The provisions and requirements stated in the Goshen College catalog are not to be considered as an irrevocable contract between the student and the college. The college reserves the right to make changes that it deems necessary at any time, without notification. Alterations may include course and program changes and cancellations. The online version of the catalog will be updated periodically to reflect such alterations. The responsibility for understanding and meeting the graduation requirements published in the Goshen College catalog rests entirely with the student.
# Table of Contents

- **Academic calendar** ........................................................................................................................................... 5
- **Mission of the college** ........................................................................................................................................ 6
- **Student Life** ...................................................................................................................................................... 9
  - Commitment to community standards ........................................................................................................... 9
  - Housing .......................................................................................................................................................... 11
  - Campus ministries....................................................................................................................................... 12
  - More Student Life programs ....................................................................................................................... 13
- **Campus student services** .................................................................................................................................. 17
- **Admission** .......................................................................................................................................................... 21
- **Financial aid** ...................................................................................................................................................... 25
- **Financial information** ....................................................................................................................................... 31
- **Academic life** .................................................................................................................................................... 35
- **Academic policies and requirements** ............................................................................................................ 40
  - Graduation requirements ............................................................................................................................. 40
  - Advising and registration ............................................................................................................................ 42
  - Grading and evaluation ............................................................................................................................... 46
  - Other academic policies ............................................................................................................................. 48
- **Undergraduate programs** .................................................................................................................................. 53
  - General education curriculum ................................................................................................................... 53
  - International education ............................................................................................................................. 58
  - Collegiate studies program ........................................................................................................................ 63
  - Special programs ....................................................................................................................................... 64
  - Division of adult and external studies (DAES) ......................................................................................... 68
- **Academic departments and courses** ............................................................................................................. 72
  - Art ................................................................................................................................................................. 72
  - Bible, religion and philosophy ................................................................................................................... 79
  - Biological sciences .................................................................................................................................. 88
  - Business ....................................................................................................................................................... 98
  - Chemistry ................................................................................................................................................. 114
  - Communication ....................................................................................................................................... 119
  - Computer science ................................................................................................................................... 129
  - Education .................................................................................................................................................. 134
  - English ....................................................................................................................................................... 145
  - History and political science ................................................................................................................... 155
  - Humanities ................................................................................................................................................ 162
  - Interdisciplinary studies ............................................................................................................................. 163
  - Mathematics ............................................................................................................................................. 163
  - Modern and classical languages and literatures (MCLL) ....................................................................... 168
  - Music ......................................................................................................................................................... 177
  - Nursing .................................................................................................................................................... 189
  - Peace, justice and conflict studies (PJCS) ................................................................................................. 198
  - Physical education .................................................................................................................................. 205
  - Physics and engineering ........................................................................................................................... 212
  - Psychology ................................................................................................................................................. 218
  - Sociology, social work and anthropology .............................................................................................. 222
  - Theater ....................................................................................................................................................... 233
  - Women's studies ...................................................................................................................................... 238
- **Graduate Programs** ......................................................................................................................................... 242
  - Master of arts in environmental education ............................................................................................ 242
  - Master of science in nursing ..................................................................................................................... 244
- **Directories** ...................................................................................................................................................... 249
  - Boards of directors ................................................................................................................................... 249
  - Administrative faculty ............................................................................................................................... 249
  - Teaching faculty ....................................................................................................................................... 253
  - Adjunct faculty ......................................................................................................................................... 258
  - Faculty emeriti ......................................................................................................................................... 259
- **Campus map** .................................................................................................................................................... 262
Academic calendar 2008-09

**Fall semester: September 1-December 12**
Saturday-Monday, Aug. 30-Sept. 1 ........................................... New student days
Monday, Sept. 1 (Labor Day) ........................................... Continuing student check-in
Monday, Sept. 1, 7 p.m. ........................................................... Classes begin
Monday, Sept. 8, 5 p.m. ...... End of drop/add period (courses and grade plans)
Wednesday, Sept. 24 .............................................................. Celebrate Service Day
Monday-Wednesday, Oct. 20-22 ............................................. Midterm break
Monday, Nov. 3, 5 p.m. ................................................... Last day to withdraw with a “W”
Thursday-Friday, Nov. 6-21 ................................................... Academic advising period
Thursday-Friday, Nov. 27-28 ................................................... Thanksgiving break
Monday, Dec. 8 ................................................................. Last day of class
Tuesday, Dec. 9 ................................................................. Reading day (no classes)
Wednesday-Friday, .............................................................. Dec. 10-12 Exams

**Spring semester: January 7-April 23**
Tuesday, Jan. 6 ................................................................. New student day/Check-In
Wednesday, Jan. 7 .............................................................. Classes begin
Tuesday, Jan. 13, 5 p.m. ...... End of drop/add period (courses and grade plans)
Monday, Jan. 19 ........ Martin Luther King Jr. Study Day (evening classes meet)
Monday-Friday, Feb. 23-27 ................................................... Midterm break
Friday, March 13, 5 p.m. ................................................... Last day to withdraw with a “W”
Friday, April 10 ............................................................... Good Friday holiday
March 23-April 7 ................................................................. Academic advising period
Friday, April 17 ................................................................. Last day of class
Monday, April 20 ................................................................. Reading day (no classes)
Tuesday-Thursday, April 21-23 ................................................... Exams
Sunday, April 26 ............................................................... Baccalaureate, Commencement

**May term: April 29-May 20**
Wednesday, April 29, 10:30 a.m. ........................................ May term classes begin
Thursday, April 30, 5 p.m. ... End of drop/add period (courses and grade plans)
Wednesday, May 6, 13 .......................................................... No class for 3-credit classes
Monday, May 11, 5 p.m. ................................................... Last day to withdraw with a “W”
Wednesday, May 20 .............................................................. Last day of May term classes

**Summer session I: May 26-June 16**
Tuesday, May 26, 9 a.m. .................................................. Summer session I classes begin
Wednesday, May 27, 5 p.m. ........................................... End of drop/add period
Friday, June 5, 5 p.m. .............................................................. Last day to withdraw with a “W”

**Summer session II: June 18-July 10**
Thursday, June 18, 9 a.m. .................................................. Summer session II classes begin
Friday, June 19, 5 p.m. .............................................................. End of drop/add period
Tuesday, June 30, 5 p.m. ................................................... Last day to withdraw with a “W”
Friday, July 3 ................................................................. Holiday – no class
Mission of the college

Mission statement
Goshen College is a liberal arts college dedicated to the development of informed, articulate, sensitive, responsible Christians. As a ministry of the Mennonite Church, we seek to integrate Christian values with educational, social and professional life. As a community of faith and learning, we strive to foster personal, intellectual, spiritual and social growth in every person. We view education as a moral activity that produces servant leaders for the church and the world.

Educational mission and core values
At Goshen College we intend to create a community of faith and learning built on five core values: Christ-centeredness, passionate learning, servant leadership, compassionate peacemaking and global citizenship. In our academic program and campus life students will develop the knowledge, skills and values for

A life that is **Christ-centered**, with

- a reflective faith that nurtures spiritual growth in individual and corporate contexts.
- an active faith that informs an individual’s experience and choices in all aspects of life.

A life of **passionate learning**, through

- the mastery of a major field of study as the basis for life-long learning, service, relationships and work in a socially and culturally diverse context.
- an extensive foundation of knowledge, skills and dispositions derived from a liberal arts curriculum that informs an appreciation for a critical understanding of human experience and cultural variety.

A life of **servant leadership**, based on

- a leadership ability that empowers self and others.
- a healthy understanding of self and others that is reflected in relationships of interdependence and mutual accountability.

A life of **compassionate peacemaking** with

- a personal integrity that fosters the ability to resolve conflict and to promote justice.
- commitment to diversity in all of its forms both conceptually and in practice.

A life of **global citizenship** with
an intercultural openness with the ability to function effectively with people of other worldviews.
- a responsible understanding of stewardship for human systems and the environment in a multicultural world.

Liberal arts tradition and Christian context
Goshen College is nationally recognized for its excellent academic program and Christian ideals. As a Christian liberal arts college, Goshen draws on the best from both streams. The basic question that drives all liberal arts inquiry is “What is truth?” Different approaches, such as historical, scientific, aesthetic or linguistic, contribute different perspectives of truth. Because Goshen College is a Christian college, theological and spiritual approaches to truth are highly valued as well. When students learn multiple ways of knowing and alternative modes of problem-solving, they have a more complete view of the world.

Together, the Goshen College community searches for knowledge and meaning, new and old. It is a liberating search that leads us to delight in the awesome mystery of life and celebrate the unique gifts and passion that God has created in each person. A Christian liberal arts education is education for life vocation, not just preparation for employment.

Historic church relationship, open to all
Goshen College was established in 1894 and is affiliated with Mennonite Church USA, a Christian denomination that grew out of the 16th-century Anabaptist movement in northern Europe. With the Friends (Quakers) and the Church of the Brethren, Mennonites are one of the three historic peace churches in the U.S. From the church in which it is rooted, Goshen College has derived a spirit of peace and simplicity, mutual support and biblically based service to those in need.

Around 55 percent of students and 80 percent of faculty members are Mennonite affiliated. Other students come from approximately 30 different Christian denominations and several world religions, and include strong representations from Catholic, Methodist and Baptist traditions. All faculty members are active Christians, and more than half have lived or worked outside the United States, often in church-related mission or service work. Students are not required to be Christians to attend Goshen, but must be willing to accept and live by the Goshen College commitment to community standards. All who are willing to search for truth with integrity are welcome.

Accreditation
Goshen College is accredited by the Higher Learning Commission and is a member of the North Central Association. [http://www.ncahigherlearningcommission.org/, (312) 263-0456, (800) 621-7440].

The college is authorized by the Indiana Division of Professional Standards Board and accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary and secondary school teachers. The division of nursing is approved by the Indiana State Board of Nurses Registration and Nursing Education and also by the Commission on Collegiate
Nursing Education [One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791]. The social work program is accredited by the Council of Social Work Education [1725 Duke Street, Suite 500, Alexandria, DC 22314, (703)683-8080]. Alumnae of Goshen College are admitted to membership in the American Association of University Women. Goshen College is registered with the Regents of the University of the State of New York.

Compliance with legal requirements

Equal opportunity
Goshen College does not discriminate on the basis of sex, race, color, handicap or national origin in its employment policies, educational policies, administration policies, scholarship and loan programs and athletic and other school administered programs; and does not deny to any student on the basis of sex, race, color, handicap or national origin any right, privilege, program or activity generally accorded or made available to students in Goshen College.

Grievance policy
The grievance procedure at Goshen College is a process by which nonacademic differences between students and employees of Goshen College (and employees of Goshen College and their supervisors or managers) can be resolved. Grievable issues are defined in the policy. The first step is an informal process, attempting to resolve differences through discussion. If this is not successful, the second step, a formal, written grievance procedure, is initiated. Information about the grievance policy and assistance with understanding the procedures is available from the human resources director.

Academic grievances originating with a student should be processed through the relevant professor. If necessary, the process can progress further to the department chair, the associate dean, and, ultimately, the academic dean.
Student Life

Commitment to community standards

A spirit of hospitality
Goshen College is dedicated to fostering a spirit of hospitality on our campus, including all students, faculty and staff and college guests, as part of maintaining a healthy living and learning community. We welcome all students as God’s creation regardless of color, gender, religion, ethnicity or nationality, sexual orientation and social or economic class. In order for a diverse community to thrive, we must recognize our differences and seek understanding and integrity in our relationships. Students and faculty at Goshen College are expected to support an environment of mutual respect and accountability, to care for the personal dignity of others and to have integrity in their conduct and communication.

The spirit of respect and hospitality at Goshen College reflects our character as a Mennonite-Anabaptist liberal arts community of scholarship, teaching, learning and service. We believe that the expression of hospitality is best understood in the life and character of Jesus Christ, who welcomed the Gentile and the Jew, women and men, the poor and the wealthy, the slave and the free, the sick and the healthy. The Mennonite Church promotes a community founded on love and justice in which all persons possess inherent dignity as children of God. Our search for truth and our understanding of complex modern challenges is informed and transformed by the life and teachings of Jesus and the tradition of Anabaptist Christians to be accountable to each other in the context of the church.

Invitation to Christian community
Goshen College is committed to encouraging students in intellectual, social, moral and spiritual growth. Students are invited to engage in a dynamic and life-giving community here and to mature as individuals through respectful relationships in the classroom, the local community, in the broader Christian church and among other cultures. All are expected to demonstrate sensitivity and concern for others’ convictions, perspectives and struggles. Within the context of a Christ-centered community, we seek to become passionate learners, global citizens, servant leaders and compassionate peacemakers.

Expectations
Members of the Goshen College community are expected to demonstrate individual responsibility in showing consideration for the beliefs and feelings of others; abiding by federal, state and local laws; and demonstrating exemplary conduct. When a student’s behavior has direct implications for others and/or the well-being of the campus community, there is cause for community involvement, regardless of where the situation occurs (e.g. home or abroad.)
Academic honesty
As an academic community that expects integrity, we seek for truth and knowledge by requiring intellectual and personal honesty in learning, teaching, research and service. As an academic community of integrity, we uphold personal accountability and take action against wrongdoing. For policy details, see academic integrity in the Academic Policies section of the catalog.

Alcohol and illegal drug use
Goshen College considers the use of alcoholic beverages and illegal drugs detrimental to individual and community health. The use of alcohol is illegal for minors, and alcohol and illegal drugs also may create dependencies, invite an unhealthy escapism, waste money and abuse health and take lives, as well as generate behavior offensive to other people. Goshen College does not consider it possible to have a wholesome campus community if alcoholic beverages and illegal drugs are used. Abstinence may be an effective witness against these practices, which are so widely and indiscriminately condoned in our culture. For these reasons, Goshen College recommends non-use as the most appropriate lifestyle choice. Alcoholic beverages and illegal drugs are prohibited from the campus and all college-related functions. Students will be held responsible for any alcohol, drugs or drug paraphernalia found in their presence.

Firearms-fireworks
The possession or use of firearms or fireworks is prohibited on campus.

Fire and safety equipment
Tampering with any fire and safety equipment on campus is unacceptable.

Fraud and theft
Students are expected to respect the identity and property of others. Examples of fraud or theft include, but are not all inclusive of, the following: dishonesty on timecards, theft of and other misuse of personal or college property.

Racism
Goshen College creates a social and academic environment where students develop awareness of issues of race, sensitivity to minority populations and intercultural understanding. The campus reflects God’s world: multicultural, multiracial and multiethnic. We believe that racist attitudes and actions do not exemplify the love of Christ, and violate the inclusive intention of the mission of Goshen College.

Racism is a set of attitudes or beliefs that hold particular racial or ethnic groups superior to others, often resulting in justification of discriminatory treatment or other racist acts. Racism denies the humanity of others and denies the truth that all human beings are made in the image and likeness of God.

As an institution of the Mennonite Church, Goshen College believes that racism is contrary to Christian theology and is inconsistent with the life and teachings of Christ. Therefore, we will resist the pervasive racism of our society by identifying and confronting its evidence.
Sexuality
We believe that sexuality is an integral part of our personalities, reflecting who we are as individuals. To care for another person includes honoring and respecting that person as a sexual being. Sexuality cannot be separated from the other dimensions of our lives.

Sexual discrimination, coercion, exploitation and abuse are detrimental to both relationships and to individual self-esteem; these are also destructive behaviors that violate the caring nature of our community. Goshen College is firmly opposed to sexual discrimination, sexual harassment, sexual exploitation and sexual abuse. We believe the clear intent of New Testament Scripture is to place sexual intercourse within the covenant of marriage.

The goal of confrontation in these matters, as in all others, will be for well-being, reconciliation, correction, forgiveness and redemption. Our counseling and health-service personnel are available to students wishing to discuss issues regarding sexuality or sexual behavior. These conversations will be held in strict confidence.

Tobacco use
The use of tobacco imposes a serious and unnecessary burden upon the health of the user and community. It also constitutes a fire hazard in some cases. Use of tobacco in any form is prohibited on campus or at any off-campus official college activity and strongly discouraged elsewhere.

Threats of violence
The threat of violence against another individual, whether verbal or physical, is unacceptable.

Vandalism
Any vandalism on campus will be considered offensive behavior. Responsibility for restitution will be expected.

Serious intent
While it is difficult to determine a framework of community standards that completely matches the ideals of each individual, clear expression of commonly held expectations is vital to productive, positive life and work together in a diverse campus setting. Every Goshen College student is expected to show serious intent to live according to these standards. Information regarding the disciplinary process is located at www.goshen.edu/aboutgc/community.php and is published in the student handbook distributed each fall.

Housing
As a primarily residential campus fostering learning and leadership outside the classroom, policies are in place to encourage single students not living with a family member to join the Goshen College community through on-campus residential programs. All full time students enrolled at GC must live in campus housing unless they meet any of these requirements:

- Have at least 112 credit hours posted on their transcript
Turn 23 years of age during a given semester
Live with parents or an immediate family member

Goshen offers a variety of housing options for students who are single, married or have families.

- **Three residence halls** – Yoder, Kratz and Miller Halls are available to single students of any classification. Each hall is coed, with men and women on different floors. Students typically live in groups of 20-30 per living unit. Leadership is provided by student resident assistants and a resident director.
- **A senior/junior hall** – In Kulp Hall, first priority is given to single students who are seniors or at least 22 years of age. Second priority is given to juniors or those who are 21 years old.
- **Small group housing** – available to single students who are juniors, seniors or 20 years of age. Facilities are in houses on or near campus and in small residence hall units in Kulp and Coffman halls. Units can accommodate six to 12 students per group. Students form their own group and apply for housing facilities.
- **Apartments** – New apartments designed for groups of four to six students are available for juniors and seniors or students at least 22 years of age. Self selected groups sign up for apartments through student life. See residence life and housing link at www.goshen.edu/oncampus.
- **College-owned houses** – available primarily for married students and families; located a short walking distance from campus; size of houses range from one to four bedrooms. Contact the physical plant office for more information

**Campus ministries**

Goshen College encourages growth in faith through worship, Christian community and service. The Campus Ministries office offers both support for students’ faith journeys and challenges to new discoveries in spiritual life. While Goshen is a Christian college rooted in the Mennonite Church USA, we welcome seekers and people of all faiths to attend campus spiritual life activities.

Worship opportunities include chapel services every week, a variety of worship groups that meet throughout the week, and Sunday morning involvement in local congregations. Worship groups meeting during the week include Voices-n-Harmony Gospel Choir, Taizé worship and student-led contemporary worship. Christian community sustains students through friendships and in small groups organized by campus ministries that meet for prayer, Bible study, accountability and sharing. Residence hall floors also plan spiritual life programming.
Service projects of many kinds allow students to reach beyond themselves and the campus to show concern for needs of the world. Types of service include the Big Brother/Big Sister program, tutoring, Habitat for Humanity, working with the elderly, housing rehab and collecting supplies to be sent for world relief. During breaks, groups of students travel to service locations. Celebrate Service Day, held annually in September, encourages service in the local community.

Facilities that support spiritual development include:

- **Labyrinth** – an outdoor space for contemplative prayer, located between East Hall and the Music Center.
- **The Quiet Place** – rooms for individual reflection and small group meetings in the basement of Coffman Hall.
- **Witmer Woods and College Cabin** – an 18-acre arboretum of plants native to Indiana located across Main street from the campus. The College Cabin, adjacent to Witmer Woods, is available to students for meetings and recreational activities. A Meditation Garden is located near the College Cabin along the Elkhart River. It is a place for quiet reflection and contemplation.
- **Brunk Cabin** – a retreat facility in southern Michigan which can house student groups accompanied by a resident assistant.

**Convocations and chapels**
Convocations and chapel services gather the campus community to focus on themes that connect with our personal lives and also to the world at and beyond Goshen College. Chapel services foster Christian worship and faith formation. They may include guest speakers, faculty faith stories, hymn sings, or student presentations. Convocations are educational events that promote the mission and core values of Goshen College. They may include faculty speakers, guest lecturers, drama or music performances, or student presentations by Study-Service Term units or campus clubs.

Chapel and convocation services are both held in the church-chapel, which is also the worship space for College Mennonite Church. Attendance requirements for convocation and chapel are publicized at the beginning of each semester. Students can monitor their attendance record online.

**More Student Life programs**

**Academic support**
The Academic Support Center promotes independent, life-long learning for all students of Goshen College. The ASC assists students with documented disabilities by helping them advocate for themselves and by helping coordinate reasonable academic accommodations with teaching faculty. The ASC trains peer writing mentors and tutors who are available to help all GC students grow as writers and scholars. ASC staff also administers the placement and competency tests.
Alerts system
The Student Life office coordinates an alerts system to identify and provide timely services to students who are experiencing academic problems.

Athletics
Goshen College holds memberships in the National Association of Intercollegiate Athletics and the Mid-Central College Conference. Goshen men compete in baseball, basketball, cross country, golf, soccer, tennis and track and field. Women compete in basketball, cross country, soccer, softball, tennis, track and field and volleyball.

Opportunities for recreational activity are available to all students through the Roman Gingerich Recreation-Fitness Center, the intramural program or outdoor facilities. Over half the student body participates in the intramural program, which schedules one-night tournaments, as well as longer sports seasons of four to six weeks. The Gingerich Center is available for a wide range of walk-in activities. The recreation-fitness staff as well as student leaders organize these events.

Career guidance and employment
The mission of the Career Services office is to help students discover their vocation. In collaboration with academic faculty and administrators, the office works to enhance the professional opportunities available to students after graduation, whether that is work, service, or graduate school. A variety of services helps students with all facets of their career planning and post-graduation experience, including career advising, résumé preparation, practice interviews, job search skills, career readiness workshops, job and internship listings, alumni mentors and more. Students who desire on-campus employment should contact this office. An extensive online job bank for both on-campus and off-campus jobs is available from the career services Web page. The office is located in the Administration Building on the first floor (Ad 14), within the Student Life offices.

Counseling and Wellness & Health Center
Located in the Roman Gingerich Recreation-Fitness Center, the Wellness and Health Center is a primary health care facility providing both preventive and treatment services to all qualified students. The Wellness and Health Center provides a variety of health education programs and participates in the Campus Wellness Committee. All students are required to carry approved hospital and medical insurance.

The counseling office, located in the Wellness and Health Center, provides professional, short-term, on-campus counseling services to students on a free and confidential basis. Services support students’ personal, social and spiritual health, while increasing student’s ability to succeed academically. The counseling office provides individual, couple and group mental health counseling, wellness education, crisis intervention and referral to community providers.
Privacy rights
Student Life staff members honor the national FERPA law, which protects individual student information. See the Academic policies section for more details.

Commuter student program
A commuter student lounge with study rooms, lockers and a kitchenette is available at the south end of the Union building. The Nontraditional/Commuter Student Association holds regular meetings to discuss special interests and concerns of commuting students.

Orientation and first-year colloquium
Orientation activities are offered for all new students. Fall orientation includes special activities for international students, multicultural students, transfer students, first-year students and parents. An abbreviated orientation is also offered to new students in spring semester.

The fall semester colloquium program helps new first-year students adjust to college life academically, socially and spiritually. In this program, ongoing orientation and advising activities are attached to a regular college class. Fall orientation includes several meetings with the colloquium professor and classmates, sessions for parents, placement testing, a worship service and other activities. During the first half of the fall semester, colloquium sessions continue to address college adjustment topics, including how to choose a major. Students do not officially declare a major until near the end of the first semester, or later, whereupon they are assigned an adviser from their major department. Colloquium professors serve as faculty advisers for students in their class during the first semester. In addition, upper-class peer mentors are assigned through Student Life to provide contact and support to first-year students through the fall semester.

Multicultural Affairs Office
The mission of the Multicultural Affairs Office is to foster intercultural understanding at Goshen College. Through diversity training, curriculum development, recruiting and retention programs, the office promotes an anti-racist campus community. Mosaic groups coordinated by the MAO office work at implementing goals of the campus diversity plan. Special events such as the Martin Luther King Jr. Study Day and the celebration of heritage months are designed to increase awareness of the historical and cultural background of underrepresented ethnic populations. Faculty advisers provide academic, social and personal support for multicultural students on campus. Black Student Union, Latino Student Union and International Students Club encourage underrepresented students to negotiate the college experience, become involved in campus activities and develop leadership skills.

Student activities
The director of student activities oversees all planning of social and recreation events on campus and advises student organizations with the help of faculty sponsors. The Campus Activities Council (CAC) sponsors a variety of events that include large celebrations like the annual luau, the Kick-Off talent
competition each semester, and a number of weekly events such as coffeehouses, Hour After (variety shows), movies and late-night activities.

**Student government and clubs**
The student body is represented by the Student Senate. A four-member cabinet is elected each spring to lead the next year’s Senate of campus group representatives and residence hall representatives. Student Senate appoints members to campus committees where students are actually involved in making decisions side by side with faculty and administrators. The Senate also manages all club funds for various student clubs and organizations.

In most cases membership is open to any interested student. New clubs or organizations may be formed with the approval of Student Senate and the student activities office. Students who wish to start a new club or organization should discuss their purposes and goals with the coordinator of student activities. Following is a partial listing of groups that meet currently:

- Advocates
- AMISH (Association of Midwesterners for Ice and Street Hockey)
- ASL Club
- Black Student Union
- Business Club
- Canadian Club
- Campus Activities Council
- Campus Ministries Team
- Catholic Student Association
- Commuter/Nontraditional Student Club
- Cycling Club
- Def Campus Poetry Club
- Eco-Pax
- Environmental Science & Biology Club
- Fellowship of Rock Climbers
- Film Club
- GC Nursing Students Association
- GC Players
- Goshen Student Women’s Association (GSWA)
- International Student Club
- Knitting Club
- Latino Student Union
- Pax
- Pre-Medical Club
- Salsa Club
- Social Work Action Association
- Student Senate
- Voices-n-Harmony Gospel Choir

**Withdrawal procedures**
Student Life staff works closely with residential students who must withdraw from college for medical or other reasons. See the Academic policies section of the catalog for detailed information.
Campus student services

Arts opportunities

Art galleries
Two art galleries on campus contain rotating exhibits. The Hershberger Art gallery located in the Music Center exhibits works by guest artists, art faculty and art students. A second gallery located in the basement of Good Library features historical and cultural exhibits.

Performing arts series
The annual Performing Arts Series brings worldclass performers to the campus Music Center. Recent artists include Sweet Honey in the Rock, Chanticleer, Nickel Creek, Brubeck Brothers and Taylor Eigsti, Baltimore Consort, The King Singers, and Wynton Marsalis and Lincoln Jazz.

Music activities
Students interested in music are invited to audition for music department ensembles, including Chamber Choir, Chorale, Orchestra, Wind Ensemble and Lavender Jazz. All members of Chorale and Chamber Choir are also part of the Men’s Chorus and Women’s World Music Choir. The Voices-n-Harmony Gospel Choir is open to all without audition. The choirs perform several on-campus concerts each year, and at least one choir tours annually. The orchestra and wind ensemble perform a repertoire of classic and contemporary symphonic and chamber music at on-campus concerts. The annual Festival of Carols in early December is broadcast on several public television stations. A fully-staged opera, operetta, or musical is produced in alternate years. In addition to these groups, a variety of student-formed groups participate in coffeehouses, talent shows and worship teams.

Theater activities
Any student may audition for the two fully staged theater productions each year or any of the numerous student-directed one-acts. In alternate years, a musical theater production is prepared and performed during May term. Students are welcome to volunteer as costume, light and set construction assistants for any of the productions. Advanced students may design or direct shows, including selected one-acts.

Bookstore
The Goshen College campus bookstore is operated by Follett and is open year-round. Textbooks for all course can be purchased online through eFollett or in person at the campus store. Used books are made available whenever possible. At the end of each term, the bookstore also offers convenient buyback services at market rates. Follett contracts with apparel companies that practice fair hiring processes. See http://www.goshen.edu/bookstore/ for more information.
Broadcasting and publications

Radio and television
WGCS, or 91.1 The Globe, is the college radio station. Students serve as station manager and staff members. The station features American roots music, public affairs and religious programs, news and sports. On the air 24 hours a day, The Globe offers students many opportunities for broadcast experience. Students working with GC-TV produce a weekly video magazine called GC Journal distributed via the campus cable system. Both The Globe and GC-TV use state-of-the-art digital equipment.

Newspaper and yearbook
Students edit two major publications on campus. The Record, a weekly newspaper, includes news, features, perspectives and photographic coverage of campus events and issues and provides a forum for student, faculty and staff opinion. The Maple Leaf annual yearbook gives an overview of campus life. Both staffs, advised by communication faculty members, use the college’s communication center, a facility equipped with state-of-the-art computers, scanner and laser printer.

Pinch Penny Press
Sponsored by the English department, Pinchpenny Press publishes small volumes of creative writing by students and faculty members. Broadside publishes occasional short pieces of creative writing in signed, limited editions. Editorial committees of students and members of the English department faculty approve manuscripts for publication.

Campus Center for Young Children (CCYC)
Established in 1998, the Campus Center for Young Children offers quality childcare services for children of students, faculty, staff and community members. CCYC is housed in the church-chapel building and shares space with College Mennonite Church.

Food Services
Sodexho provides food services for Westlawn dining hall and the Leafraker snack shop in the Union building. Sodexho welcomes student feedback and collaboration to improve its services and endorses the Sullivan principles for economic and social justice. Java Junction is a student-operated coffee bar located in the Connector between Kratz, Miller and Yoder residence halls.

Several food service packages are available to students. These vary somewhat from year to year. Packages offered during 2007-08 were: Carte Blanche - unlimited entry into the dining hall whenever open, plus $30 munch money; 14 Meal Plan - 14 entries into the dining hall per week, plus $30 Munch Money; 80 Meal Block - 80 dining hall meals per semester, plus $185 munch money (available to those living in Kulp, Small Group Housing, and Student Apartments); 45 Meal Block - 45 dining hall meals per semester, plus $110 munch money (available only for those living in the Student Apartments).

Munch money can be used at the Leaf Raker snack shop, the dining hall, to buy grocery specials from the Sodexho web site, and at the Java Junction coffee shop. In addition to the plans above, munch money can be purchased in...
$25 blocks. The munch money program uses the college ID card as a debit card.

**Information Technology Services (ITS)**

ITS provides the high quality technology environment required by a modern college curriculum – and one that is continuously improving. All student lab computers are upgraded regularly (annually in most cases). Recent upgrades included 64 bit computers, flat screen monitors and DVD burners. The student to computer ratio in labs is 7.6 to 1, and both Macintosh and PC computers are available. Students who own their own computers can easily connect them to the campus network because all residence halls are networked, and all academic buildings and most public areas have wireless coverage. All classrooms have network connections; 32 classrooms have multimedia and computer projection capabilities. Students have access to a full complement of network services, all accessible via a single, personal user ID and password. Students also have access to 1 GB (more upon request) of personal network storage accessible from any computer on campus. The ITS Help Desk provides students on and off campus with tech support. Schertz Computing Center is open 24 hours, seven days a week. ITS also holds special Install Fair events to help get student computers configured for use from home or residence hall room. For more information about technology at GC, see the ITS Web page at www.goshen.edu/its/.

**Lecture series**

- **Christner Memorial Lecture** on environmental issues was launched in 2007 with renowned scholar E.O.Wilson.
- **Eric Yake Kenagy Visiting Artist Program** annually brings a distinguished visual artist to campus for lectures, workshops and interaction with students.
- **Martin Luther King Jr. All-Campus Study Day** annually brings to campus outstanding civil-rights leaders who share King’s vision for peace and justice.
- **Miller-Jeschke Endowment for Science and Religion** brings an outstanding scholar to campus each spring for a conference on science and religion.
- **C. Henry Smith Peace Lecture** is given annually on a peace-related theme by a faculty member of a Mennonite college.
- **Umble Master Class** series brings an outstanding educator or practitioner in theater or communication to campus each year for lectures and workshops.
- **S.A. Yoder Memorial Lecture** annually brings a distinguished poet, novelist, essayist or humorist to campus.
- **Frank and Betty Jo Yoder Public Affairs Lecture Series** brings nationally known speakers to campus to address a variety of current issues.

**Library**

As a research and information center, the Harold and Wilma Good Library connects the campus to ideas and information in a variety of formats. In
addition to over 130,000 print sources, the library maintains a video/DVD collection and serves as the gateway to extensive online resources, including scholarly databases, digital journals and electronic books. Collection strengths include peace studies, curriculum materials, and the J. D. Hartzler Music Collection of early American hymnody. Librarians are available for one-on-one assistance throughout much of the day and evening and also offer group instruction. A Web catalog indexes the collections of the Good Library, the Mennonite Historical Library, and 25 other Indiana college libraries. Interlibrary loans provide access to print materials in most North American libraries. Library facilities include a computer lab/classroom, vending and lounge areas, plenty of study space, a reservable meeting room, listening/viewing stations, a periodicals reading room and a gallery described above.

Mennonite Historical Library
The Mennonite Historical Library, housed on the third floor of the Good Library, contains more than 65,000 volumes, an unrivaled collection of published works by and about Anabaptists, Mennonites and related groups (Amish, Hutterites, etc). Resources also include substantial source materials on the Protestant Reformation, local and family history and Pennsylvania Dutch culture.

Mail services and lost & found
All full and part-time students receive an assigned key or combination to a campus mailbox, located in the Union building. U.S. Postal Service mail is delivered daily, in addition to campus mail, a free service to the campus community. Package services, stamps, and the campus lost and found department are located in the printing and mailing services office in the basement of Coffman Hall.

Motor vehicles and bicycles
Students must register all motor vehicles to be used on campus at the beginning of each semester during registration check in or anytime at the physical plant office. Vehicles must be covered by liability and property damage insurance. Auto registration is available both online and through the physical plant. Tickets are issued for parking, driving or registration violations. Goshen city ordinance requires that all bicycles used on campus must be registered, which can be done at the physical plant. Indoor winter bicycle storage is available on campus.

Parents program
The office of alumni, parent and church relations sponsors a parents program which provides avenues for parents to learn about their student’s education and to communicate with administrators and faculty. Programs and services include a Parent Council, comprised of approximately 35 households, Family Weekend (usually the second Saturday in November) and a web site especially for parents at www.goshen.edu/parents/.
Admission

First year students
Admission counselors work individually with each applicant to ensure sound educational planning. High school courses, grades, test scores, high-school rank, references and personal essay, are all indicators of an individual's ability to work successfully in college programs; they are important factors in the admission decision.

High school preparation
Graduation from an accredited high school is required. High school college-prep programs are the best way to prepare for Goshen College. This preparation usually includes the following areas of study and units: English – 4, science – 2-3; foreign language – 2-4; social science and history – 2-3; mathematics – 2-4. Applicants planning to enter the pre-nursing program need to have one unit of high-school chemistry with a grade of “C” or higher, or its college equivalent.

Students admitted with a Critical Reading score lower than 430 are required to enroll in Engl 105 Introduction to College Writing. Applicants who have not completed high school are considered for admission if they have achieved an average score of 500 or above on each of the sub-scores of the General Educational Development (GED) tests administered after 2002.

Full admission for first-year students will be granted to students achieving a 2.6 or higher grade point average (on a 4.0 scale) with a composite ACT of 18 or higher or a combined SAT I of 860 or higher (Critical Reading and Math), along with two references and an essay.

Home-schooled students
Goshen College welcomes home-schooled students and recognizes the valuable contribution they bring to the diversity of the student body. Home-schooled students need to show that they have successfully completed a secondary school education in a home school setting and met state law requirements for secondary education. Applicants must submit high school equivalent transcripts with grades or evaluations. If these are not available, curricula for grades 9 through 12 may be provided. Official SAT I or ACT scores, a personal essay, and two letters of reference from a pastor, employer or close family friend are also required for admission.

SAT I or ACT test scores
All United States and Canadian applicants who want to play intercollegiate sports are asked to take the Scholastic Aptitude Test (SAT I) or the American College Test (ACT) on a national testing date. SAT I and ACT tests are given at testing centers several times each year around the world and should be taken in the junior year and/or as early as possible in the senior year. SAT I and ACT scores are not required of students age 24 or older.
Students who do not meet full admission standards
Students not meeting full admission standards may be asked by the admission office for additional information or a personal interview before an admission decision is made. Applicants who are denied admission may appeal the decision to the admission committee.

Learning disabilities
Students with diagnosed learning disabilities who are otherwise qualified for admission to Goshen College must, after being admitted, provide documentation of their specific learning differences in order to receive reasonable accommodation.

Application procedures and fee
First-year applicants need to provide a completed application for admission, $25 application fee, high school transcript, SAT I or ACT scores, one personal reference, one guidance counselor reference, and a personal essay for admission. All students, full time and part time, who are degree seeking, must provide this information.

Applications will be reviewed on a continuous basis as they are completed. Admitted students must submit the $200 enrollment deposit in order to establish their priority for campus housing placement and to be eligible to register for classes. The $200 enrollment deposit is fully refundable by written request until May 1 for fall semester entry and Dec. 1 for spring semester entry.

Transfer students

Requirements for admission
Transfer student applicants need to provide a completed transfer application for admission, $25 application fee, high school transcript (if fewer than 24 semester college credits have been earned), all college transcript(s) (including official documentation for Advanced Placement credit), personal essay and a transfer reference form, which is completed by the dean of students at the college most recently attended. Applicants are expected to be in good standing at the college or university they last attended and to have maintained a 2.60 GPA (out of 4.00) or higher.

Transfer of credits
Students who transfer from nationally or regionally accredited colleges or universities can receive credit on work in which they received a “C” grade or better. Up to 12 hours of credit will be accepted from technical schools. Transfer credit is recorded with the same titles and credit hours as at the previous school. Departmental advisers evaluate courses that are to be considered for meeting requirements for majors, minors and professional programs. All transfer students are expected to meet Goshen College graduation requirements before a bachelor's degree is granted. Course requirements for general education are determined by the registrar.

Hesston College transfers
Goshen College assures the acceptance of the Hesston College associate of arts degree and the associate of science degree and assures the student of junior standing. Goshen College accepts the associate of arts and associate of science degrees as meeting the Goshen College lower level general education
requirements for students who received a Hesston College associate's degree after 2003. These degrees may meet some upper level requirements and international education requirements. All other competencies, prerequisites and upper level general education requirements must be met on the same basis as any other Goshen College student before a bachelors' degree will be granted.

**Transfer application deadlines**

Applications are reviewed on a continuous basis. Admitted students must submit the $200 enrollment deposit in order to establish their priority for campus housing placement and to be eligible to register for classes. The $200 enrollment deposit is fully refundable by written request until May 1 for fall semester entry and Dec. 1 for spring semester entry.

**International students**

Applicants who are not citizens or permanent residents of the United States should complete the International student application forms. These forms are available from the admission office and are also available online at www.goshen.edu/admission. There is an application fee of $25.

A TOEFL score of 550/213/79 (paper version/computer version/Internet version) or an overall Band Score of 6.0 on the IELTS or a grade of “C” or better on the General Certificate of Education (GCE) English exam is required for admission; bank statements and/or salary statements and/or sponsor letters; two photos with name printed on back; personal history, describing significant life experiences, school experiences, activities, future plans and reasons for wanting to study at Goshen College; official secondary school transcripts, exam reports, diplomas (certified with original signatures and/or seals; official post secondary/university transcripts and exam reports certified with original signatures or seals; certified English translations of all documents if they are not in English (www.wes.org); guidance counselor reference or college personnel reference; personal reference from a teacher, employer or pastor; and copy of passport.

It is also highly recommended that international students submit SAT I scores with their application for admission. The SAT exam is given in locations around the world several times a year. Students may obtain details of when the exam is administered and how to apply by contacting the nearest American Embassy or Consulate. Students should start planning a year in advance of the time they plan to begin studies at Goshen College to take the required TOEFL and SAT I exams and to prepare the other required documents for admission and financial aid consideration.

**Early enrollment program**

The early enrollment program at Goshen College is for area high school juniors and seniors who excel in one or more subject areas and are ready for more advanced study at the college level. The student enrolls part time at Goshen College while maintaining enrollment in high school. The total number of college courses a student may take each semester must be equal to or fewer than the number of high school courses taken during the same period. A separate application is required, and students enroll on a semester-by-semester basis. Early enrollment students may select from 100
and 200 level courses. Course prerequisite documentation must be provided by the student before registration is complete. No financial aid or other tuition discounts are available. See financial information section for special rates.

**Guest student status**
The guest student program is for individuals who wish to take a college course but do not initially intend to seek a degree from Goshen College. Students enrolled in this program may take no more than five credit hours per semester and will receive no financial aid. A separate application is required, and students enroll on a semester-by-semester basis. A maximum of 15 cumulative credit hours can be earned in the guest student program. If a student reaches 15 credit hours and wants to continue taking classes, he or she must complete the application process for full admission. Degree-seeking students will have priority for limited enrollment courses.

**Transient students**
The transient student program is for non-degree seeking students who are currently enrolled at another college. A transfer application is required, as is a college reference. Transient students can enroll full time or part time at Goshen College.

**Re-admitted students**
Students who are not enrolled for one or two consecutive semesters at Goshen College, and who did not enroll at another college or university during their absence, may follow a simplified re-admission process, beginning with the registrar’s office. Students intending to transfer credits earned during their absence from Goshen College and students not enrolled for more than two consecutive semesters must begin the re-admission process in the admission office.

Students contemplating a leave from their studies at Goshen College are encouraged to complete a Leave of Absence form, available in the registrar’s office and online (www.goshen.edu/registrar/Forms), to expedite the re-admission process. The Leave of Absence policy is explained in the Academic Policies section of this catalog.

**Graduation and retention rates**
The Student Right-to-Know Act, PL 101-542, requires that institutions publish graduation rates. The rates are based on new freshmen entering an institution as first-time, full-time, degree-seeking students and graduating within 1.5 times the normal time for their program (six years). The graduation rate for those entering Goshen College in the fall of 2001 and graduating within six years was 61 percent. The five-year average rate of first-time freshmen returning to Goshen College for the second year of study is 82 percent.
Financial aid

Purpose and philosophy
The financial aid program at Goshen College is designed to assist students in financing a Goshen education and to supplement, not replace, family resources for college. The program is intended to provide financial assistance to accepted and continuing students who would be unable to attend Goshen College without aid. It is intended to encourage the attendance at Goshen College of students who have demonstrated high achievement or otherwise have indicated strong potential to benefit from study at the college and to contribute to the achievement of the college’s mission.

The student is expected to contribute financially toward his or her own education, usually through savings and/or summer employment. Our awarding policies are balanced to consider need but to also recognize past achievement and high potential achievement (i.e. merit).

Financial aid packaging
All financial aid awards are determined by the student financial aid office. Students applying for financial aid are considered for all aid for which they are eligible. Financial aid is normally provided in a "financial aid package"-- a combination of institutional, state, federal and private loans, employment and gifts. Goshen College attempts to provide a financial aid package adequate to meet the needs of each student who applies.

Students planning to attend Goshen College should expect the following direct expenses for the 2008-09 academic year; tuition and fees--$22,300; room--$3,950; board--$3,450. Indirect expenses, including books and supplies, personal expenses, medical insurance and transportation are added to the total cost of attendance. The student financial aid office considers the total costs of attendance when preparing a financial aid award.

During 2007-2008, Goshen College administered more than $14.9 million in financial aid. The total amount of each student aid package is based on the student's financial need and/or eligibility for merit-based aid. Need is determined by subtracting the resources of the student and his or her parents' contribution and any merit-based aid from the total estimated student expenses. The amount of the expected family contribution (EFC) is determined from information on the Free Application for Federal Student Aid (FAFSA), which uses such items as number of family members, income, assets, taxes paid and certain other liabilities of the family.

Types of financial aid available
- **Scholarships** - Scholarships are merit aid awarded in recognition of outstanding achievement. Descriptions below.
- **Grants** - Grants are gift aid awarded to students, usually based upon demonstrated need.
• **Loans** - Education loans, other than Federal Direct Unsubsidized Stafford loans, usually accrue no interest during the time of enrollment in college. Relatively low interest accrues during the repayment period.

• **Employment** - Part-time jobs are available on campus or in the community where earnings can amount to as much as $1,800 or more each school year. Full-time summer employment can provide additional earnings.

**Financial aid package order of assembly**
1. Federal Pell Grant
2. Academic Competitiveness Grant
3. National SMART Grant
4. Federal Supplemental Educational Opportunity Grant (SEOG)
5. State grants
6. College scholarships and discounts
7. Church aid and Goshen College Church Aid Matching Grant
8. Endowed Scholarships
9. Federal College Work-Study
10. Federal Direct Stafford Loan
11. Goshen College Grant
12. Federal Perkins Loan, Federal Nursing Student Loan to meet remaining need
13. Federal Direct Parent Loan (PLUS) or unsubsidized Federal Direct Stafford Loan to families who desire it.

**Sources of financial aid**

**Federal and state programs**
Goshen College participates in all federal programs, including the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Federal Perkins Loan, Federal Nursing Student Loan (NSL), Federal College Work-Study Program (CWSP), the Federal Direct Stafford Student Loan, the Federal Direct Parent Loan for Undergraduate Students (PLUS), and Veteran Educational Benefits. Residents of Connecticut, Indiana, Pennsylvania, Rhode Island and Vermont are eligible to receive state scholarship and grant awards that can be used at Goshen College.

**Goshen College President's Leadership Award**
Up to five awards will be given annually to entering first-year students in recognition of outstanding academic and leadership skills. A separate application is required for the President's Leadership Award. To be eligible to apply, students must meet at least two of the following criteria: a) be a National Merit Semifinalist, b) rank in the top five percent of their high school class, c) have a grade point average of at least 3.8 (on a 4.0 scale), d) score at least 1270 (Critical Reading plus Math) on the Enhanced SAT or 29 on the ACT. Canadian students must have a high school overall average of 88 or better. The President’s Leadership Award is renewable each year with a 3.50 grade point average. The award is made for no more than eight total semesters. The stipend for 2008-2009 is $15,000. (The President's Leadership Award replaces a Menno Simons or Wens Honors Scholarship.)
Goshen College National Merit Scholarship (Burkholder Scholarship)
National Merit Scholarships for National Merit finalists--$1,000 to $2,000 per year for four years. Stipends above $1,000 are based on need. These scholarships are partially funded by an endowment established in honor of President Emeritus J. Lawrence Burkholder and his wife, Harriet. It is renewable each year with a 3.20 grade point average. The award is made for no more than eight total semesters.

Goshen College Academic/Merit Scholarships
These "merit-based" scholarships reward achievement in high school. Eligibility for the Menno Simons, Wens, Yoder, Grebel and Kratz Honors Scholarships are determined by looking at a combination of grade point average (GPA) and SAT or ACT scores. Awards based on academics are limited to a total of eight semesters, and are renewable based on continued minimum GPA levels (3.20 for Menno Simons, 3.00 for Wens, Yoder and Grebel, 2.80 for Kratz).

- Menno Simons Scholarship ....................................... $8,000
- Wens Honors Scholarship ....................................... $7,000
- Yoder Honors Scholarship ....................................... $6,000
- Grebel Honors Scholarship ....................................... $5,000
- Kratz Honors Scholarship ....................................... $4,000

Goshen College Transfer Academic/Merit Scholarships
Transfer students who have shown outstanding performance can receive academic/merit scholarships based on their cumulative transfer GPA.

- Transfer High Honors Scholarship ............................ $7,000
- Transfer Honors Scholarship ..................................... $5,000

Students from Hesston (Kan.) College who are not eligible for the above scholarships, but who still show good academic performance, are eligible for the Hesston Honors Scholarship worth $2,000. Renewals are based on maintaining a 3.20 GPA for the Transfer High Honors and 3.00 for the Transfer Honors and Hesston Honors Scholarships.

Stoltzfus Recognition Award
All African-American, Asian-American, Latino and Native-American students (U.S. and Canadian citizens and alien residents) are eligible. Eligibility requires a high school grade point average of 2.5 (on a 4.0 scale) or ranking in the top half of the high school class. Transfer students must have a 2.0 grade point average. This scholarship is renewable each year, but the award is made for no more than eight total semesters.

Athletic scholarships
Scholarships for athletic leadership/achievement are awarded each year through the athletic department. Check directly with the department for details.

Music scholarships
Scholarships for music achievement are awarded each year through the music department. First-year students are not required to be music majors, but must be involved in activities of the department. Scholarship applications and audition dates and procedures can be found at www.goshen.edu/financialaid/achievement.php#music.
Endowed and restricted scholarships
In 2007-2008, the aid office administered over 150 endowed and restricted scholarship funds and awarded over $800,000 to students from these sources. Simply by applying for financial aid, the student will automatically be considered for endowed and restricted scholarships, using criteria specified by each donor. Over 75 percent of these scholarships are need-based. Many are designated for a specific major or professional goal; some are based on other criteria such as geography, descendency, etc.

Missionary service scholarships (Swallen and Lord's Trust)
Two scholarships are available for students who are preparing for missionary service. These scholarships are the Swallen and the Lord's Trust. Application for first time recipients is available in the admission office. Renewal applications are available in the financial aid office. In addition to the application, two references are required. Awards are made for no more than eight total semesters.

Goshen College Grant
A Goshen College Grant is gift assistance provided on the basis of financial need. The amount of the grant is dependent on the student's demonstrated need and other gift aid received by the student.

Church Aid Matching Plan
Goshen College provides grants to match assistance given by the student's congregation or conference aid plan. The Church Aid Matching Grant will be awarded in addition to other scholarships, grants or discounts for which the student is eligible. The Church Aid Matching Grant program is available to any eligible student, regardless of religious denomination. The Church Aid Matching Grant will apply dollar-for-dollar to the first $1,000, and beyond that on a 1:4 ratio. Congregational or conference representatives must notify the church relations office by March 1, providing the amount of aid commitment and the name of each recipient. The match is pro-rated for part-time enrollment.

Tuition discounts

Related Mennonite institution discounts
Dependents of a faculty or staff member from schools of the Mennonite Secondary Education Council, Mennonite Elementary Education Council, Associated Mennonite Biblical Seminary, Eastern Mennonite Seminary or College Mennonite Church are eligible for a tuition discount up to 25 percent. Dependents of faculty and staff from these institutions who are employed less than full-time receive a pro-rata share of the 25 percent discount, based on the percentage of the parent's employment.

Mennonite Colleges tuition discount reciprocity
Dependents of faculty and staff members from the following members of the Council of Mennonite Colleges are eligible for a 50 percent tuition discount: Bethel College (KS), Bluffton University, Eastern Mennonite University and Hesston College. Dependents of faculty and staff from these colleges who are employed less than full-time receive a pro-rata share of the 50 percent discount, based on the percentage of the parent's employment.
Financial aid policies

Limits on Goshen College aid
Goshen College institutional dollars are available to students who have not achieved a bachelor's degree. Students may apply or audition for any number of awards, but each student may receive a maximum of two awards from the following list:

- Anglemyer Education Fund
- Athletic Awards
- Gorsline Business, Communication or Theater Scholarships
- Lord's Trust & Swallen Scholarships
- Menno Simons, Wens, Yoder, Grebel or Kratz Honors Scholarships
- Music Department Achievement Award
- President's Leadership Award
- Transfer Honors Scholarships
- Tuition Discount Benefit

Per College policies, the total gift aid from Goshen College sources cannot exceed the cost of tuition. Gift aid from all sources cannot exceed the combined cost of tuition, room/board and books.

Qualifications for financial aid
Goshen College financial aid requires full-time enrollment of at least 12 credit hours each semester. For federal and state financial aid requirements, contact the financial aid office. Accounts from previous enrollment must be paid in full to retain financial aid assistance.

In accepting a scholarship, grant, loan or discount, a recipient agrees to maintain satisfactory support of the ideals and standards of Goshen College and to maintain satisfactory academic progress.

Any financial aid held by a student who withdraws either voluntarily or by request will be adjusted according to federal and institutional refund policies. Any loan or open account will become due and payable.

Satisfactory academic progress
Financial aid recipients must show sufficient academic progress toward completion of degree objectives within a reasonable time period. The time period is normally defined as five years of full-time enrollment with exceptions granted for remedial work or other unusual circumstances. Failure to make normal progress will cause ineligibility in federal, state and institutional programs. The appeals committee hears appeals from those failing to meet minimum satisfactory academic progress. To continue receiving financial aid a student must:

- have at least a 1.50 grade point average while earning between 12 and 29 credit hours
- have at least a 2.00 grade point average after earning 30 or more credit hours
- complete 24 hours in each academic year (if a full-time student).
In no case may a student receive federal financial assistance after having attempted 150 percent of the published length of program for a full-time student, i.e., a maximum of 180 credit hours for programs that require 120 hours for completion. A full statement of the policy is found in the academic policies section of this catalog.

**Procedures for applying for financial aid**
Early and orderly planning is important for receiving financial assistance.

1. **Apply for admission**; a student must be admitted to the college before a financial aid offer can be made.
2. **Annually complete the Goshen College financial aid application form before March 1.** (For first-year and transfer students, the financial aid application is combined with the application for admission.)
3. **Submit a Free Application for Federal Student Aid (FAFSA)** by March 1. The FAFSA may also be used to apply for the Pell Grant program and the Indiana Higher Education Award and Freedom of Choice Award. The FAFSA may be obtained online at www.fafsa.ed.gov. Students should specify 001799 as the code number for Goshen College in the appropriate section of the FAFSA.
4. **Investigate other sources of financial aid**; high school, church, community service clubs, industry or vocational rehabilitation.
5. **The student financial aid office will begin awarding incoming students in early March.** Upon receiving a financial aid package, the student should review the award and respond to the guidelines stated in the financial aid letter.
6. **Continuing students must reapply for financial aid each academic year.** Aid usually continues at substantially the same level each year unless the family's resources or the student's status change. All enrolled students receiving aid automatically receive information about applying for renewal awards. Award letters will be sent beginning in early April.

**Canadian students**
Canadian students are eligible for institutional grants and scholarships listed above. To apply for need-based financial assistance, students should request the Canadian Student Financial Aid Form. Students should also consider sources of aid in their home province.

**International students**
Grants are available to qualified international students. These grants cover part of the cost of tuition. International students may apply for aid as a part of the admission process. To be considered, a completed application along with all supporting transcripts and test scores must be submitted along with a financial declaration. Students who had previously received a bachelor's degree will not be eligible for financial assistance.

**DAES and graduate students**
Students attending either the DAES or graduate programs at Goshen College may be eligible for financial aid. For more information, please contact the financial aid office.
# Financial information

## Expenses and fees for 2008-09

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Spring</th>
<th>May Term</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time tuition (12-15 hours)</td>
<td>$11,150</td>
<td>$11,150</td>
<td>Inc¹</td>
<td>$22,300</td>
</tr>
<tr>
<td>Room (residence halls)²</td>
<td>$1,975</td>
<td>$1,975</td>
<td>Inc¹</td>
<td>$3,950</td>
</tr>
<tr>
<td>Board (full board)³</td>
<td>$1,725</td>
<td>$1,725</td>
<td>Inc¹</td>
<td>$3,450</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$14,850</strong></td>
<td><strong>$14,850</strong></td>
<td><strong>$29,700</strong></td>
<td><strong>$29,700</strong></td>
</tr>
</tbody>
</table>

Fall or Spring SST ................................................................. $14,850
Summer SST (attended full time both fall and spring) ......................... $11,910
Summer SST (attended full time fall or spring) .................................. $13,380
Summer SST (did not attend full time fall or spring) .......................... $14,850

*There will be an extra cost for Germany, China & Peru SST units.*

¹ No additional cost for May term for students who are registered full-time, living on-campus, and with a meal plan at Goshen College in both fall and spring semesters. All others, including Brethren College Abroad students and those in off-campus courses through other agencies, pay the charges listed below for May term. Additional costs for May term meals may apply if student was not in full board both fall and spring.

<table>
<thead>
<tr>
<th></th>
<th>Tuition</th>
<th>Room</th>
<th>Board (full)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>May Term only</td>
<td>$2,200</td>
<td>$390</td>
<td>$350</td>
<td>$2,940</td>
</tr>
<tr>
<td>May Term (if attended full-time either fall or spring, but not both)</td>
<td>$1,100</td>
<td>$195</td>
<td>$175</td>
<td>$1,470</td>
</tr>
</tbody>
</table>

² Single-room charges are $500 additional per semester.

Kratz, Miller, Yoder residence halls - $1,975/semester
Kulp junior/senior floors - $1,900/semester
All small group housing - $2,175/semester
Individual apartment complex units - $2,375/semester

³ Other meal plan options –
14 meals per week at $1,625/semester, 80 meals per semester at $920/semester, 45 meals per semester at $530/semester.

Add the following estimates to the above fixed costs: books and supplies - $890; personal expenses (i.e., health insurance, recreation, laundry, pocket money, etc.) - $1,100; transportation - variable.

### Other tuition rates

**Adult programs** comprehensive fee ........................................... $14,000
(tuition, books, fees for entire program)

**Transition to Teaching** program
Elementary education .............................................................. $10,000
Secondary education .............................................................. $7,500
Part-time fall and spring enrollment charges (applied music surcharge additional)

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>$550</td>
</tr>
<tr>
<td>Two</td>
<td>$850</td>
</tr>
<tr>
<td>Three</td>
<td>$1,200</td>
</tr>
<tr>
<td>Four</td>
<td>$1,600</td>
</tr>
<tr>
<td>Five</td>
<td>$2,050</td>
</tr>
<tr>
<td>Six-to-eleven</td>
<td>$890</td>
</tr>
<tr>
<td>Extra</td>
<td>$550</td>
</tr>
</tbody>
</table>

Full- and part-time: Independent study, per credit hour (tutoring) .......................... $890
Independent study, per credit hour (honors thesis) .............................................. $715
Independent study, per credit hour (readings) ....................................................... $550
Summer session: ....................................................................................................... $1,600

Other surcharges and special fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied music surcharge (students enrolled for six or more hours)</td>
<td>$280</td>
</tr>
<tr>
<td>Applied music surcharge (students enrolled in less than six hours)</td>
<td>$395</td>
</tr>
<tr>
<td>Applied drama surcharge</td>
<td>$140</td>
</tr>
<tr>
<td>Audit fee, per hour</td>
<td>$170</td>
</tr>
<tr>
<td>Credit by examination per hour</td>
<td>$140</td>
</tr>
<tr>
<td>Credit for experience per hour</td>
<td>$160</td>
</tr>
<tr>
<td>Credit through Voluntary Service per hour</td>
<td>$140</td>
</tr>
<tr>
<td>Early enrollment tuition, per credit hour</td>
<td>$290</td>
</tr>
<tr>
<td>Examination out of schedule</td>
<td>$30</td>
</tr>
<tr>
<td>Late arrival for check-in</td>
<td>$50</td>
</tr>
<tr>
<td>Late payment (payment received after due date)</td>
<td>$50</td>
</tr>
<tr>
<td>Special payment arrangement (arrangements other than the standard payment plans)</td>
<td>$75</td>
</tr>
<tr>
<td>Yearbook</td>
<td>$35</td>
</tr>
<tr>
<td>Transcripts of credit (after first)</td>
<td>$4</td>
</tr>
</tbody>
</table>

(Transcripts are released only after all accounts are paid in full)

GC Student Health and Accident Insurance Program

<table>
<thead>
<tr>
<th>Description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single student per year</td>
<td>$626</td>
</tr>
<tr>
<td>Major Medical</td>
<td>$163</td>
</tr>
<tr>
<td>Spouse per year</td>
<td>$1,196</td>
</tr>
<tr>
<td>Each dependent child per year</td>
<td>$1,010</td>
</tr>
</tbody>
</table>

Finance charges

Interest of 12 percent annually (1 percent per month) will be levied against charges unpaid 30 days after statements are issued. Delinquent accounts may be sent to a collection agency. The student is responsible for all collection costs.

Standard payment plans

Final payment due dates

- Fall Term - August 14, 2008
- Spring Term - December 18, 2008
- May Term - April 29, 2009 (first day of classes)
- Summer Term - May 26, 2009 (first day of classes)
Plan #1 Payment in full. Any payment not received by the due date is subject to the $50 late payment penalty. For more information on payment methods, including online payments, visit www.goshen.edu/accounting.

Plan #2 Monthly Payment Plan: Contracts may be arranged with our outside agency for a low-cost monthly payment program to extend throughout the year. The cost of the annual plan is $45. There are no interest charges. Contact the accounting office for information, or visit www.goshen.edu/accounting for information.

To avoid a $50 late payment fee, enroll in one of the payment plans by the final payment due date. Students may not go through final check-in until payment requirements are met under one of these plans.

Tuition, fees, expenses and payment due dates can be found on links from the accounting office web page (www.goshen.edu/accounting) or from this expense sheet brochure. This information along with the financial aid information received in the Financial Aid award letter can be used to determine payment requirements. Student account information, including estimated billings, can be found on GC Online. Please use this information to plan adequately and meet payment requirements for the 2008-09 year.

Note: Delinquent accounts may be referred to a collection agency at any time after the account is 120 days past due. Collection costs on referred accounts are charged to the student and added to the balance due.

Refund policies and procedures
The following tuition refund procedures apply to students who withdraw or are dismissed from the institution, change status from full time to part time, or reduce hours as a part-time student. Room and board refund rates apply to students who withdraw, are dismissed, or change from resident to commuter status.

Voluntary withdrawal
Students who withdraw completely from the college initiate the process by contacting counseling services. Official contacts must also be made with the academic adviser, registrar, resident director (if residence-hall student), accounting office and student financial aid office. Students who reduce their hours of enrollment must contact their academic adviser and the registrar. Students with changes in housing or food-service contracts must contact the dean of students and dining service. To receive credit for the unused board contract, the student’s ID and any unused munch money must be returned to the dining hall, and the dean of students must be informed.

Involuntary withdrawal
The registrar’s office establishes the last date of attendance for students who stop attending classes without following withdrawal procedures by contacting teachers, the student’s adviser and residence life personnel. Information obtained from these persons will be used to document the last date of attendance.
Prorated refund policies
From the day of registration through the first week of classes (drop/add period), the student will receive a 100 percent refund on tuition. The refund percentage for the rest of the semester follows the federal regulations for refunding financial aid. From the eighth day of the semester, the refund percentage is calculated by counting the number of days left in the semester, divided by the total number of days in the semester. As in the federal formula, weekends and breaks are also counted except for scheduled breaks of at least five consecutive days. There is no refund after the last day to withdraw with a “W” which is when 60 percent of the semester is completed. A day-by-day refund schedule is posted in the accounting office and at http://www.goshen.edu/financialaid/cf_refundpolicy.php

Room and board refund rates, following day one of a given term, are prorated daily until the last date to withdraw with a “W.” No refunds are given after the “W” date. Refund rates for students enrolled in the May term only are the same as those listed above, but the 100-percent refund rate applies only to days 1 and 2 (drop/add period).

A student financial aid recipient will have earned aid according to the formula listed above. Exceptions are during the 100 percent refund period, where no aid is earned since no costs are incurred. The full formula for determining the amount of Title IV federal aid that is earned, and how unearned portions are returned to the federal programs is outlined in CFR 668.22. Institutional aid earned is calculated according to the same procedures, with the exception that any credit left on the student’s account after the refund listed above will first pay back any current year loan owed to Goshen College.

Withdrawal and refund policy for reservists called to active duty
See the Academic policies and requirements section of the catalog.
Academic life

Academic year

Two semesters plus a May term
In addition to fall and spring semesters, a three and one-half week May term is considered part of the regular school year. Commencement is held annually between spring semester and May term. Students may enroll for three or four credit hours in a wide range of May term courses. Students who are enrolled full time in fall and spring semesters and living in campus housing pay no additional tuition or room and board costs for May term courses on campus. Two summer sessions during June and July also offer a limited number of courses.

The summer Study-Service Term starts at the beginning of the May term and ends in July. A calendar for the academic year is included in this catalog and is also available online.

Degrees offered
The Bachelor of Arts is the primary degree awarded by Goshen College. The program that leads to this degree includes general education requirements, a major and electives that can also be used for a second major, one or more minors or to complete professional programs in elementary or secondary education and social work.

The Bachelor of Science in Nursing is a professional degree which requires successful completion of the State Board Examination to become a registered nurse. Graduates of associate degree programs in nursing are welcome to enter and pursue a modified program to earn a B.S.N.

The Bachelor of Science degree in Organizational Leadership is designed for students with two or more years of college. Classes are offered in the evening by the Goshen College Division of Adult and External Studies program and accommodate adult needs in content and learning style.

The first graduate programs at Goshen College began in 2007. Three degrees are offered:

- Master of Science in Nursing, Family Practioner
- Master of Science in Nursing, Clinical Nurse Leader
- Master of Arts in Environmental Education

The environmental education program is based at the Goshen College Merry Lea Environmental Education Center near Wolf Lake, Ind.

Majors and minors
The major is a specified concentration of courses in a department, in addition to designated courses in related departments, which develop expertise in the concepts and skills of a discipline. Many majors offer specialized concentrations, which allow students to tailor a program to their personal
interests. Each major includes a departmental or interdisciplinary seminar at the senior level and most include an internship. Majors range in size from 33 credit hours to 60 or more in professional programs.

Minors supplement the major, often emphasizing an interdisciplinary approach or vocational skill. They require 18-20 credit hours of study.

35 majors available
- Accounting
- American Sign Language Interpreting
- Art
- Bible and religion
- Biology
- Broadcasting
- Business
- Business information systems
- Chemistry
- Communication
- Computer science
- Computer science and applied mathematics
- Elementary education
- Elementary education/Special education
- English
- Environmental science
- History
- History and investigative skills
- Journalism
- Mathematics
- Molecular biology/Biochemistry
- Music
- Nursing
- Organizational Leadership
- Peace, justice and conflict studies
- Physical education
- Physics
- Psychology
- Public relations
- Social work
- Sociology
- Spanish
- TESOL (Teaching English to Speakers of Other Languages)
- Theater

An Interdisciplinary major is also offered, usually combining work in three departments.

37 minors available
- Accounting
- American Sign Language
- Anabaptist-Mennonite studies
- Art
- Bible and religion
- Broadcasting
- Business
- Business information systems
- Communication
- Computer science
- Conflict studies
- English
- Entrepreneurship
- Environmental science
- Global economics
- Graphic design
- Health
- History
- International studies
- Journalism
- Mathematics
- Multimedia communication
- Music
- Music in worship
- Peace and justice studies
- Physical education
- Piano pedagogy
- Psychology
- Public relations
- Social policy
• Sociology/
  Anthropology
• Spanish
• (TESOL) Teaching
  English to speakers
  of other languages
• Theater
• Women's studies
• Writing
• Youth ministry

Details on required courses and sequences for each major and minor appear under departmental headings in the academic programs section of the catalog. Handbooks on professional programs such as nursing or education are available in the appropriate departmental offices.

Declaring a major or minor
Students who wish to declare a major or minor should meet first with their academic adviser, then notify the registrar's office of their intent.

Certificate programs
Certificate programs are designed for persons with special interests who want to spend one year at Goshen College. These programs are open to high school graduates and other mature adults. Certificate programs are offered in biblical studies, business administration, music in worship, piano pedagogy and teaching English to speakers of other languages (TESOL). Details of each program are available from the related department or from the registrar's office.

Professional and pre-professional programs
Undergraduate professional programs at Goshen College
Three undergraduate professional programs are offered at Goshen College: education (elementary and secondary), nursing and social work. All require passing a certification exam after graduation. The accounting department offers several options for completing the 150 credit hours necessary to take the CPA exam. In addition, other majors such as broadcasting, journalism and business information systems offer extensive opportunities for internships and professional preparation. Details about these programs are in their department pages in the academic programs section of the catalog.

Teacher certification programs
The teacher education programs below lead to certification in Indiana. Most states have reciprocal certification agreements.

• American Sign Language education .........................(5-12)
• Bilingual/bicultural education ..................................(5-12)
• Business education ..............................................(5-12)
• Elementary education ...........................................(K-6)
• Elementary education/English as a new language ......(K-6)
• Elementary education/Exceptional needs: Mild intervention .(K-6)
• English/language arts education .............................(5-12)
• English as a new language (ENL) education ..........(K-12)
• Journalism education ..........................................(5-12)
• Mathematics education ......................................(5-12)
• Music education (general, vocal or instrumental) ......(K-12)
• Physical education ..............................................(5-12 or K-12)
Professional undergraduate programs completed at other colleges

**Engineering**

This is a two degree, or 3-2, program resulting in a B.A. in physics, chemistry or mathematics from Goshen College and a B.S. in engineering from a major university with an accredited engineering program. Goshen College has articulation agreements with Case Western Reserve, University of Illinois, and Washington University in St. Louis. The student spends the first three years at Goshen and the final two years at the university. For details and requirements, see the physics and pre-engineering department section of this catalog.

**Pharmacy**

This program is normally a 2-3 program, with the last three years spent in an accredited college of pharmacy. Pre-pharmacy students take general-education courses and courses in chemistry, biology, physics, mathematics, sociology and psychology. The student should consult the college of pharmacy early in the freshman year to select appropriate courses at Goshen College. This undergraduate program results in only one bachelor's degree, from the college of pharmacy. Students may, however, choose to earn a B.A. at Goshen College and a Master's degree in pharmacy elsewhere.

**Pre-professional programs that require a graduate degree**

**Pre-architecture**

An undergraduate degree in art is recommended, along with courses in mathematics, physics, history, sociology, communication and business. More information is available in the art department catalog pages and from art faculty advisers.

**Pre-law**

Law schools want students who can think, read and write well and who have some understanding of what shapes human experience. No specific major is required. History and English are good choices, but, depending on student interests, business, communication, Bible and religion or other fields could serve just as well. The most important thing is to select rigorous courses in wide-ranging fields. Materials for the Law School Admissions Test (LSAT) and information about law schools and pre-law internships are available in the Career Services office.

**Pre-medicine, physician's assistant, veterinary, physical therapy or dentistry**

Since course sequencing is important, any student interested in these programs should consult the pre-medical adviser or advisers in the biology and chemistry departments about course selection. Early in the spring semester of
the junior year, the pre-medical adviser, biology professor James Miller, will meet with students interested in applying to professional schools and explain the application and recommendation process. Applications should be sent before the fall of the senior year.

Pre-seminary
Goshen College has a close historical relationship with Associated Mennonite Biblical Seminary (AMBS), Elkhart, IN; however, Goshen graduates attend a variety of seminaries for theological study or preparation for ministry. Students anticipating seminary study are counseled to complete a B.A. degree with a major in Bible and religion, humanities or social sciences. They are also encouraged to attend the annual spring vocation banquet at AMBS and participate in a summer Ministry Inquiry Program internship in a congregation.

Key to course numbers
Lower level
100 - 199 courses -- Primarily for first-year students
200 - 299 courses -- Primarily for sophomores

Upper level
300 - 399 courses -- Usually for juniors or seniors
400 - 499 courses -- Primarily for seniors and graduates
A student may register for courses one year above current classification (for example, a sophomore may register for a 300 level course), if prerequisites have been met.

Some courses are offered for variable credit hours. The default credit value will be listed first, with the variable range in parenthesis, e.g. 3 (1-3).

Not all courses listed are offered each year. A list of course offerings for the next academic year is prepared in March of each year and is available from the registrar's office and online. The college reserves the right to cancel any course if fewer than 10 students enroll or if suitable faculty are not available.

Special courses in all departments
209 Field Experience ..........................................................1-4
Offers first- and second-year students opportunity to gain experiential learning in settings where departmental perspectives and skills are put to work. The student contracts with a faculty member in regard to goals, performance expectations, supervision, evaluation and course subtitle. Forty clock hours of field experience will be expected for each hour of credit earned. The course is open for use in all departments of the college.

299/399 Special Studies: (title to be given) .................................1-6
An all-purpose course for recording credit in topics not contained in regular offerings, often used for independent study or credit by experience. Registration arrangements need to be approved by both the department and the registrar's office. The course is open for use in all departments of the college.
Academic policies and requirements

Graduation requirements

1. Total credit hours
Minimum total credit hours for each bachelor of arts and bachelor of science degree is 120 credit hours.

2. General education
All general education requirements must be completed as listed in the catalog that is current at the date of matriculation.

Courses that meet multiple requirements:
Most general education courses may also count toward a student's major or minor. Exceptions are SST alternate courses, Engl 105/110 (for English majors), and Bibl 100/200 (for Bible and religion majors).

3. Major
A defined major or interdisciplinary major must be completed. At least 12 upper-level credit hours (300-499) are required, with at least six upper-level credit hours in the major completed at Goshen College.

Internship credit expectations:
From 40 to 60 clock hours of experience will be expected for one hour of credit earned in departmental internships completed during the academic year. See credit by experience information for policies governing credit earned outside the semester calendar.

Double major policies:
Students with a double major are required to complete only one senior seminar and one internship. However, since seminar and internship credit counts toward the total number of credit hours required for a major, other departmental courses must be substituted in order to reach the total required number of credit hours for the second major. Duplication of courses for two (or more) majors may occur only for courses specifically required in both of the majors.

4. Minor (optional)
A minor supplements the major, often emphasizing a special interest, an interdisciplinary approach or vocational skill. Minors consist of 18-20 credit hours, with at least eight credit hours of upper-level study. At least three credits in the minor must be completed at Goshen College.

Course overlap between majors and minors:
Duplication of courses for two (or more) minors may occur only for courses specifically required in both of the minors. However, courses in a minor may duplicate related courses in a major, at the discretion of the relevant departments.

5. Grade point average
A minimum 2.00 grade point average (GPA) for all work at Goshen College is required for graduation. Some specific majors require a GPA of 2.50.
6. Minimum credits of coursework at Goshen College
At least 30 credit hours of course work must be completed at Goshen College.

7. Senior credit requirement
Of the minimum 30 credit hours taken at Goshen College, at least 24 must be completed in the senior year (after achieving 90 credit hours). Exceptions are made for certain professional curricula where the fourth year is spent at another institution and for students in the Division of Adult and External Studies.

8. Limit of credit hours in one department
No more than 45 credit hours in one department can count toward the minimum hours required for the degree. In other words, at least 75 credit hours must be completed outside the department of the major. All interpretations of requirements should be checked with the registrar.

9. Convocation/chapel attendance
Posted attendance requirements must be met. Current attendance policies are distributed to students annually and available at the chapel and convocation Web site.

10. Full financial settlement
Diplomas and transcripts are released only after the student's financial obligations to Goshen College have been met.

Special degree conditions

Credit limitations
- **Technical education** - A maximum of 12 credit hours may be transferred from terminal (non-liberal arts) programs at other colleges, such as community colleges, technical or Bible institutes.
- **English as a second language** - A maximum of 10 credit hours may be counted toward the bachelor's degree.
- **Correspondence credit** - Goshen offers no correspondence courses, but up to 12 credit hours may be accepted in transfer.
- **Credit for learning based on work and/or experience** - A maximum of 12 credit hours of experience-based credit can be counted for the bachelor's degree.

Changes in graduation requirements
A student will normally be expected to meet the graduation requirements outlined in the catalog for the year of matriculation at Goshen College (or Hesston College) unless those requirements have been changed later by faculty actions that are to be applied retroactively. A student whose graduation is delayed because of absences of more than two semesters will be subject to the graduation requirements in force at the date of readmission. However, a student who, in spite of a period of absence, can graduate not more than seven years after first matriculation (or an appropriate share of this time, in the case of a student admitted with advanced standing), may elect the requirements in force on the date either of the first matriculation or of readmission.
Candidacy for degree
Candidates for degrees must file applications not later than the beginning of
the semester in which the degree is to be awarded. Official application forms
are available online.

Advising and registration
Following admission for study in a particular semester, all new students
participate in course registration as described below.

Registration procedures
Registration for each semester normally proceeds in two distinct stages –
course selection and final check in. Course selection includes consultation with
a faculty adviser and online course-selection. This registration must be
confirmed at the final check in just before classes begin. Final check in
includes housing confirmation, financial aid processing, proof of insurance, ID
cards, auto registration and other items. Fees must be paid prior to check in by
the accounting department's due date. Part-time students and late applicants
complete both course selection and check in on the first day of the semester.

Fall semester
Continuing students select courses in April. New students participate in special
orientation/registration days scheduled from May to August. Final course
selection and registration for all students is held the first days of the semester,
as is course selection for late students. Classes begin on the evening of the
first day of the semester.

Spring semester/May term
Students on campus select courses in November and December. Fall SST
students and new students complete course selection in December or on the
first day of the semester. Final check in for all students is the first day of the
spring semester, and classes begin on the second day.

Academic advising
First-semester freshmen are assigned to colloquium advisers. Those who are
ready to declare a major at the end of the first semester are then assigned to
advisers in their academic departments. All others will be assigned to general
advisers in the collegiate studies department until they declare majors.
During the advising period at the end of fall and spring semesters, all students
are asked to consult with their academic advisers, but contact is not limited to
these days. Faculty advisers are prepared to assist with a range of questions –
career goals, graduate school, choice of major, course selection and general
adjustment to college. Some departments and professional programs also
conduct group information or advising sessions for interested students.

Students share responsibility with the faculty adviser for planning their college
program, including course selection, and for becoming acquainted with
requirements through reading printed materials and attending departmental
meetings. Questions about the advising program should be addressed to the
associate academic dean.
Changes in registration (Drop and Add)
Students may make online changes to their course schedules during designated “open registration” times. Students may add new courses and change grading plans only during the first five days of classes in the fall and spring semesters and the first two days of the May term and summer sessions. Courses formally dropped before the end of the fifth day of classes do not appear on a student’s permanent record. Courses dropped during the second to ninth weeks will appear on the permanent record with a W grade (withdrawal). Courses dropped after the ninth week are recorded F (failing) or NC (no credit). Students may make changes in depth-credit registration (see below) during the first 12 weeks of the fall and spring semesters. Course changes after the times specified above are permitted for health reasons only and must be approved by the coordinator of counseling.

Hours and course load
The usual academic load during the fall and spring semester is 12 to 15 credit hours. To discourage fragmentation of the student's time and allow more concentrated study in each course, the maximum load permitted in any semester is 15 credit hours (six courses maximum). Exceptions to this policy are possible with approval from the registrar. Extra tuition is charged for hours beyond 15.

Depth credits
Depth credit is offered in some courses to encourage individual study. Sophomore, junior and senior students may register during the first 12 weeks of the semester for an extra credit hour in one or two such courses each semester.

Auditing courses
Students are invited to enrich their program by auditing courses on a space-available basis. Auditors may participate in a class, but are not required to complete assignments and tests. Therefore, classes that emphasize knowledge expansion rather than skill-building are most appropriate for auditing. To register, obtain an audit form in the registrar's office and secure the instructor's signature. A per-hour fee is charged for part-time students. There is no fee for full-time students. No attendance or achievement records are kept for auditors. Audited courses are not available for later credit by examination.

Northern Indiana Consortium for Education (NICE)
Goshen College is a member of the Northern Indiana Consortium for Education, along with Bethel College, Indiana University South Bend, Holy Cross College, Saint Mary’s College and Ivy Tech Community College in South Bend. Through this consortium, Goshen College students may cross-register for courses offered at another member institution. Registration is on a space-available basis. The home school records the registration, and home-school fees are charged. Summer courses are not eligible for cross-registration. See the registrar for current course options and registration procedures.
International Baccalaureate credits
Goshen College recognizes International Baccalaureate work and grants seven semester credits for examination scores of four or higher in higher level courses. A maximum of one year of credit (30 hours) is granted. IB credits may be counted toward general education requirements, major or minor requirements, or electives in the same manner as advanced placement credits. Individual departments will determine the exact placement in departmental courses. Generally, Goshen College does not award credit for standard level exams. However, when the IB diploma has been earned, four semester credits will be awarded for exams with scores of six or seven.

Special courses by request
A special course may be offered to students who propose and agree to enroll in it, provided a faculty member agrees to teach it. Off-campus courses and all courses not listed in the catalog need approval by the academic affairs committee. In some cases, courses may be offered during the summer or during the May term. The course title and description will be kept as a permanent record by the college. An advance deposit will be required from all students agreeing to enroll.

Special registration options
Courses and special credits are available by independent study, credit by experience and credit by examination. Since these options are not part of registration for any semester, students may register for them at any time with the registrar's office. A special fee is always charged, and financial aid does not apply.

Independent study
To develop more curricular flexibility, Goshen College invites students to register for independent study. Students have one year from the date of registration to complete independent study courses. For special circumstances, the professor may request one extension with a specific completion date, generally not to exceed three months. There are two primary reasons why students may wish to take independent study:

Regular courses at special time
An academic program may require that a student take a course not offered during a given semester. In some cases it is possible to take such a course by independent study, under the direction of a faculty member, at a special tutorial rate. To register for such a course, the student obtains permission and a form from the registrar. The instructor indicates approval on the form, which the student then returns to the registrar's office. Students may register for independent study at any time during the year, but normally cannot register for an independent-study class that would increase their current course load to more than 15 hours. All independent study is charged at a special rate: tutorial, which assumes equal amount of professor contact hours as when the course is normally offered, or readings, which assumes about one-fifth the normal contact hours.
Special independent courses
A student may want to engage in an independent-study project in an area not covered by regular curriculum courses, especially during the summer, when full time can be devoted to the project. The student may study at the Goshen campus or may elect to go to any area appropriate to the particular study. To take a special independent course, the student makes an initial proposal to the faculty member under whom the project would be conducted. If the faculty member approves, the student submits a more detailed proposal in writing. Next, the associate dean must approve this proposal, then the student registers for the course and pays the usual fee for independent study.

Credit for learning based on work and/or experience
Students may seek college credit for learning acquired through significant experiences in work, travel and service assignments. Goshen College will give credit for this kind of learning if the area of study is educationally valid and is compatible with college academic programs. The learning experience should involve both thorough preparation and systematic reflection on the importance of what has been learned. Contact with a faculty member before, during and after the experience is crucial for planning and evaluating readings, special research journals, portfolios and other materials. Participants in church-sponsored programs such as YES, Radical Journey and DEO arrange a contract with the associate dean for international education for earning credit through the course Intl 250/350 described in the International education section of the catalog. Payment in full is required to validate the contract.

From 80-to-120 hours of experience will be expected for one hour of credit. A maximum of 12 hours of experience-based credit can be counted for a bachelor’s degree. Students have two years from the date of registration to complete credit by experience registrations. For special circumstances, the professor may request one extension with a specific completion date, generally not to exceed three months.

Credit by examination
Credit is granted for acceptable test results under four programs – College Level Examination Program (CLEP), DANTES Program and Advanced Placement Tests (all programs of Educational Testing Services, Princeton, N.J.) and tests given by Goshen College instructors. Any student may take these examinations and credit may be earned unless it duplicates previous college credit.

The CLEP tests are administered at least monthly at several hundred centers in the United States, including Goshen College. If acceptable levels are attained in any of the tests, credit is granted. The use of such credit toward specific course requirements of general education and a major will be decided by the departments concerned. Credit policies for CLEP and AP examinations are posted at www.goshen.edu/registrar. Credit earned through testing, other than AP, that is intended to meet Goshen College general education, major or minor requirements is subject to the normal credit by examination fee. Contact the registrar for details.
Grading and evaluation

Goshen’s system of evaluation offers a standard (letter) grading system and a limited option system (CR/NC). The student chooses at registration whether courses will be selected for the option system.

Standard system

A  Excellent
   A   4.0 quality points
   A-  3.7 quality points

B  Very Good
   B+  3.3 quality points
   B   3.0 quality points
   B-  2.7 quality points

C  Satisfactory
   C+  2.3 quality points
   C   2.0 quality points
   C-  1.7 quality points

D  Unsatisfactory, but Passing
   D+  1.3 quality points
   D   1.0 quality points

F  Failing
   F   0 quality points

NR  Grade not reported (temporary grade)
I  Incomplete (temporary grade)
W  Withdrew during 2nd -9th week, no evaluation made

Option system

Selected by the student for a maximum of 12 credit hours in the entire college program (prorated for transfer students) or by the instructor/department for certain courses. The Credit/No Credit option may not be selected for courses in the General Education curriculum, including International Education, nor for courses in a student’s major or minor, unless designated by the academic department. The student chooses at registration whether courses will be selected for the Credit/No Credit option system.

CR  Passing work of C level or better; no grade point value
NC  No credit: equivalent to C- level or lower; no grade point value

Written evaluation paragraphs may be requested in option-system courses and selected courses in the major. Sometimes an instructor will choose to submit written evaluations for all students in a course.

Changes in grade plan

Changes in the grading plan are possible only in the first week of each semester (two days in May term). Under CR/NC, letter grades cannot be granted, but students may ask for a more extensive written evaluation of their work in a given class for up to five years after graduation.
Incomplete grades
A grade of I (incomplete) may be given at the instructor’s discretion for medical emergencies or circumstances beyond the student’s control. Students must be earning a passing grade at the time of the request for an I grade. It is to be given rarely and not to accommodate the student who, through carelessness or poor planning, does not complete course work in the given time. The student will work with the instructor to establish a plan for completion of the course. If a final grade is not submitted by the end of the spring semester (for fall) or the beginning of fall semester (for spring or May terms), an F or NC will be recorded. The new grade is used to compute the grade point average, but the I remains on the student's permanent record.

Evaluations rather than letter grades
The objectives of certain courses can best be met by special grading conditions. The academic dean can approve such courses, and they will be so marked on the official semester course offerings. Some courses have continuing approval to be offered in such a manner, e.g., student teaching and field-experience courses. Evaluations submitted for such courses become part of the permanent academic record, available with transcripts.

Grade reporting
An examination period is scheduled at the close of each course. Grade reports are available online to the student within one week of the close of each semester. Grade reports will also be sent to the parents at the request of the student.

Grade point average
A cumulative grade point average (GPA) for standard-system courses is posted on the student’s record at the end of each semester. Only courses completed at Goshen College (and Hesston College) are factored into the cumulative grade point average. The basis of calculation is: A=4, A-=3.7, B+=3.3, B=3, B-=2.7, C+=2.3, C=2, C-=1.7, D+=1.3, D=1, F=0 (CR and NC not included). For graduation, a minimum 2.00 GPA is required. Some majors require a cumulative GPA of 2.50.

Any course may be repeated only once for a higher grade. The first entry will be specially marked on the transcript and only the second attempt will count in the grade point average (GPA).

Latin honors
Academic honors are awarded to traditional baccalaureate degree graduates who have earned a cumulative grade point average of 3.6 or above (A = 4.0) and with no grade lower than a C at Goshen College. To qualify for graduation honors, a student must have completed at least 48 graded semester hours at Goshen College. Academic Honors indicated in the commencement program are reflective of fall semester grades and are subject to change with the addition of spring, May term and summer grades.

Academic honors are also awarded to Adult Degree Completion Program graduates who have earned a cumulative grade point average of 3.6 or above, with no grade lower than a C, while pursuing a degree from the Adult Degree Completion Program. To qualify for graduation honors, a student must have completed at least 40 graded semester hours at Goshen College.
Honors indicated in the commencement program are reflective of fall semester grades and are subject to change with the addition of spring, May term and summer grades.

- **Summa Cum Laude** ...... 3.90-4.00 GPA (with highest honor)
- **Magna Cum Laude** ........... 3.80-3.89 GPA (with great honor)
- **Cum Laude** .....................3.60-3.79 GPA (with honor)

**Dean’s list**
The Dean’s list is published after the fall and spring semesters. Students who have earned a semester GPA of 3.75 or higher on at least 12 credit hours of course work for a letter grade and who have no grades of incomplete (I) will be named to the list. Students may decline having their names published, if they so desire, by informing the registrar.

**Other academic policies**

**Official transcripts**
Official transcripts of a student’s academic record will be released upon written authorization of the student. To assure that the student has complete control over this confidential information, all requests by other individuals will be refused. Positive identification in the form of student number or birthdate should accompany the signed request.
One transcript is available free of charge. A fee of $4, payable in advance, is charged for each additional transcript. A transcript will be issued only if all financial obligations have been settled with Goshen College.

**Classification**
Students enrolled for 12 to 15 credit hours are considered full time; those enrolled for one to 11 credit hours are considered part time. All students are classified each semester as freshman, sophomore, junior or senior according to the following scale, based on total hours at the beginning of the semester:

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
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<tbody>
<tr>
<td>0-29</td>
<td>30-59</td>
<td>60-89</td>
<td>90 or more</td>
</tr>
</tbody>
</table>

**Attendance regulations**
Regular attendance at class is expected; the instructor will announce specific requirements for each course. Absences and completion of missed class work are issues for the instructor and student to resolve. When a class field trip results in absence, the professor is responsible to notify other instructors via the online Faculty-Staff Bulletin.

**Credits**
Credit is given for work successfully completed by the student and for which a passing grade or CR has been earned. The credit hour should indicate the use of one-fifteenth of the student’s time (3 to 3 1/2 hours per week in and out of class for the average student). The number of class meetings each week in a particular course will be determined by the instructor in consultation with the academic dean.
Standards for academic progress
Satisfactory progress depends on maintaining a minimum grade point average (GPA) and earning at least 12 hours of credit each full-time semester. Since graduation requires a 2.00 GPA, these intermediate goals must be met:

- In first year (12-29 hours earned) .......... 1.50 minimum GPA
- After earning 30 or more credit hours .... 2.00 minimum GPA

Any student not meeting these standards for: a) GPA or, b) hours earned, is placed on academic probation for the next semester. While on probation the student will be expected to either: a) increase GPA to the required level or, b) complete sufficient credit hours to have at least 24 hours in the two consecutive semesters (including May term). If these conditions are not met by the end of the semester, the student is subject to academic disqualification. Full-time students who pass fewer than five semester hours in any given semester of enrollment are also subject to immediate academic disqualification. Disqualification action is taken after a short appeal period when the student can file a written appeal with the Appeals Committee, which takes final action. It is possible that the student would be asked to take a battery of tests from a qualified mental health professional. These tests would examine academic potential, any learning problems present and emotional or social problems that could affect the student’s progress. In an effort to work with identified problems, the student may be asked to contract with support persons such as counselors, parents or professors. Disqualification lasts two semesters and the student may apply for readmission after that time. The first 12 hours of attendance after disqualification will be at student expense (no financial aid). Further eligibility for financial aid is dependent on maintaining satisfactory academic progress.

Academic integrity
Goshen College expects all students and faculty members to practice academic integrity. Honesty, trust, fairness, respect and responsibility are essential building blocks in creating a vital learning community. They are also the foundation for lifelong integrity. Academic dishonesty at Goshen College is considered a serious breach of the “Goshen College Commitment to Community Standards.” Academic dishonesty is any act that misrepresents academic work or interferes with the academic work of others. It includes:

- Plagiarism (giving the impression that another person’s work is your own)
- Cheating on assignments or exams
- Falsification of data
- Submission of the same (or substantially the same) paper in more than one course without the prior consent of all instructors concerned
- Depriving others of necessary academic sources
- Sabotaging another student’s work

Consequences of academic dishonesty are based upon the severity of the offense, course expectations and other variables. Consequences for individual
offenses may range from re-doing the assignment to dismissal from the college.

**Academic bankruptcy**
Academic bankruptcy is designed to assist the once-disqualified student to return to school under reduced handicap. Only selected students may be considered for bankruptcy status; to qualify the student will: a) have earlier been academically disqualified from Goshen, b) not be enrolled in any college study for at least two years, c) submit a written appeal to the Appeals Committee. Academic bankruptcy can be granted only once for a student and results in the entire Goshen College record up to that time being re-evaluated as a transfer record. This means that: a) only courses with grades of C or better will be retained for credit at Goshen; b) the grade point average will be restarted with no computation for former work at Goshen; c) academic bankruptcy will be clearly marked on the academic record. Clear conditions of probation will be stated to fit the individual situation. Fully meeting these conditions and the maintenance of a minimum 2.00 GPA will be required to continue after academic bankruptcy.

**Privacy rights of students**
In accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA), post-secondary students enrolled at Goshen College are hereby notified of their rights with respect to their education records. They are:

1. The right to inspect and review the student’s education records within 45 days of the day the college receives a request for access. Students should submit to the registrar, vice president for student life or other appropriate official, written requests that identify the record(s) they wish to inspect. The college official will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate or misleading. Students may ask the college to amend a record that they believe is inaccurate or misleading. They should write to the college official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to prohibit disclosure of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative,
supervisory, academic, research or support staff position (including security personnel); a person or company with whom the college has contracted (such as an attorney, auditor or collection agent); a person serving on the board of directors; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks. A school official has legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Goshen College to comply with the requirements of FERPA.

The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 600 Independence Ave., SW, Washington, DC 20202-4605. FERPA further provides that certain information concerning the student, designated as “directory information,” may be released by the College unless the student has informed the college that such information should not be released. “Directory information” includes:

- Name
- Permanent address
- Local address*
- Telephone number*
- E-mail address*
- ID photo*
- Verification of birthdate supplied by inquirer
- Dates of attendance
- Full- or part-time status
- Date of graduation and degree received
- Major field(s) of study
- Classification
- Participation in officially recognized activities and sports
- Height and weight of athlete

*Local address, campus phone number, email address and student ID photo are available on Goshen College’s Web site, but only to people using a computer connected to Goshen College’s on-campus network (physically connected to the network or remotely connected with a valid Goshen College username and password.) Goshen College does not provide student e-mail lists to public or private entities.

Any student who desires that any or all of the above listed information not be released may contact the registrar’s office or complete the form found at http://www.goshen.edu/registrar/privacy. Questions about this policy may be directed to Stan Miller, registrar, or Bill Born, vice president for student life.

Withdrawal and refund policy for reservists called to active duty

Any student called to active duty may withdraw from courses up until the last day of the semester. If the withdrawal comes during the first nine weeks of the
semester, normal withdrawal and refund policies take effect. If departure comes after the ninth week, the student has the option of withdrawal “W” or incomplete “I”. Options should be discussed with and approved by the course instructor(s). If course withdrawal “W” is pursued, tuition and fees will be refunded on a prorated basis. The official date of withdrawal will be used to calculate the refund. Students receiving financial aid will be subject to refund policies as provided for by the agencies sponsoring the aid. Reservists called to active duty who wish to withdraw from courses must provide the Registrar with a copy of their orders.

**Leave of absence policy**

Students whose enrollment is interrupted by one or two consecutive semesters may apply for a leave of absence at the time of their withdrawal. Formal requests for leaves should be made by completing a Leave of Absence Form, available from the registrar’s office or online. Justifiable reasons for a leave may include medical or financial difficulties or church-related service assignments. Students enrolled at the Indianapolis Peace Institute, Chicago Center, Oregon Extension, Washington Community Scholars Center or in BCA study programs are considered to be currently enrolled students at Goshen College.

Students on official leave shall enjoy all the catalog privileges of continuous enrollment. The offices of registrar, student financial aid, SST and residence life will communicate with students on leave in a timely manner to ensure student services commensurate with continuing students.

Students who interrupt enrollment for more than one academic year must apply for readmission through the admission office. All students who take courses elsewhere during their leave, and who want to transfer that credit to Goshen College, also must apply for readmittance through the admission office.
Undergraduate programs

General education curriculum

Director, R. Peterson-Veatch, Associate Academic Dean

The Goshen College general education program provides a core of common courses and activities for students in every major. Central to Goshen College general education is the Study-Service Term (SST), with its strong emphasis on international, intercultural education. As a Christian liberal arts college, Goshen also gives Bible and religion studies a prominent place in its liberal arts core.

What is a liberal arts education?

At the heart of the liberal arts tradition is the assertion that only an educated person – one who is aware of self and of the other; one capable of independent discernment, analysis and judgment; one gripped by the quest for truth – can be truly free. The Bible also reflects this notion in Jesus’s words, “You will know the truth, and the truth will make you free.”

The basic question that drives all liberal arts inquiry is “What is truth?” Since different disciplines offer different approaches to the exploration of truth, the general education core at Goshen College gives students courses and experiences in a wide range of disciplines: communication skills, mathematics and natural science, history and social science, physical education, humanities, Bible and religion, and international education. As the Goshen College learning community pursues truth together, our aim is to develop “informed, articulate, sensitive, responsible Christians.”

Summary of course requirements

Orientation (1 credit hour)

- Colloquium attached to another course............................... 1

Communication skills (5-6 credit hours)

- Comm 202, Oral communication..................................... 2-3
- College reading and writing course selected from two possible levels: ......................................................... 3
  Engl 110, Literature and Writing
  Engl 210, Introduction to Literature

International/intercultural education (12-13 credit hours)

- Study-Service Term (SST) or alternate option .............. 12-13
- Language proficiency through 102 level (or alternate) ..... 0-8

Bible, religion, philosophy, and peace studies (9 credit hours)

- Bible survey course selected from two possible levels: ...... 3
  Bibl 100, Knowing the Bible
  Bibl 200, Reading the Bible
• Elective Bible or religion course .............................................. 3
  Any additional Bible or religion course except Greek or Hebrew languages

• PJCS or philosophy course selected from the following: ...  3
  Phil 200, Introduction to Philosophy
  Phil 302, Ethics and Morality
  Phil 307, Asian Thought
  PJCS 210, Transforming Conflict and Violence
  PJCS 312, War, Peace and Nonresistance
  PJCS 313, Violence and Nonviolence

Mathematics and natural science (6-8 credit hours)
Two courses, selected from any two separate areas below:
  • Mathematics .................................................................... 3-4
    Math 110, Mathematical World
    Math 131, Mathematical Concepts for the Elementary Classroom
    Math 141, Finite Mathematics
    Math 170, Precalculus
    Math 205, Discrete Mathematics
    Math 211, Calculus I
  • Biological science ......................................................... 3-4
    Biol 100, Biological World
    Biol 111 or 112, Biological Principles I or II
    Biol 154, Human Biology
    Biol 203, Human Anatomy and Physiology
  • Physical science .......................................................... 3-4
    Chem 100, Chemical World
    Chem 101 or 102, Chemistry and Physics of Life I or II
    Chem 111, General Chemistry
    Phys 100, Physical World
    Phys 154, Descriptive Astronomy
    Phys 203 or 204, General Physics I or II

History and social science (6 credit hours)
  • History: one course from the list below: ........................... 3
    Hist 100, Human Stories
    Hist 101 or 203, World History I or II
    Hist 102, European History
    Hist 105 or 202, American History I or II
  • Social science: one course from the list below: ................. 3
    Econ 201 or 202, Principles of Economics
    PoSc 200, Introduction to Political Science
    Psyc 100, General Psychology
    Soc 200, Principles of Sociology
    Soc 220, Human Origins, Human Nature

Physical Education (1 credit hour)
  • PhEd 100, Wellness ....................................................... 1
Humanities (4 credit hours)

- One course from the list below: ....................................................... 4
  - Hum 220, Humanities: Literature and Art
  - Hum 221, Humanities: Literature and Music
  - Hum 222, Humanities: Theater and Literature
  - Hum 223, Humanities: Music and Art
  - Hum 224, Humanities: Music and Theater
  - Hum 225, Humanities: Art and Theater

Total credit hours ...................................................................................... 44-48

Exceptions and modifications

All students seeking elementary or secondary education certification must take PJCS 210 for the PJCS/Phil requirement.
DAES students have modified general education requirements. Information is available from the program director.
Nursing and Education students have modified general education requirements. Details are available in department catalog pages.
See planning guides for other majors for general education recommendations or requirements. Many courses can meet requirements in both a major or minor and general education simultaneously.

Special features in the senior year

Students in nearly every major participate in an internship during the senior year in which they apply academic learning to practical problem-solving or a position of employment. In addition, seniors enroll in a senior seminar appropriate to their major. Senior seminars integrate and synthesize learning from students’ entire college experience and guide them in exploring future vocations. Senior seminars also address ethical issues in the major field from a Christian perspective and sometimes include a major research project.

Descriptions and advising notes

Colloquium

All first-time first-year students enroll in a colloquium course in the fall semester at Goshen College. Colloquium, a one-credit-hour course attached to another 1-4 credit course, is a set of activities that introduces students to academic life. Most of the courses with colloquium attachments meet a general education core requirement. Class size is limited to 22 students, giving them close contact with a small group of other students and the professor.

Colloquium students learn about the resources and values of Goshen College, process the changes that happen at college and find encouragement to grow socially, spiritually, psychologically and academically. The colloquium class introduces competency requirements in information literacy and begins to document students’ academic learning. The colloquium professor serves as academic adviser to students in the colloquium class for the first semester at Goshen College. Required of all transfer students with fewer than 15 credits of college courses.
Communication skills
Courses in this area build a solid foundation in reading, writing, speaking and thinking skills to be used throughout students’ academic careers. Close, careful reading and effective speaking and writing are essential skills for academic success. The English classes include readings in classical and contemporary literature and writing instruction. Most students will select Engl 110. Engl 210 is for students with SAT verbal scores of at least 630 or ACT English scores of at least 28 or for students who have earned AP or CLEP credit, but desire a stronger foundation in college-level reading and writing. Students with SAT verbal score below 430 or ACT English score below 20 must take Engl 105 before Engl 110. The oral communication class involves practical speaking experiences from public speaking to interpersonal communication. Attention is given to communicating in a culturally diverse society and to an educated audience.

International/Intercultural education
The core requirement in international/intercultural education provides students with an opportunity to learn about the values and assumptions of their own and other cultures. Most students choose to meet this requirement by participating in the unique Study-Service Term, or SST program. SST is a full semester of international service learning in a country significantly different from the United States. Groups average about 20 students and are led by a Goshen College professor. Students live with host families and study the language and culture of the host country in a large city during the first half of the semester. Much experiential learning occurs as students scatter to outlying locations during the second half of the term. Current SST countries include Cambodia, China, Tanzania, Nicaragua, Germany, Jamaica, Senegal and Peru. This core general education requirement may also be met through alternate intercultural study that combines academic coursework and experiential learning. See a fuller description of both SST and other alternatives in the international education section of the catalog.

Study-Service Term abroad (13 credits)
Requires the following language proficiency as a prerequisite:
• French, German, and Spanish SST units: 102-level in the language of the country; 102-level also required for American Sign Language unit in Jamaica.
• China, Cambodia and Tanzania: one elementary language course in the language of the country and either one course from the list of prerequisite courses in the international education pages or other foreign language competency at the 101 level or higher.

Alternate SST (12 credits)
Requires one of the following ways to demonstrate language proficiency
• 102-level language proficiency or
• Comm 206, Communicating Across Cultures and 101-level language proficiency or
• two 101-level language courses (or proficiency).
In addition, students select 12 credits of courses from the approved list in the international education section of the catalog.
Bible/religion/philosophy/peace studies
Because Goshen College considers biblical literacy to be a foundational requirement for a well-rounded education, all students take a Bible survey course, either Bibl 100 (for students with little or no past experience with the Bible) or Bibl 200 (for students who are already familiar with biblical stories and concepts). For course descriptions, see the Bible, religion and philosophy department pages of this catalog. Placement tests are available at the beginning of each semester to help uncertain students determine which level is most appropriate for them. In addition to a Bible survey course, all students select one more Bible or religion class of their choice. Also, all students select at least one of the philosophy or peace/justice/conflict studies classes in the list of general education courses. Each of these courses broadens the knowledge base and cultivates critical thinking skills in students as they face both current and perennial issues. Note: The preferred PJCS course for students not majoring in PJCS or related fields is PJCS 210.

Mathematics and natural science
The core requirement in natural science is designed to help students understand the scientific approach to the pursuit of knowledge and the nature of the scientific community. Courses include laboratory experiences as well as classroom instruction. Since the ability to think quantitatively and reason accurately from data is a fundamental skill for every educated person, all students must meet a mathematics competency requirement. Competency may be established in three ways: SAT math score of 550 or ACT math score of 23, college credit in mathematics at the pre-calculus level or higher, or a passing score on the Goshen College math competency exam. Students who do not meet the minimum competency requirement must pass Math 105, Understanding Our Quantitative World, before taking general education courses in mathematics or natural science. All students choose at least one course from two of the three areas in the list of general education courses. Note: The preferred mathematics course for students who do not have a mathematics requirement in their major is Math 110. Also note: Biol 112 and Phys 204 may be taken without Biol 111 or Phys 203 as prerequisites.

History and social science
Historical study reveals the roots of modern civilization. History is a form of inquiry and a way of knowing both the world and one’s place in it. The social science core requirement allows students to become familiar with at least one approach to understanding human behavior in the context of contemporary society. Students select at least one of the history courses and at least one of the social science courses in the general education list.

Physical education
Everyone has both the challenge and the opportunity to improve and preserve health in body, mind and spirit. Toward this end, all students take PhEd 100, Wellness as part of the general education core. This course explores wellness in many dimensions: physical, mental and spiritual. It is taught in the physical education department in collaboration with Student Life professionals.
Humanities
The humanities – art, music, literature, theater and other fine arts – have long been a central part of a liberal arts education because they offer both an expression of and an inquiry into human experience. These interdisciplinary courses give students an opportunity to study the history of artistic expression while participating in artistic activities and examining the relationship between the arts and their own lives. Students select one humanities course from the general education list. Two or three courses will be offered each year.

International education
T. Meyers, Director of International Education

Introduction
Goshen College offers several types of international education. First is the general education requirement of a Study-Service Term (SST) or its equivalent in on or off-campus courses (Sections I and II). Second is a Minor in international studies (Section III). Third is a variety of other overseas educational opportunities offered by Goshen College or other organizations with whom we cooperate (Sections IV and V). In addition, the international student program described in the Student Life pages integrates international students with campus life.

I. The Study-Service Term (SST)

Program description
SST is a program designed to immerse students for one term in a culture significantly different from that of the United States. Its goals for each student are to develop intercultural openness, communication in a variety of forms, thinking that is active and reflective, and understanding of self and others. Spanish SST units are offered in the Caribbean and South America. Currently, units also operate in Germany, China, Asia, Ethiopia and Senegal.

Students choose a language area for SST in consultation with their academic adviser and spend one term in a location of that language, preferably during the sophomore year. Students are urged to plan and sign up for SST participation upon entering college because spaces are limited.

At each location, Goshen faculty leaders arrange the academic program and give personal counsel to a group of up to 23 students. The first six weeks of the term are spent studying the language and culture of the host country. The faculty leader uses local resources to support a largely experience-based learning program: home stays, lectures, discussion, field trips, journal writing, readings, special projects and examinations. Library resources, although somewhat limited, are available at each unit. During the last six weeks of the term, students work in a field/service-learning assignment, usually in a rural area. Throughout the term, students live in homes of the host country and eat at least two meals daily with their “families.” See www.goshen.edu/sst/ for more information.
Participation in SST is an educational privilege for those whose recent performance suggests that they are ready for the special challenge of SST. A screening process reviews the health and the academic and behavioral performance of all SST applicants throughout the preparation process until departure. On location, all SSTers are expected to follow both the standards of the college and the guidelines more specific to the norms of the host culture and host family.

Student fees in the Caribbean area, including travel costs, are the same as for a semester’s tuition, room and board on campus. Units in other locations involve extra cost.

**SST locations for 2008-2011 (tentative)**

<table>
<thead>
<tr>
<th>2008-09 Fall semester</th>
<th>Spring semester</th>
<th>Summer semester</th>
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<tbody>
<tr>
<td>• China</td>
<td>• Peru</td>
<td>• Germany</td>
</tr>
<tr>
<td>• Peru</td>
<td>• Jamaica</td>
<td>• Nicaragua</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Peru</td>
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<table>
<thead>
<tr>
<th>2009-10 Fall semester</th>
<th>Spring semester</th>
<th>Summer semester</th>
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<tbody>
<tr>
<td>• Peru</td>
<td>• Cambodia</td>
<td>• Nicaragua</td>
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<tr>
<td></td>
<td>• Peru</td>
<td>• Peru</td>
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<td></td>
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<tr>
<th>2010-11 Fall semester</th>
<th>Spring semester</th>
<th>Summer semester</th>
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<tbody>
<tr>
<td>• Peru</td>
<td>• Peru</td>
<td>• Peru</td>
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<tr>
<td></td>
<td>• Tanzania</td>
<td>• Nicaragua</td>
</tr>
</tbody>
</table>

**Credit hours and evaluation**

- Foreign language .............................................................. 4
- Intercultural communication ............................................... 3
- History and Culture of [country] ........................................ 3
- Arts and Literature of [country] ........................................ 2
- The Natural World of [country] ......................................... 1

Students will receive a letter grade for each program component.

**Prerequisites for SST**

Students are responsible for completing these essential prerequisites prior to SST. The director of international education must approve any exceptions

1. Students participating in French, German or Spanish units need to establish 102-level competency (by course or test) in the language of the country.
2. Students participating in any other foreign language unit will complete one elementary course in that language, offered on campus especially for that SST group prior to departure, and one course selected from any other language or from the following list. Whenever possible, students should elect a course from the specific region of their SST unit.
   - Bus 350, International Business
   - Comm 206, Communication Across Cultures
   - Econ 306, International Economics
   - Econ 308, Introduction to Economic Development
• Engl 201, World Literature in English
• Engl 310, Introduction to Linguistics
• Hist 240, History of Global Poverty
• Hist 340, Religious History of Africa
• Hist/WoSt 330, Gender in World History
• Hist 335, History of Ethnic Conflict
• Hist 350, African History
• MCLL 300, International Classics
• PoSc 308, International Politics
• Phil 307, Asian Thought
• Rel 317, Islam and Judaism
• Soc 230, Cultural Anthropology
• Soc 330, Family and Kinship Across Cultures
• Soc 334, Race, Class and Ethnic Relations
• Soc 340, African Societies and Cultures

II. Alternate ways to meet the international education requirement

A. Approved study-abroad programs
The approved study-abroad programs described in Section IV may be used toward the alternative to the SST. Students may receive SST alternate credit for language courses at the 200-level or higher in an approved study abroad program. If the student has already met the SST prerequisite, 100-level language study in a second language may also count as an alternate. Approval must be granted by the director of international education.

B. Other international and cross-cultural options
This program is designed for those whose needs call for an experience different from the full three-month SST unit abroad. While immersion in another culture through SST comes nearest to our ideal for an integrative experience in international education for most students, we intend other options to promote the same learning outcomes as SST. Through courses on the Goshen campus, experiences and resources in the surrounding community, and where possible participation in shorter seminars abroad, this program includes a serious study in culture, encourages an interdisciplinary service learning component and invites an integrative activity to bring the various components into a meaningful whole. B.S. Nursing students who desire an alternative to the SST program should see the nursing department information in this catalog for a modification of the requirements below.

Required prerequisite: Two units of foreign language and culture which may be completed in any one of the following ways:
• 102-level course or proficiency in any foreign language
• 101-level language plus Comm 206
• two 101-level courses in any foreign language (credit or proficiency)

Additional 12 credit hours in courses selected from the list of “SST alternate” courses below. These courses may not also count toward major, minor or other general education requirements. With assistance from advisers,
students are encouraged to plan an integrated program to meet particular educational goals rather than to select courses based on random interest. The following list of international-studies courses may be supplemented with one-time courses approved by the dean and the director of international education. Some courses are offered in alternate years.

- ASL 104, North American Deaf Culture
- Bus 350, International Business
- Bus 375, Business in Spain
- Comm 206, Communicating Across Cultures
- Econ 306, International Economics
- Econ 308, Introduction to Economic Development
- Engl 201, World Literature in English
- Engl 207/307, Irish Literature in Ireland, African American Literature or American Indian Literature
- Engl 310, Introduction to Linguistics
- Hist 240, World Geography
- Hist 255, History of Global Poverty
- Hist/WoSt 330, Gender in World History
- Hist 335, History of Ethnic Conflict
- Hist 340, Religious History of Africa
- Hist 344, Latin American History
- Hist 350, African History
- Hist 375, Topics: History of the Southwest
- Intl 250/350, Intercultural Service-Learning (see description below)
- MCLL 300, International Classics
- PJCS 320, Borderlands
- PJCS 430, Healing the Wounds of Violence
- PoSc 308, International Politics
- PoSc 318, Latin American Politics
- Phil 307, Asian Thought
- Rel/Soc 315, Religion in Culture and Society
- Rel/PJCS 316, Liberation Theologies
- Rel 317, Islam and Judaism
- Rel/Soc 319, Doing Theology Abroad
- Soc 220, Human Origins/Human Nature
- Soc 230, Cultural Anthropology
- Soc 330, Family and Kinship Across Cultures
- Soc 334, Race, Class and Ethnic Relations
- Soc 336, Latin American Societies and Cultures
- Soc 340, African Societies and Cultures
- Soc 342, Native American Societies and Cultures
- Spanish courses, any 300-level or above

**Intl 250, 350 Intercultural Service-Learning** ...............................................1-6

A field assignment in an intercultural setting through an approved voluntary-service agency. Arranged by the student with the international education director.
C. Modified program for students with other intercultural experience

Although most North American students who have considerable intercultural experience participate in SST, some may qualify for a reduced international education requirement. Students must meet one of the following requirements:

1. Live in another country outside the United States or Canada at least six months after completing high school.
2. Live in another country outside the United States or Canada for at least two years after the age of 12.
3. Participate in an organized service program operated by a church or service agency in a cultural group significantly different from one's own, for a period of at least six months.

If ANY one of the above conditions is met, the student must then:

1. Meet the standard language prerequisite to SST (See II.B.)
2. Earn six credit hours in international studies courses from the above options. Three credit hours of language learned in a foreign country may count as part of the six credit hours.

D. Exemption from SST

1. Students who have had significant intercultural experience throughout their life prior to enrolling at Goshen College may be exempt from SST. These students will be assessed on a case by case basis by the director of international education.
2. Studying in the United States meets the international education requirement for international students, though they are encouraged to seek service experience in this country. They may participate in SST, but any GC grants to international students may not be applied to SST.

III. Minor in international studies

Program director and adviser: T. Meyers, Associate Dean for International Education

9-17 credit hours, in addition to a semester of SST

- Language prerequisite for SST (credits or proficiency) ... 0-8
- Any three approved "SST alternate" courses from the list above .................................................................................. 9

Planning and advising notes

This minor is available only to students who have had SST or an equivalent semester of study abroad. For students with SST in east Africa, China, or Cambodia, the alternate SST language prerequisites may be used. The course work is recommended for after SST, but courses taken before SST do apply. The three "SST alternate" courses may not overlap with requirements in any major or any other minor.

If the international studies minor is selected as one of the three areas of study in an interdisciplinary major, 15 credit hours of courses must be selected from the "SST alternate" list to complete that area of study.

IV. Other study abroad options with Goshen College

During the May term or summer, Goshen College may offer special courses abroad. Locations vary, but in the past they have operated in England, Ireland,
France, Germany, Italy, Spain, the Middle East, Colombia, Guatemala, Mexico and Perú. Credits may be earned in several areas, among them language, history, literature and peace studies. Some credits may apply as international study options (II-B).

V. Study abroad with other international programs

Study abroad is available at colleges or universities in many different countries. Special application must be made on forms available from the international education office. Goshen College students have access to approved study-abroad programs through affiliation with the following organizations:

- Schools that are members of the Council of Mennonite Colleges
- Brethren Colleges Abroad (BCA)
- Council on International Educational Exchange (CIEE)
- Council of Christian Colleges and Universities (CCCU)
- Lithuania Christian College (LCCU)
- Central American Study and Service (CASAS) in Guatemala

Goshen College students in these affiliated programs will be registered as students at Goshen College in absentia. Credit may count for international education requirements only with the approval of the director of international education. Approval for credit equivalency does not mean that Goshen College financial aid will apply, but sources of financial aid outside of Goshen College are available.

Financial aid policies

For the list of affiliated international study programs in the previous paragraph, sources of student financial aid and scholarships are limited to funding outside of Goshen College, such as Pell Grants, state grants, outside scholarships, church aid and Guaranteed Student Loans. Only when the international program is required by the student's major and there is no alternative available on campus may Goshen College scholarships and financial aid be used. An application must be submitted and the major must be declared by spring advising days prior to the year of off-campus study. Contact the director of student financial aid for more information.

Programs which are not on the approved list above may be eligible for credit transfer, but students who choose to enroll in programs that have no affiliation with Goshen College cannot apply for any sort of financial aid through Goshen College.

Collegiate studies program

Director, R. Peterson-Veatch, Associate Dean

The department of collegiate studies is a collaboration between Student Life faculty and academic faculty. It has three tasks: first, to help students adjust to academic life at the college level; second, to help students select courses, majors and minors so that they can make progress toward a degree; and third, to provide career counseling for all students.
All Goshen College faculty members have an interest in this department because students’ success at Goshen College depends at least in part on their making wise decisions about majors and careers and responding to a sense of vocation.

The department itself offers neither a major nor a minor; instead, it offers these services:

- An academic home for all first-year students during their first semester and for continuing students who are deciders (those students still in the process of selecting a major)
- Coordination of the colloquium program for first-year students during their first semester
- Academic advising for all deciders
- Workshops, advising guidelines and career counseling services for all students

**Colloquium**

Introduces new college students to the Goshen College learning community. Required of all first-year students when they enter college during the fall semester. Colloquium activities add an extra credit hour to existing courses. See the Student Life and General Education sections for more details.

**Courses**

**DCS 210 Career Exploration ................................................................. 1**

An interactive exploration of career decision making. Introduces students to the concepts of career, life planning and vocation through identifying strengths, clarifying values and self-evaluation. Career services director and guest speakers provide information about educational and career options. Lectures and discussion.

**Special programs**

**Adult programs**

Bachelor degree programs with majors in organizational leadership and nursing are offered in the evening. For more detailed information, see the Division of Adult and External Studies (DAES) section.

**Center for Intercultural Teaching and Learning**

The Center for Intercultural Teaching and Learning, known as CITL, was established with a grant from Lilly Endowment. It has three main areas of activity:

- **Research** - CITL is conducting research on the dynamics behind the changing ethnic composition in a rural Midwest community and its implications for higher education.
- **Educational Access** - CITL is working to make a Goshen College education accessible to Latino students and in the
process enabling the college to better serve other culturally diverse students.

- **Transformed Learning Community** - CITL is creating an intercultural learning community for all Goshen College students that prepares them for communication, understanding and collaboration needed in the 21st century. See http://citl.goshen.edu/ for more information.

**Honors opportunities**

The academic ethos at Goshen College is rigorous and engaging. Requirements for the Dean's List and the Latin Honors system for graduates are described in the Academic policies section of the catalog. Two special honors opportunities are described below.

**Academic Symposium**

An annual Academic Symposium features exemplary student research and writing. The symposium brings together students and faculty members involved in original research and scholarly activity from all disciplines. A selection of papers representing the quality of student research at Goshen College is published on the Academic Symposium Web site: http://www.goshen.edu/honors/Research Symposium.

**Maple Scholars**

Each summer the Maple Scholars program supports numerous student-faculty research partnerships. Maple Scholars is an eight-week program that gives students the opportunity to participate in independent research alongside Goshen College faculty of various disciplines. Each scholar is paired with a faculty member who works with and supervises individuals to help carry out their work. Students who are selected as Maple Scholars live in campus housing and receive a stipend. See www.goshen.edu/academics/maple_scholars.php for more details.

**Indianapolis Peace Institute**

Goshen collaborates with Earlham and Manchester colleges to offer an urban peacemaking experience. The city of Indianapolis is the classroom. The peace house program combines a living and learning experience with other college students, academic study and an internship at an Indianapolis agency. A 14-week, 15-credit program in fall or spring semester. Summer internships also available. For more information, contact a PJCS faculty member, the associate dean for international education and off-campus programs, or see http://www.indianapolispeaceinstitute.org/

**Merry Lea Environmental Learning Center**

Owned and operated by Goshen College, the Merry Lea Environmental Learning Center is a 1,150-acre complex of fields, forest, bogs and meadow located 30 miles south of the campus. Opportunities are available for field research in natural sciences as well as teaching internships in outdoor education. More than 6,000 K-12 children each year are guests at Merry Lea. Facilities include an environmental-education building that houses a classroom, offices and library, a Farmstead, a pavilion, and some housing with overnight accommodations. Rieth Village, a set of "green" collegiate laboratory/residence...
buildings was completed in 2006. Rieth Village received a Platinum award, the highest level possible and one of only 43 in the nation, from the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system. LEED buildings are required to meet rigorous standards in areas such as energy efficiency, water management, use of recycled materials and indoor air quality. Merry Lea offers undergraduate courses in environmental science and education. A master's degree program in environmental education began in 2008. See www.goshen.edu/merrylea/ for more information.

Goshen College Music Center
The Goshen College Music Center, opened in 2002, is a beautiful award-winning facility with excellent acoustics. The Music Center contains the 1,000-seat Sauder Concert Hall, 300-seat Rieth Recital Hall, rehearsal rooms, classrooms, practice rooms, and offices. The Hershberger Art Gallery features rotating exhibits by guest artists, faculty and students. The Music Center hosts a popular annual Performing Arts Series with world-class performers as well as dozens of other concerts. The Community School of the Arts, based in the Music Center, offers piano lessons, Suzuki string lessons, children's choirs and other musical activities to more than 300 families. The Acorn Project provides subsidized music lessons for low-income families. String orchestra opportunities are also offered for home-schooled students and older adults. More information is available at www.gcmusiccenter.org.

Off-campus May-term courses
Each May-term, marine biology courses are offered at Goshen College's marine biology facility on Long Key in Florida. Environmental science courses are also offered each May at Merry Lea. Most other courses in the list below are offered every two years. Off-campus May term courses offered by Goshen College in 2006-08 were:

- Anabaptist History in Europe
- The Arts in London
- Biology of the Sea (Florida)
- Borderlands (Texas/Mexico)
- Business in Spain
- Camping and Recreation (Boundary Waters, Minnesota)
- Field Experience in Environmental Biology
- General Ecology (Merry Lea)
- Marine Biology (Florida)
- Ornithology (Merry Lea)
- Religious Journalism

Other off-campus programs
In addition to Goshen College SST and May-term courses, many other possibilities for off-campus study exist in cooperation with other colleges and universities. (See list below.) For information about registering for any of these programs, contact the associate dean and director of international education.

Financial policies for off-campus programs
Special arrangements make it possible for students to register for Goshen College credit while participating in the programs below. However, since tuition
and fees are collected and passed on to the other agencies or colleges, sources of student financial aid and scholarships while enrolled in these programs are nearly always limited to outside funding such as Pell grants, state grants, non-Goshen College scholarships and Stafford Loans.

Goshen College tuition discounts, scholarships and direct financial aid can be used only when a sponsored program is required for a student’s major and those requirements cannot be fulfilled without the sponsored off-campus experience (Spanish major, e.g.). For Goshen College financial aid to apply to required off-campus study, an application must be submitted and the major must be declared by spring advising days prior to the year of off-campus study.

To obtain information on financial aid, contact the student financial aid office. Academic credits earned in these sponsored off-campus programs are considered residential credits. However, these are not Goshen College programs. Therefore, May-term fees are charged for students who were off-campus in one of these affiliated programs during fall or spring semester.

**Off-campus programs affiliated with Goshen College**

- **Au Sable Institute of Environmental Studies** offers summer programs in Mancelona, Mich., and other locations. Contact the environmental science director for more information or see www.ausable.org.

- **Brethren Colleges Abroad** offers academic-year and half-year programs in Europe, Asia and South America. Contact Spanish professors for more information or see www.bcanet.org.

- **Central American Study and Service (CASAS)** in Guatemala offers semester or summer programs in Spanish and Central American studies. See http://semilla.org.gt/ingles/CASAS/casas.html for more information.

- **Chicago Center** offers semester and summer programs in Soc 302, Urban Diversity and many internship possibilities. Because of special financial arrangements with this program, students who spend the fall or spring semester at Chicago Center are not charged extra for a May term at Goshen. See www.chicagocenter.org for more information.

- **Council for Christian Colleges and Universities (CCCU)** offers various semester and summer programs. For further information, see www.bestsemester.com. Semester programs of CCCU include the Los Angeles Film Studies Center. Located near major production studios, the program combines seminar courses with Christian context and a liberal arts perspective. Participation in this program is required for theater and communication majors who elect a film studies concentration.

- **Council on International Education Exchange** offers many academic-year and half-year programs in Europe, Asia and Latin America. See www.ciee.org for more information.
• **Lithuania Christian College** has summer TESOL internships and semester study opportunities. See www.lccbc.org for more information.

• **Oregon Extension**, in an old logging camp, offers an interdisciplinary fall semester and a women's studies May term for students from Christian colleges. Contact www.oregonextension.org for more information.

• **Washington Community Scholars Center**, sponsored by Eastern Mennonite University, has semester, year-long or spring/summer programs available in Washington, D.C. Includes significant internship experience and course work at a nearby university. See www.emu.edu/wcsc for more information.

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**Division of adult and external studies (DAES)**

*M. Moretto, Director of DAES*

**Introduction**

The Division of Adult and External Studies offers quality education designed for adult learners. It reflects the distinctive standards of academic excellence, in a friendly environment of professional support, that characterizes Goshen College. Two different majors are available:

- Organizational leadership
- B.S.N. completion

The organizational leadership program prepares learners to lead effectively within an organization. Through a thoughtful blend of theory and application, learners are able to understand what works – and why. Solid textbooks, experienced faculty, and the formal and informal life experiences of participants enable learners to be challenged to grow as leaders – and as people. Visit the DAES Web site at www.goshen.edu/daes/Home.

The bachelor of science in nursing program is for persons who have already completed an R.N. program. For more information about the R.N. to B.S.N. program, including specific graduation requirements, see the nursing department pages.

Organizational Leadership Program faculty members are full-time professors at Goshen College or adjunct professors from local businesses who teach in their area of expertise. For nursing faculty, see the Goshen College nursing department pages.

**Admission information**

Degree completion programs are designed for adult learners who are working full time. Classes meet once a week in evening hours. Students must have three to five years significant life or work experience, at least 60 semester hours already completed, demonstrate mastery of basic computer skills, provide a satisfactory writing sample, references and have a C average in all prior work.
Students graduating in this department must earn 120 semester hours with a 2.0 grade point average on courses completed at Goshen College. General education requirements must be completed as follows: English composition (3), literature/fine arts/foreign language (3), natural science (3), social science (3) and history (3). In addition, students must show evidence of competency in four areas: computer usage (basic knowledge, word processing), speech (presentation skills), written communication (effective writing ability) and quantitative skills (basic math skills).

In addition to the 40 credit hours earned in the core modules/classes, students may earn up to 20 additional credit hours by Credit for Prior Learning. Credits can also be obtained using DANTES and CLEP tests. Goshen College is a test center for both exam programs.

Major in organizational leadership

40 credit hours

OLP 300 Effective Communication .............................................................. 3
This course develops and enhances general and professional writing skills. Clear, concise, well-edited writing is emphasized. Course content includes selecting appropriate writing formats for specific situations and practicing various writing strategies to promote clear thinking and effective communication. Life-learning essays and professional writing assignments are included in the course requirements. (five weeks)

OLP 301 Individual and Group Dynamics .................................................... 3
This course examines the question: what factors combine to determine individual and group performance in an organization? Individual and group dynamics are examined in the context of the adult learning environment as well as the work environment. The internal and external environment of the worker in modern organizations is explored. Motivation is studied as a consideration of personality, attitudes, perception, roles and environment. (five weeks)

OLP 307 Managerial Accounting ................................................................. 3
The acquisition, analysis and reporting of financial information is important to the individual leader and the organization. Special attention is given to the planning and control responsibilities of practicing managers. Students gain confidence in their ability to interpret and use financial information for more effective decision making. (five weeks)

RELN 305 Enduring Issues in Christian Perspective................................. 3
Examines the biblical heritage and major doctrines of Christian faith. Explores basic issues such as individualism and community, personal decision-making, social justice and relating to other religious traditions. Class members will be challenged to think through their own responses to these issues. (five weeks)

OLP 308 Economic Environment of Organization..................................... 3
This course focuses on the role of prices and markets in the modern, mixed free-enterprise economy. Students consider economic tools needed to better understand economic policy debates and make better choices as leaders. (five weeks)
OLP 309 Leading & Serving Multicultural World ................................................. 3
The modern workforce is rapidly becoming a mosaic of colors, languages, cultural traditions and values. This demographic reality poses an immense challenge for both workforce and leaders. The goal of this course is to better understand different cultural values and styles, to recognize one’s own biases and assumptions and to value diversity. (five weeks)

OLP 312 Organizational Theory ..................................................................... 3
Humans are immersed in organizations; to a large extent they form our lives. This course introduces the history of organizational development and examines how and why organizations change. It covers organizational task goals of planning, organizing and control. (five weeks)

OLP 401 Organizational Cultures .................................................................. 3
This course introduces the concept that organizational culture is the sum total of the written and unwritten assumptions that an organization has learned and used throughout its history. The role of culture in young corporations, mid-life and mature organizations is considered. Consequences to organizational culture in a time of acquisitions, mergers and joint ventures are examined. (five weeks)

OLP 403 Leadership Theory & Development................................................ 3
This course focuses on providing theoretical foundations and conceptual principles for leadership and skills necessary to practice leadership competently. Activities are designed to enhance leadership self-awareness, encourage development of personal perspectives on leadership and prepare students to address leadership challenges. The course reviews historical and current perspectives on leadership and considers how leaders use influence to direct and coordinate the activities of group members. (five weeks)

OLP 410 Ethical Issues in Leadership and Organization ............................. 3
This capstone course considers the responsibilities of both leaders and organizations. Attention is given to three distinct but related themes: the social responsibility of organizations, public policy toward business organizations and leadership ethics. Students are challenged to make ethical analysis a routine part of their decision-making framework. Case studies explore the reality of the multiple, competing claims placed on the leader and the organization. (five weeks)

OLP 412 Leading & Managing Change.......................................................... 3
Organizations today function within a dynamic environment marked by rapidly changing technologies, globalization of markets, the “knowledge enterprise” and an increasingly diverse workforce. Leaders of organizations must understand the change process, appropriate responses to change, conflict resolution and how to develop strategies for the future. Rethinking competition, leadership and markets is an essential exercise as leaders search for new paradigms that will govern organizations now and in the future. (five weeks)
OLP 420 Strategic Planning, Action, Measurement ........................................ 3
This course addresses strategic issues in running a business enterprise. Effective strategy-making and strategy-execution are the key ingredients of company success and the most reliable signs of good leadership. The basic concepts and tools of strategic analysis and business research are presented, utilizing case studies and simulation problems. (five weeks)

OLP 450 Leadership Project................................................................. 4
This project provides opportunity for students to integrate classroom theory with practical experience by identifying an opportunity to lead through service within an organizational setting – either the student’s workplace or a public benefit organization. Students work with a faculty mentor to structure the learning, coordinate with the cooperating organization and assess the level and significance of their learning. The findings or outcomes of the project will be presented on the last two nights of the program schedule. (12 months)

B.S.N. Completion
For more information about the R.N. to B.S.N. completion program, including specific graduation requirements, see the nursing department catalog page.
Academic departments and courses

Art

Professors J. Blosser (chair), M. Krabill
Associate Professor J. Wenig-Horswell
Assistant Professor G. Penner
Adjunct Faculty J. Mishler

Introduction
The art department offers the following programs:

- Major in art
- Minor in art
- Minor in graphic design
- Minor in multimedia communication
- K-12 visual arts teaching certification
- Six possible concentration areas.

Visit the art department website at www.goshen.edu/art/Home.

Career and post-graduate opportunities
Art graduates are currently working as elementary and secondary school art teachers, architects, graphic designers, designers in industry and business, art therapists, free-lance artists, college teachers, fashion designers, interior designers, museum curators, photojournalists and production crafts persons and fine artists.

Major in art

33 credit hours

- Art 101, Drawing ................................................................. 3
- Art 107, Design ................................................................. 3
- Art 202, Painting ............................................................... 3
- Art 205, Figure Drawing .................................................. 3
- One 3-D course selected from the following: ..................... 3
  Art 204, Ceramics
  Art 206, Sculpture
  Art 217, Jewelry
- Art 341, History of Art I .................................................... 3
- Art 342, History of Art II .................................................... 3
- Art 409, Senior Exhibit ..................................................... 1
- Art 410, Senior Seminar ................................................... 3
- Thea 245, Aesthetics ......................................................... 3
- Art concentration area (options below) .............................. 5
Concentration areas (at least 5 credit hours in one area)

**Graphic design**
Art 108, Art 208, Art 308, Art 408, Art 203, Art 207, Art 301/401, Art 315, Art 343, Art 355; Bus 336, Advertising; Bus 121, Introduction to Entrepreneurship; Engl 204, Expository Writing; Comm 212, Broadcast Media Production I; Comm 255, Photo Communication; Comm 326, Creating for the Web; Art/Comm 375, Animation.

**Production crafts**
Art 206; Art 301/401; Art 312; Art 343; Art 355; 9-15 hours ceramics or jewelry; Bus 121, Introduction to Entrepreneurship; 328, Venture Planning; Acc 201 and 202, Accounting.

**Studio art**
For students preparing for graduate school or a career as a studio artist. Art 301/401; Art 312; Art 343; Art 355; 9-15 hours in selected studio courses in two- or three-dimensional media. Engl 204, Expository Writing. Selections from history, French, German, philosophy and anthropology.

**Visual arts education (K-12)**
In addition to the required courses outlined above, these course are also required for teacher certification: Art 108, Art 255, Art 312; and six credits advanced study in a medium as preparation for the senior exhibit. Also 30 credits in education, including student teaching during fall semester of the senior year. PJCS 210 is required for the PJCS/PHIL general education requirement. For more details see visual art and secondary education pages of the Teacher Education Handbook.

**Pre-Architecture**
Pre-graduate school program. For a master's degree in architecture, an undergraduate major in art is recommended, along with selected electives in other areas. Additional courses usually required include: Art 108; Art 301/401; Art 355; studio art classes; Math 211, Calculus I; Phys 203 or 204, General Physics; and two history courses chosen from Hist 101, 102, 203 or one of the humanities courses. In addition, courses in sociology, psychology, communication skills and business are strongly recommended, along with cross-cultural experience.

**Art therapy**
Pre-graduate school program. Art 204; Art 206; Art 207; Art 217; Art 301/401; Art 312; Art 355; Art 412; Psyc 210, Developmental Psychology; Psyc 306, Abnormal Psychology.

**Curatorial studies**
Pre-graduate school program. Art 301/401; Art 312; Art 343; Art 355; Art 412; Bus 121, Introduction to Entrepreneurship; Comm 324, Principles of Public Relations; Engl 204, Expository Writing; selections from history, French, German, philosophy and anthropology.

**Planning guide**

**First year**
- Drawing
- Design
Painting
Any art 3-D media course
General education courses

Second year
Figure Drawing
Balance of remaining first-level studio courses
Begin art concentration courses
Aesthetics (offered on alternate years)
General education, including SST

Third year
History of Art
Art concentration courses
General education

Fourth year
History of Art
Remaining major courses, concentration courses and electives
Remaining general education and electives
Senior Exhibit
Senior Seminar

Planning and advising notes
At least one, but no more than two studio art courses are recommended per semester. At least 75 non-art credit hours are required for a Goshen College degree.

Minor in art
20 credit hours
• Art 101, Drawing ................................................................. 3
• Art 107, Design or Art 202, Painting ................................. 3
• History of art: Art 341, Art 342, or Art 343 ...................... 3
• 11 credit hours of art electives; 5 or more must be upper level (300-499) ......................................................... 11

Minor in graphic design
20-21 credit hours
• Art 101, Drawing ................................................................. 3
• Art 107, Design ................................................................. 3
• Art 108, Digital Design ...................................................... 3
• Art 208-308, Graphic Design I & II ................................. 6
• History of art: Art 341, Art 342, or Art 343 ...................... 3
• One elective course selected from the following: ............ 2-3
  Art 255, Photocommunication
  Art 408, Graphic Design III
  Bus 336, Advertising

Note to art majors: A third art history course is not required for art majors to complete this minor. Instead, an additional three credit hours may be selected from the elective options above.
Minor in multimedia communication

18 credit hours
See the communication department pages for a full description of this minor, which represents a collaboration between art, business, communication, and computer science departments.

Art courses

ART 101 Drawing ........................................................................................................ 3
Fundamentals of drawing as applied to pictorial organization. Emphasis placed on rendering skills: the use of line, value and perspective balanced by expressive approaches. Includes the use of various dry and wet media. Encouraged as a first course in art. Open to all students.

ART 107 Design ....................................................................................................... 3
A beginning course focusing on art elements and principles. Through experimentation, exercises, specific problems and using basic media and techniques, the student becomes familiar with fundamental visual concepts. Studio experience, critique and some research/writing are included. Encouraged as a first course in art. Open to all students.

ART 108 Digital Design .................................................................................... 3
This course in visual expression and communication will introduce students to relevant computer programs including Adobe InDesign, Adobe Illustrator and Photoshop. Through exercises, projects and critiques, students will learn both creative visual design and technical aspects of computer-generated images and composition.

ART 202 Painting ............................................................................................ 3
The first course in painting is an introduction to the use and control of acrylic medium with a dominantly perceptual approach. Emphasis on technique, color and composition. Advanced courses emphasize independent investigation leading to personal expressions in oil paint. Art 202 open to all students.

ART 203 Watercolor ....................................................................................... 3
Through studio activity, a wide range of subject matter and techniques are explored. Skill and control of the medium are developed through numerous painting exercises. Art 203 open to all students.

ART 204 Ceramics .......................................................................................... 3
In the first term, students use a variety of methods to create forms in clay, including hand building and the potter's wheel. Both sculptural and functional forms, glazing and firing are learned. Art 204 open to all students.

ART 205 Figure Drawing ................................................................................ 3
Studio based on the human figure, using a variety of drawing media and techniques, brief and sustained poses. Further development of perception and knowledge of the human figure stressed in advanced work. Features a variety of media, the relationship of figure to ground and a variety of conceptual approaches. Prerequisite: Art 101.
ART 206 Sculpture ................................................................. 3
Exploration of sculpture media and techniques. Includes verbal interpretation
and research of sculptors. Art 206 open to all students.

ART 207 Printmaking .......................................................... 3
The study of relief and intaglio techniques. Includes a brief introduction to
monoprinting. Advanced work directed toward experimental techniques and
skill development. Individual and group critiques. Art 207 open to all students.

ART 208 Graphic Design I .................................................... 3
Students are introduced to the elements and principles of graphic design/visual
communication. Emphasis will be placed on the aesthetic use of typography
and image in the development of projects in publication, poster and advertising
design. This course will also provide an historical overview of the influences
and movements in the field of typography. Prerequisite: Art 108.

ART 217 Jewelry ................................................................. 3
Three-dimensional design in metals including basic fabrication techniques,
silver soldering, cold connections, stone setting, chain making and polishing
processes. Includes study of historical and contemporary work in metal. Art
217 open to all students.

ART 255 Photo Communication ........................................... 3
(Cross-listed from Comm 255) A first course including camera work, digital
image workflow and printing. Technical fluency, visual composition,
photojournalistic approaches, and expression are components of the course.
Students must provide a camera on which f-stop and shutter speed can be
controlled.

ART 301 Art Study Tour ........................................................ 3
Art study on location in major art centers in Europe. Study stresses historical
works and architecture. Both class and individual study is included. Extra cost.
Open to all students.

ART 302 Painting ............................................................... 3
Emphasis on technique, color and composition using oil paint. Features study
of the human figure, direct observational approach to a variety of problems and
an investigation into abstract vocabulary. Emphasizes independent
investigation leading to personal expressions. Prerequisite: Art 202.

ART 303 Watercolor ............................................................ 3 (1-3)
Through studio activity, a wide range of subject matter and techniques are
explored. Skill and control of the medium are encouraged through practice.
Prerequisite: Art 203.

ART 304 Ceramics ............................................................... 3
Second-term students continue skill and concept development. More advanced
work in glazes and firing is also required. Prerequisite: Art 204.

ART 305 Figure Drawing ....................................................... 3 (1-3)
Studio based on the human figure, using a variety of drawing techniques, brief
and sustained poses. Further development of perception and knowledge of the
human figure stressed in advanced work. Features a variety of media, the
relationship of figure to ground and a variety of conceptual approaches. Prerequisite: Art 205.

ART 306 Sculpture ................................................................. 3 (1-3) Exploration of sculpture media and techniques. Includes verbal interpretation and research of sculptors. Prerequisite: Art 206.


ART 308 Graphic Design II ................................................. 3 Emphasis will be placed on corporate design. Students will design various symbols and identities and carry the visuals through to stationery, packaging, advertising and various other marketing projects. Production standards for layouts, inks and paper and the printing process will also be studied. This course will also provide an historical overview of the influences and movements in the field of graphic design. Graphic design courses must be taken in sequence. Prerequisite: Art 107, Art 108, Art 208 or consent of instructor.

ART 312 Teaching Visual Arts ............................................. 3 (3-4) A methods course introducing the issues, concepts, philosophy and content of teaching art for art education students (K-12) or others with an interest in teaching art in other settings. Emphasis on curriculum and lesson planning, reading in art education, art classroom management and evaluation. Includes field work. All art majors strongly encouraged to take this course. Visual art education majors must take it for 4 credits; others may take it for 3 credits.

ART 315 Photography .......................................................... 3 The study of photography as an expressive art form. Includes further study in artistic, technical, and/or commercial areas of photo imaging. Prerequisite: Comm/Art 255.

ART 317 Jewelry ................................................................. 3 (1-3) Three-dimensional design in metals that builds on the basic metals techniques presented in Art 217, focusing on continued concept and technical skills and lost wax casting or enameling processes. Includes study of historical and contemporary work in metal. Prerequisite: Art 217.

ART 330 Media Workshop: ............................................... 3 A course that explores in depth a single medium or process such as metal casting, raku, papermaking, weaving, kiln building, silk screen and airbrush.

ART 341 History of Art I ....................................................... 3 A survey of historical art from prehistory through the Middle Ages. Lecture. Offered alternate years with Art 342.

ART 342 History of Art II ....................................................... 3 Historical survey of art from the Renaissance to the mid-20th century. Lecture. Offered alternate years with Art 341.
ART 343 Contemporary Art History .............................................................. 3
A survey of major art movements, architecture and artists since the mid-20th
century. Offered alternate years with Thea 245.

ART 355 Arts in London ................................................................................. 4
(Cross-listed from Thea 355) A May term class that encompasses theater, art
and music study and experiences in London, England. Class activities include
morning lectures, visits to art galleries, attending music and theater
performances, and day trips to Coventry, Stratford-upon-Avon, Salisbury and
other locations. Daily writing assignments and a major project required. Offered
in alternate years. Extra cost.

ART 375 Animation ......................................................................................... 3
(Cross-listed from Comm 375) Focuses on digital animation. Students will learn
the skills needed to bring characters to life as well as create visual effects
using computer software. Issues in the international contemporary visual
culture will also be studied. Prerequisite: Comm 326.

ART 401 Advanced Art Study Tour ............................................................... 3
Art study on location in major art centers in Europe. Study stresses historical
works and architecture. Both class and individual study is included. Extra cost.
Open to all students.

ART 402 Painting ................................................................................... 3 (1-3)
Emphasis on technique, color and composition. Emphasizes independent
investigation leading to personal expressions in oil paint. Prerequisite: Art 302
and Art 101 or Art 107.

ART 403 Watercolor .............................................................................. 3 (1-3)
Emphasizes independent investigation leading to personal expressions.
Prerequisite: Art 303 and Art 101 or Art 107.

ART 404 Ceramics ................................................................................. 3 (1-3)
Advanced students develop personal styles. Prerequisite: Art 304 and Art 101
or Art 107.

ART 405 Figure Drawing ....................................................................... 3 (1-3)
Studio based on the human figure, using a variety of drawing techniques, brief
and sustained poses. Further development of perception and knowledge of the
human figure stressed in advanced work. Features a variety of media, the
relationship of figure to ground and a variety of conceptual approaches.
Prerequisite: Art 305.

ART 406 Sculpture ................................................................................ 3 (1-3)
Exploration of sculpture media and techniques. Includes verbal interpretation
and research of sculptors. Prerequisite: Art 306 and Art 101 or Art 107.

ART 407 Printmaking .......................................................................... 3 (1-3)
A deeper study of techniques. Advanced work directed toward experimental
techniques and skill development in media of choice. Individual and group
critiques. Prerequisite: Art 307 and Art 101 or Art 107.

ART 408 Advanced Graphic Design .................................................... 3 (1-3)
Students concentrate on developing skill in various areas of interest. Projects
from GC and the Goshen community are used with input and critique from
students and instructor. Projects are chosen with the purpose of developing experience in working with clients and portfolio development. Graphic design courses must be taken in sequence. Prerequisite: Art 308 and Art 101 or Art 107.

ART 409 Senior Exhibit  .......................................................... 1
A senior exhibition emphasizing studio work in an area in which the student has specialized and developed a personal style. Course includes gallery installation, publicity and education relating to the exhibit. Prerequisite: Six to nine hours in medium and consent of instructor. For art majors only.

ART 410 Senior Seminar  .......................................................... 3
Integrating creative endeavors, life's purpose and faith. Issues concerning professional, vocational, ethical, theological and historical dimensions of being an artist are explored. Prerequisite: Required of all senior art majors; consent of instructor.

ART 412 Special Projects  .................................................. 1 (1-3)
Independent self-directed work or apprenticeship at an advanced level beyond that which is offered in regular courses or an internship related to an art concentration area. Prerequisite: consent of instructor.

ART 415 Advanced Photography  ....................................... 3 (2-3)
Students follow individualized plans of study to prepare work for exhibition, or web use, and to develop skills needed prior to a field assignment in commercial or journalist photography. Prerequisite: Art 315 and Art 101 or Art 107.

ART 417 Jewelry  ............................................................ 3 (1-3)
Three-dimensional design in metals that builds on previous metals techniques with a focus on continued concept and technical skill development plus lost wax casting or enameling processes. Includes study of historical and contemporary work in metal. Prerequisite: Art 317 and Art 101 or Art 107.

Bible, religion and philosophy

Professors K. Graber Miller (chair), J. Brant, J. E. Brenneman, P. Keim
Assistant Professor and Director of Youth Ministry R. E. Yoder
Visiting Professor M. Berry

Introduction
The Bible, religion and philosophy department offers the following programs:

- Major in Bible and religion
- Minor in Bible and religion
- Minor in youth ministry
- Youth ministry track within the Bible and religion major (an apprenticeship in ministry)
- Certificate in biblical studies

More information is available at the department Web site at www.goshen.edu/bibrelphil/Home.
The Bible and religion major is designed to provide students with an introduction to biblical studies and the academic study of Christian and other religious traditions, while affirming their faith and orienting them toward the value that the Anabaptist tradition places upon the Bible and the church. The major requires courses on the content and methods of biblical study, church history, theology, ethics and philosophy, and culminates in a senior seminar in narrative theology.

**Career and post-graduate opportunities**
A major in Bible and religion is of particular value to students contemplating graduate study in Bible, religion or theology, mission and service occupations in the church, or callings to youth ministry or broader pastoral work.

Recent graduates have gone on to become pastors, service workers, professors, hospital chaplains, teachers, journalists, public relations consultants, lawyers, farmers, computer analysts, musicians, artists, business executives, translators, and church administrators.

Regardless of their future occupations, majors are given a strong foundation for careful reading of texts, thinking theologically, considering the relevance of faith for their daily lives, and active participation in congregational life.

**Major in Bible and religion**

**39-40 credit hours**

**Core requirements (18 credit hours):**
- Bibl 300, Jesus and the Gospels ........................................ 3
- Bibl 301, Hebrew Scripture ................................................. 3
- One of the following: ........................................................... 3
  - Rel 318, Anabaptist/Mennonite History
  - Hist 321, History of Mennonites in America
- Rel 320, Christian Faith ...................................................... 3
- Bibl/Rel 409, Internship ...................................................... 3
- Bibl/Rel 410, Seminar ......................................................... 3
- One of the tracks below ............................................... 21-22

**General track (21 credit hours):**
- Elective in Bible ................................................................. 3
- Phil 302, Ethics and Morality ................................................ 3
- Additional philosophy course selected from: ...................... 3
  - Phil 200, Introduction to Philosophy
  - Phil 307, Asian Thought
  - Phil 401, Philosophy of Religion
- Related courses in the department or in supporting courses such as Hist 304, PJCS 313, Psyc 314, or Soc 310, in consultation with the adviser ............................................ 12

**Apprenticeship in youth ministry track (22 credit hours):**
- Rel 210, Introduction to Youth Ministry .............................. 3
- Rel 374, Youth Ministry Seminar ........................................ 3
- Course on worship selected from the following: ............... 3
  - Rel 322, Worshipping Communities
Mus 311, Topics in Music Literature: Church Music
AMBS course in worship
• Rel 405, Spiritual Care and Healing ................................. 3
  or AMBS course in spirituality or pastoral care
• PJCS 210, Transforming Conflict and Violence ................. 3
  or PJCS 325, Mediation: Process, Skills and Theory
• Educ 309, Educational Psychology: Secondary ............... 3
  or Psyc 210, Developmental Psychology
• Course on sexuality selected from the following: ............. 3
  Rel 330, Religion and Sexuality
  Soc 210, Sociology of the Family
  Soc 260, Human Sexuality
• PhEd 102, First Aid and CPR ........................................... 1

Planning guide

First year
General education
Knowing the Bible or Reading the Bible

Second year
General education
SST
200-300 level courses in major, Bibl 301

Third year
General education
Upper-level courses in major, Bibl 300
Related courses

Fourth year
Balance of general education
Balance of major
Internship
Seminar

Planning and advising notes
Bible 100/200 may not be applied to the Bible and religion major. Students are encouraged to focus their plan of study by selecting electives in the following areas: ministry inquiry, religious studies, theology, biblical studies, philosophy. Suggestions are available from Bible, religion and philosophy department faculty advisers.

Bible and religion majors are strongly encouraged to take at least one course at Associated Mennonite Biblical Seminary (AMBS) in Elkhart, IN. One course per semester may be taken there as part of a full-time Goshen College registration. For AMBS course listings, see http://www.ambs.edu/academics/courses

Minor in Bible and religion

18 credit hours
• Bibl 300, Jesus and the Gospels ...................................... 3
• Bibl 301, Hebrew Scripture ............................................. 3
• Elective in Bible ......................................................... 3
• Phil 302, Ethics and Morality ........................................... 3
• Rel 320, Christian Faith ............................................... 3
• Elective in religion or philosophy ..................................... 3
Minor in youth ministry

18 credit hours

- Rel 210, Introduction to Youth Ministry ........................................ 3
- Rel 374, Youth Ministry Seminar .............................................. 3
- PJCS 210, Transforming Conflict and Violence ........................ 3
- Two courses selected from the following: ....................... 6
  Rel 320, Christian Faith
  Bibl 300, Jesus and the Gospels
  Bibl 301, Hebrew Scripture
- One course selected from the following: ......................... 3
  Educ 309, Educational Psychology: Secondary
  Psyc 210, Developmental Psychology
  Rel 330, Religion and Sexuality
  Soc 210, Sociology of the Family
  Soc 260, Human Sexuality

Certificate program

A one-year certificate program is available in biblical studies. See the department chair or the registrar for more details.

Bible courses

BIBL 100 Knowing the Bible ................................................................. 3
This course will cover the basic narrative structure of the Bible, the main characters and themes and will address the following questions: How did the Bible come to be? How does one understand Scripture? In what contexts does one read Scripture? This course is for people with very little or no formal background in the Bible. Bibl 100 or 200 fulfills the lower-level Bible literacy general education requirement. Students who do not know which level to take are encouraged to take the placement test scheduled at the beginning of each semester or to consult with either Professor Brant or Keim.

BIBL 200 Reading the Bible ................................................................. 3
This course will focus upon questions of genre and composition and interpretation of the Bible and will address the following questions: How does genre affect how we read? How is doctrine derived from Scripture and how does it influence our own readings? How are various modern methodologies used to understand the Bible? How does one distinguish between opinion and reasoned interpretation? This course is for students who have studied Scripture in a formal setting such as in high school, Sunday school or academic courses and who know the basic narrative structure and main characters. Note: Students who take Bibl 100 cannot use Bibl 200 to satisfy the additional general education Bible and religion requirement. Bibl 100 or 200 fulfills the lower-level Bible literacy general education requirement. Students who do not know which level to take are encouraged to take the placement test scheduled at the beginning of each semester or to consult with either Professor Brant or Keim.

BIBL 201 Elementary New Testament Greek ................................. 3
Basic vocabulary, verb structure and grammar of New Testament Greek;
reading and translation in first chapters of the Gospel of John. This course does not meet the Bible/religion general education requirement. It may, however, meet the basic Bible literacy requirement for students who place out of Bibl 200 on the Biblical Literature placement test. Prerequisite: Bibl 100, Bibl 200 or equivalent.

**BIBL 204 Hebrew Language and Culture** ................................................................. 3
Students will work through a standard grammar of biblical Hebrew, building a working vocabulary of 600-800 words. The Book of Ruth will be read in its entirety, along with representative selections from the major genres of biblical Hebrew literature. Attention will also be devoted to the cultural settings reflected in the texts. Offered alternating years with Bibl 201. This course does not meet the Bible/religion general education requirement. It may, however, meet the basic Bible literacy requirement for students who place out of Bibl 200 on the Biblical Literature placement test. Prerequisite: Bibl 100, Bibl 200 or equivalent.

**BIBL 300 Jesus and the Gospels** ........................................................................... 3
Study of the life and teachings of Jesus, focusing on the proclamation of the reign of God and Jesus' messianic identity as the Son of God. Examination of Jesus in his historical setting will be balanced with discussions of Jesus' call to discipleship and theological interpretations of the Gospels. Prerequisite: Bibl 100 or 200 or consent of instructor. BRP majors are encouraged to add a one-hour depth credit.

**BIBL 301 Hebrew Scripture:** .................................................................................. 3
Content of this course will alternate every other year with one of the following topics.

- **Prophets.** A study of the important corpus of prophetic literature from the Hebrew Bible. Attention is given to historical, social, literary and theological features of the texts. Broad surveys of the prophetic writings will set the stage for close reading of selected oracles. Balancing the ethos of the Hebrew prophets with the demands these texts place on the contemporary audience keeps the Scriptural nature of this foundational material constantly in view.

- **Wisdom and Psalms.** Alongside law, history and prophecy, the wisdom and poetry sections of biblical Hebrew writings give expression to the formative power of this significant literary, theological and social movement in ancient Israel. Primary attention will be given to the universal perspectives reflected in the books of Ecclesiastes, Proverbs and Job, with selective attention given to the wisdom corpus of the Apocrypha. Significant time will also be devoted to the laments, hymns, and pilgrimage songs of the book of Psalms. Prerequisite: Bibl 100 or 200.

**BIBL 303 Paul and the Early Church** ................................................................. 3
Study the ministry of Paul and the growth of the early church by traveling through the geography and social world of the early church and reading the Book of Acts and Paul's letters. Explore Paul's understanding of Jesus Christ and the nature of the Christian communities he established. Discussion will range from Paul's counsel on issues such as church life, the role of women and the state, and circumcision to his theological teachings on salvation and end times. Prerequisite: Bibl 100 or 200.
BIBL 304 Writings of John ................................................................. 3
A study of the theology, themes, literary structure and social world of the fourth Gospel. Special attention is given to unique contributions of the fourth Gospel to the New Testament canon, to our understanding of the Christ event and to Christian thought. Other Johannine writings are examined in relation to the Gospel. Prerequisite: Bibl 100 or 200 or consent of instructor.

BIBL 310 Topics in Biblical Studies ..................................................... 3
Lecture, research and discussion oriented around specific biblical studies themes such as the book of Revelation, leadership in ministry, spiritual and pastoral care. Prerequisite: Bibl 100 or 200.

BIBL 321 Biblical Themes of Peace ..................................................... 3
A study of the themes and concepts that provide a biblical basis for nonretaliation and peace making. Particular attention is given to the nature of God's sovereignty, forgiveness versus vengeance and love of enemies. Prerequisite: Bibl 100 or 200.

BIBL 324 Women in the Bible ............................................................. 3
An examination of the characterization of women in Old and New Testament narratives, their role in biblical societies and the early church and their representation in Judeo-Christian culture, particularly our contemporary culture. The course draws upon current research and exegetical strategies in Biblical studies. Prerequisite: Bibl 100 or 200

BIBL 409 Bible Internship ................................................................. 3
An approved internship or work experience related to biblical studies. Examples are: Ministry Inquiry Program, supervised work in local campus ministries, church agencies or hospital chaplaincy.

BIBL 410 Bible Senior Seminar .......................................................... 3
Advanced work in principles and problems of biblical studies through the examination and assessment of narrative theology and ethics. Constant attention is given to meaningful articulation of faith.

Religion courses

REL 202 Religion in the Americas ...................................................... 3
An overview of religious institutions and individual expressions of religious faith in the Americas. The course includes some attention to historical developments across the Americas, but focuses primarily on recent or contemporary religious movements, realities, themes and issues in North America. The course also provides an introduction to the discipline of religious studies and is designed for colloquium students.

REL 209 Field Experience .............................................................. 3 (1-3)
A field placement in applied ministry or discipleship at a camp, retreat center, congregation or religious organization. Appropriate for credit by experience registration.

REL 210 Introduction to Youth Ministry ............................................ 3
Focuses on aspects of pastoral identity formation, theological understanding for and history of youth ministry, various models of youth ministry and issues
related to spiritual development of youth. Attention will also be given to issues regarding size of youth groups, organizational nature of ministry, mentoring, abuse, suicide, evaluation, self-care, humor and recreation. Includes attending a national or regional youth ministry training event.

REL 310 Topics:  ................................................................. 3
Lectures, research and discussion of specific topics in religion such as politics and religion, spirituality, religion and the media.

REL 315 Religion in Culture & Society  ................................. 3
(Cross-listed from Soc 315) An analysis of the social, cultural and political contexts that profoundly affect religious institutions and expressions, and upon which religion has an influence. Course includes such topics as meaning and belonging, modern individualism, dynamics of religious collectives and the impact of religion on social change.

REL 316 Liberation Theologies  ........................................... 3
Focuses on three contemporary theologies of liberation (Latin American Liberation Theology, North American Black Theology and North American Feminist Theology) as they are developing in the Americas. The course examines similarities and differences among these three theologies - in conversation with Womanist and Latina theologies - as each addresses specific theological questions raised by the people of God in actual contemporary situations of exploration and oppression. The course also has a praxis component in which students move outward into the community.

REL 317 Islam and Judaism  .................................................. 3
An introduction to the essential beliefs, religion, texts and cultures of Islam and Judaism. Along with Christianity, these religious traditions represent the great cultural heritage of the Ancient Near East. A survey of essential Scriptures and exploration of primary doctrines will lay the groundwork for understanding these traditions with more clarity and sympathy. The living, contemporary communities of faith which claim direct descent from the Scriptures and doctrines of these formative cultures will become familiar through personal interaction with Muslims and Jews - both in the classroom and on field trips to mosque and synagogue. Emphasis will be placed on the deep continuities that exist among the "peoples of the book," as well as the unique contributions each has made to contemporary world culture.

REL 318 Anabaptist/Mennonite History  ................................. 3
(Cross-listed from Hist 318) Introduction to Mennonite history and thought. About one-third of the course is devoted to Anabaptism. Special attention given to distinctive Anabaptist religious ideas, changes in Mennonite religious ideas and practice in Europe, migrations, contrasts in social-communal practices among Mennonites and related groups.

REL 319 Doing Theology Abroad  ......................................... 4
An intensive seminar taught on location in a southern hemisphere country, focusing on socio-political relations, practical theology and the significance of global Christianity. Participants live and attend church-related activities with host-country families. Proficiency in language of host country desired, but not required.
REL 320 Christian Faith ............................................................................... 3
An introduction to theology, examining the character of Christianity by identifying and defining basic features and themes (e.g. Christology, atonement, church, eschatology). Careful attention will be paid to both historical development of theology as well as contemporary credibility. Prerequisite: Bibl 100 or 200 or consent of instructor.

REL 321 History of Mennonites in America ................................................. 3
(Cross-listed from Hist 321) Emphasis on Mennonites as a people developing and interacting with the larger American society, using themes such as migration, community formation, beliefs, acculturation and pacifist citizenship in war and peace.

REL 322 Worshipping Communities .......................................................... 3
An introduction to the forms, styles, and history of Christian worship. Content includes a survey of the liturgical year and the major traditions of Christian spirituality. In addition, students will reflect on themes ranging from public and private forms of worship to the aesthetics of worship spaces. Students will also have the opportunity to actively reflect on how social realities and political concerns can be resources for discipleship, spiritual growth, and corporate worship.

REL 328 Spiritual Writings of Women ......................................................... 3
A survey of women's writings about the spiritual journey. Includes a range of medieval through 20th-century women. Examines women's use of their experiences as one source of theologizing.

REL 330 Religion and Sexuality ................................................................. 3
An exploration of the meaning and purpose of human sexuality in the context of Christian (and other) religious faith(s) and in relation to culturally based attitudes. Topics addressed will include body phenomenology, body theology, gender issues, historical developments, sexuality and spirituality, singleness, marriage, friendship, sexual violence, and a variety of other theological, ethical and relational issues. The course draws extensively on feminist models, themes and authors.

REL 374 Contemporary Iss in Youth Ministry .............................................. 3
This course considers the challenges of our ever-changing world and explores the pastoral care issues of adolescent youth that result from these dynamics. We will also examine programmatic ways for us to respond in our youth ministry settings that appropriately seeks to strengthen youth in their faith journey. Students will also engage in various prayer exercises and develop a list of practical ministry resources.

REL 402 Christianity & Modern Thought .................................................... 3
A seminar examining and assessing narrative theology and ethics. An attempt to state faith in meaningful terms by understanding the principles and structures of narrative and habitually using them. This course also serves as the senior seminar for Bible and religion majors, and only seniors are allowed in the course. Participation for non-Bible and religion majors requires the consent of the professor.
REL 405 Spiritual Care and Healing ............................................................. 3
Especially oriented towards the professional caregiver, this course emphasizes the interaction of spiritual factors with physical and emotional ones in the lives of helpers and their clients. Course enrollment includes a commitment to regularly practice one of the classical spiritual disciplines as a source of spiritual renewal and healing.

REL 409 Religion Internship ................................................................. 3 (1-3)
Approved intern or work experience related to studies in religion. Examples are Ministry Inquiry Program, supervised work in campus ministries, church agencies, chaplaincy or congregational programs.

REL 410 Religion Senior Seminar ................................................................. 3
Advanced work in principles and problems of religious studies through the examination and assessment of narrative theology and ethics. Constant attention is given to meaningful articulation of faith. (See Rel 402, Christianity and Modern Thought))

**Philosophy courses**

PHIL 200 Introduction to Philosophy ............................................................ 3
An introduction to the major problems of philosophy such as the nature of knowledge and reality, the relation of faith and reason, moral reasoning, politics and aesthetics. Discussion of the problems is driven by self-examination of each student's reasoned ideas and the contributions of major philosophers from a variety of traditions.

PHIL 302 Ethics and Morality ........................................................................ 3
A study of the nature of moral claims and the bases for ethical principles. The course draws on both moral philosophy and on Christian ethical reflection, addressing the development of character as well as the patterns and methods for both individual and corporate decision-making.

PHIL 305 Philosophy of Science ................................................................... 3
A study of the nature and history of scientific inquiry, the role of rationality, intuition and truth in the sciences, as well as the relationship of the sciences to other realms of discourse, especially religion.

PHIL 307 Asian Thought ................................................................................ 3
The main aim of this course is to introduce the student to the questions, methods, goals and character of Asian philosophies and to instill in him or her a sensitivity to the profundity of thought that informs Asian history and culture.

PHIL 310 Topics in Philosophy ..................................................................... 3
Study in specific areas of philosophic thought such as ancient/medieval, logic, modern philosophy, theory of knowledge, theory and problems of reality.

PHIL 400 Individual Readings in Philosophy ............................................... 1
Students take initiative to develop a plan with a department faculty member. By consent of the faculty member only.

PHIL 401 Philosophy of Religion ................................................................. 3
Traditional and modern encounters of religion and philosophy; theistic
arguments, faith and reason, apologetics, natural theology and philosophical theology.

**Biological sciences**

*Professor J. Miller*

*Associate Professors D. Miller (chair), J. Saylor*

*Assistant Professors D. Hess, B. Minter, R. Sensenig*

**Introduction**

The biological sciences department offers three majors and one minor:

- Major in biology
- Major in environmental science
- Major in molecular biology/biochemistry
- Minor in environmental science

**Field study sites:** Most field biology courses in the environmental science major take place at the Merry Lea Environmental Learning Center of Goshen College, a 1,150-acre natural area 30 miles from campus. This preserve contains prairies, grasslands, upland forests, lowland forests, lakes, ponds and senescent bogs. The marine biology course is taken at the Goshen College Marine Biology Laboratory, located on Long Key, Fla. Additional field courses are available through the Au Sable Institute, a field station with several U.S. locations and international programs.

Visit the biological sciences Web site at [www.goshen.edu/bio/Home](http://www.goshen.edu/bio/Home).

**Career and postgraduate opportunities**

Biology graduates are active in human medicine and related areas, veterinary medicine, the agricultural sciences, cell biology, microbiology, marine biology, biotechnology, ecology, environmental analysis, science communications and science education, as well as basic research in numerous biological areas.

A molecular biology major provides excellent preparation for further study in medical or graduate school, or direct entry into the job market. Molecular biology provides a foundation for careers in biochemistry, molecular biology, molecular genetics, biotechnology, genetics, molecular medicine, genomics, molecular diagnostics, drug discovery and many related areas.

Courses in environmental science are designed to provide knowledge in areas of social structures, available natural resources, market forces, biodiversity status, landscape quality, cultural value, habitat and natural resource sustainability, and policy decisions. Graduates in environmental science may work in a wide variety of areas, such as sustainable agriculture, conservation biology, water/air quality analysis, environmental education, recovery of threatened or endangered species, and as consultants for local, regional, or national parties interested in sustainable development. Potential employers include church and community agencies, local, state and federal government, private advocacy, stewardship and land trust organizations. A master's degree program in environmental education is available at Goshen College. See that section of the catalog for more information.
A minor in environmental science is appropriate for elementary and secondary teachers, regional planners, interpretive naturalists, park and camp managers, water and air resources analysts, environmental policy makers, bioinformation specialists and artists wishing to represent the natural world.

**Teacher education in life sciences**
Teacher certification is available for grades 5-12 in two related areas. Courses needed in addition to biology major requirements are:

**Life Sciences** - Biol 200 or 201; Biol 203-204 or 302; and Biol 215, 309 or 315.

**Life Sciences and Chemistry** - Biol 200 or 201; Biol 203-204 or 303; Biol 215, 309 or 315; Chem 200; Chem 303-304; and Chem 310, 312, 415 or 430.

Also requires 30 credits of education courses, including a semester of student-teaching. PJCS 210 needed to meet general education PJCS/Phil requirement. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the *Teacher Education Handbook* for more details.

**Major in biology**

40-43 credit hours

- Biol 111-112, Biological Principles I & II ........................................... 8
- Biol 300, Microbial Biology ........................................................... 4
- Biol 301, Genetics ................................................................. 4
- Biol 409, Internship (or alternate) ........................................... 0-3
- Biol 410, Biology Senior Seminar ........................................... 3
- Biology electives; at least 4 credit hours upper level
  (300-499) ............................................................................... 8
- Chem 111-112, General Chemistry ........................................... 8
- Chem 303, Intro to Organic Chemistry .................................... 4
- Additional science electives ............................................... 1

**Planning and advising notes**

Students expecting to major in biology should elect General Chemistry, Chem 111-112, in the first year.

Areas of interest for which majors may prepare by careful selection of courses include: agriculture, allied health (medical technology, pharmacy), biotechnology, botany, cellular biology, ecology, environmental biology, field biology, genetics, human biology, marine biology, microbiology, molecular biology, pre-professional (dentistry, medicine, veterinary medicine, physical therapy), teaching biology, tropical agriculture, wildlife biology or zoology.

Alternatives to Biol 409 may include Biol 209, Biol 400 or equivalent experience. See academic adviser for application form. Phys 410, Physics Senior Seminar may be taken instead of Biol 410, with adviser's permission.

**Planning guide**

*First year*

- General education
- Biological Principles I & II
- General Chemistry
- Pre-calculus (if needed)
Second year  General education  
- Microbial Biology (or Calculus I)  
- Genetics (or Calculus II)  
- Intro to Organic Chemistry  
- SST (summer)

Third year  General education  
- Upper-level biology (or calculus)  
- Physics  
- Developmental Vertebrate Biology (pre-med)  
- SST (if not in second year)

Fourth year  Balance of general education  
- Balance of major  
- Internship or equivalent  
- Biology Senior Seminar

Major in molecular biology/biochemistry

55-58 credit hours
  - Biol 111-112, Biological Principles I & II ............................. 8  
  - Biol 301, Genetics .............................................................. 4  
  - Biol 307, Molecular Cell Biology ......................................... 4  
  - Biol 409, Internship (or alternate) ........................................ 0-3  
  - Biol 410, Biology Senior Seminar ......................................... 3  
  - Chem 111-112, General Chemistry ...................................... 8  
  - Chem 303-304, Organic Chemistry ........................................ 8  
  - Chem 430, Biochemistry ..................................................... 4  
  - Math 211-212, Calculus I & II ............................................. 8  
  - Phys 203-204, General Physics .......................................... 8

Planning and advising notes
Recommended elective courses: Biol 300, Microbial Biology; Biol 302, Developmental Vertebrate Biology; Chem 200, Analytical Chemistry; Chem 310, Thermodynamics; and Chem 312, Quantum Mechanics I. Recommended enrichment activities: Research Seminar, Biol 330; undergraduate research project – credit available through advanced biology (if done on campus) or internship (if done off campus).

Planning guide

First year  General education  
- Biological Principles I & II  
- General Chemistry

Second year  General education  
- Calculus I, II  
- Intro and Intermed Organic Chemistry  
- Genetics  
- SST (summer)

Third year  General education  
- Biochemistry  
- General Physics  
- Molecular Cell Biology
**Fourth year**

Balance of general education  
Balance of major  
Internship/alternate  
Biology Senior Seminar

### Major in environmental science

56-59 credit hours (Core courses and one concentration)

#### Core courses (28-31 credit hours):

- Biol 111-112, Biological Principles I & II ........................................ 8  
- Biol 215, Introduction to Environmental Science .......................... 3  
- Biol 309, General Ecology .......................................................... 4  
- Biol 335, Natural Resources Policy Seminar ................................. 1  
- Biol 409, Internship .................................................................. 0-3  
- Biol 410, Biology Senior Seminar .............................................. 3  
- Econ 202, Principles of Economics ............................................. 3  
- Econ 207, Introduction to Statistics .......................................... 3  
- PoSc 210, Introduction to Public Policy ..................................... 3

#### Agroecology concentration (28 credit hours)

- Biol 201, Botany of Seed Plants .................................................. 4  
- Summer program at Merry Lea, studying four courses simultaneously: ................................................................. 12  
  - Biol 220, Soil Properties and Management  
  - Biol 230, Small Farm Management and Produce Marketing  
  - Biol 316, Vegetable Crops  
  - Biol 318, Agroecology
- Biol 308, Entomology ................................................................. 4  
- Biol 312, Land Management ...................................................... 4  
- Chem 111, General Chemistry .................................................... 4

#### Conservation biology concentration (28 credit hours)

- Biol 301, Genetics .................................................................. 4  
- Biol 312, Land Management ...................................................... 4  
- Chem 111-112, General Chemistry ............................................ 8  
- Chem 303, Intro to Organic Chemistry ....................................... 4  
- Field biology courses approved by adviser ................................. 8

#### Resource management concentration (28 credit hours)

- Biol 201, Botany of Seed Plants .................................................. 4  
- Biol 312, Land Management ...................................................... 4  
- Biol 345, Forest Resources .......................................................... 4  
- Chem 111-112, General Chemistry ............................................ 8  
- Field biology courses approved by adviser ................................. 8

### Planning and advising notes

Core courses equip all majors to analyze environmental issues from biological, economic and social/political points of view. All of these tools are necessary for addressing questions of human ecology. When students declare the environmental studies major, they will, with their academic adviser, choose an area of concentration that reflects their interests and career goals.
Recommended elective courses: Hist 345, Environmental History; Biol 200, Zoology; Biol 201, Botany; Biol 300, Microbial Biology

Students should enrich their course work in the major with appropriate experiences/internships. Many Goshen students have worked on projects in environmental education, city planning, municipal water quality assessment, organic agriculture, conservation biology, urban forestry, wilderness trail and facility maintenance, restoration ecology, wetland construction and planting and field biology. Appropriate international experience can be gained on SST, in Au Sable-India and Au Sable-Africa programs and with specially arranged programs.

Four agroecology courses are taught at the Merry Lea Environmental Learning Center during a summer session: Biol 220, Biol 230, Biol 316 and Biol 318. Permission of the director of environmental science is required to enroll.

**Planning guide**

**First year**
- General education
- Biological Principles I & II
- General Chemistry
- Principles of Economics
- Social science general education (Soc 220 preferred)

**Second & third years**
- General education
- SST
- Principles of Environmental Science
- Introduction to Statistics
- Introduction to Public Policy
- Natural Resources Policy Seminar
- General Ecology
- Courses in concentration area

**Fourth year**
- Courses in concentration area
- Balance of general education
- Internship
- Senior Seminar

**Minor in environmental science**

**18-19 credit hours**
- Biol 111-112, Biological Principles I & II ............................. 8
- Biol 215, Principles of Environmental Science ................... 3
- Two courses selected from the following: .......................... 7-8
  Biol 201, Botany of Seed Plants
  Biol 304, Marine Biology
  Biol 308, General Entomology
  Biol 309, General Ecology
  Biol 340, Field Experience in Environmental Education
  Biol 345, Forest Resources
  Biol 350, Ornithology
  Field biology courses at Au Sable Institute, with adviser's consent

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Goshen College Catalog 2008-2009

92
Biological science courses

BIOL 100 The Biological World ................................................................. 3
A general education science class designed to provide a background of biological principles in order to help the student understand and evaluate current issues. Laboratory exercises will document and test these principles.

BIOL 111 Biological Principles I ............................................................. 4
This course emphasizes the basic principles underlying all fields of biology, including diversity, water biology, energy flow, inheritance, life cycles and communication. Surveys plant and animal taxa, with special emphasis on vascular plants and vertebrate animals. This course is for science majors and others interested in a rigorous introduction to biology. Either Biol 111 or Biol 112 may be taken first.

BIOL 112 Biological Principles II ............................................................ 4
This course emphasises the basic principles underlying all fields of biology, including diversity, water biology, energy flow, inheritance, life cycles and communication. Surveys plant and animal taxa, with special emphasis on vascular plants and vertebrate animals. This course is for science majors and others interested in a rigorous introduction to biology. Either Biol 111 or Biol 112 may be taken first.

BIOL 154 Human Biology ................................................................. 3 (3-4)
A biological study of how the body functions, of the diseases/disorders that can disrupt the normal functioning of the body and of strategies for the prevention of disease. Includes an exploration of human genetics and its role in disease. Current issues related to human health are discussed. Laboratory exercises will introduce students to scientific principles affecting the body. A four-credit option, with extra material on the muscular and skeletal systems, is offered in even numbered years for physical education majors.

BIOL 200 General Zoology ................................................................. 4
A survey of representative animal groups from Protozoa through the Chordata. Includes anatomy, morphology, systematics, life histories and ecology. Three lectures, one three-hour lab. Prerequisite: Biol 111-112, or permission of instructor. (Alternate year offering)

BIOL 201 Botany of Seed Plants ............................................................. 4
A major study of the stems, roots, leaves, flowers, fruits and seeds of the advanced vascular plants. Emphasis is placed on plant anatomy, morphology and physiology. Two lectures and two two-hour labs. Prerequisite: Biol 111-112 or permission of instructor.

BIOL 203 Human Anatomy & Physiology ............................................ 4
A study of the organ systems of the human body, their gross and microscopic structure and their functions. Laboratory demonstrations and dissections. Three lectures, one three-hour lab. Prerequisite: one semester of college chemistry.

BIOL 204 Human Anatomy & Physiology ............................................ 3
A study of the organ systems of the human body, their gross and microscopic structure and their functions. Laboratory demonstrations and dissections.
Three lectures, one three-hour lab. With permission of the instructor, biology majors may take Biol 204 for two hours of lecture only. Prerequisite: Biol 203 and one semester of college chemistry.

**BIOL 206 Microbiology** ................................................................................... 3
A general study of microorganisms and their relations to health and disease, with practical applications valuable to the nurse. Includes the characteristics and activities of microorganisms, procedures for sterilization and disinfection; methods of growing and studying organisms; and techniques of diagnosis, treatment and prevention of diseases; as well as a brief survey of the major pathogenic groups. Three lectures, one two-hour lab. Prerequisite: one semester of college chemistry. Not for the biology major.

**BIOL 209 Field Experience** ................................................................... 3 (1-3)
Practical experience in biology, typically in a relevant off-campus experience. Off-campus positions may include various types of work (employed or volunteer) in university, hospital or other medical, veterinary, agricultural and industrial facilities or nature centers and camps. Students are encouraged to develop their own ideas. Taken only as credit/no credit. Prerequisite: consent of adviser.

**BIOL 210 Biology of the Sea** .......................................................................... 4
An introductory course to enable the student to recognize the more common marine plants and animals and appreciate such an ecosystem. An elective suitable for elementary-education students. Does not count toward biology or natural-science major. The course will be given on location in the Florida Keys. Lecture-lab approach. Prerequisite: application process and consent of instructor. Moderate extra cost.

**BIOL 215 Principles of Environmental Science** ........................................... 3
Introduction to natural resources (forests, wetlands, water, air, climate, soils, etc.), human use and impact on resource supply, pollution and sustainability. A critique of the land use history and ethics in the United States will then frame the discussion of the human ecology and the development of a vision of sustainability. Prerequisite: Biol 111-112 or consent of instructor. (Alternate year offering)

**BIOL 220 Properties & Management of Soils** .............................................. 3
A comprehensive introduction to the field of soil science with emphasis on scientific principles and their application to solve practical soil management problems. Topics will include soil formation, soil physical properties, soil organisms and ecology, and practical nutrient management. This course constitutes one of the four courses taught during the summer agroecology program. Permission of the director of environmental science is required.

**BIOL 230 Small Farm Mgmt/Produce Marketing** .............................................. 3
This course teaches skills necessary for making a farm or market garden an economic success, including finding land, planning appropriate marketing strategies for selected crops, and managing income and expenses. Community supported agriculture (CSA) and other direct marketing options will be studied and local farmers and entrepreneurs will share from their experience. This course constitutes one of the four courses taught during the summer
agroecology program. Permission of the director of environmental science is required.

**BIOL 300 Microbial Biology** ................................................................. 4
Study of the anatomy, physiology and natural history of microorganisms, particularly bacteria, fungi and freshwater algae. Such organisms are studied in their roles in the total environment. Includes techniques involved in isolating, culturing and analyzing microbial organisms. Lecture-lab approach.
Prerequisites: Biol 111-112.

**BIOL 301 Genetics** ................................................................................. 4
Introduction to genetics including classical, molecular and population concepts. Includes discussions of the moral and ethical implications related to genetic principles and techniques. The laboratory will include individual experiments with living organisms and modern genetic biotechnology. Three lectures and one laboratory/discussion session per week. Prerequisites: Biol 111-112.

**BIOL 302 Developmental Vertebrate Biology** ......................................... 4
Principles of vertebrate development with study of developing systems in chicken and human embryos. Material covered includes the molecular genetics of developmental processes and cancer. Three lectures and one lab per week.
Prerequisite: Biol 111-112. (Alternate year offering)

**BIOL 303 Vertebrate Physiology** ............................................................. 4
A concentrated study of the principles of vertebrate physiology. Material covered includes various topics of significance in the biomedical field, such as cellular, nervous, muscular and cardiovascular physiology. Laboratory activities will cover the same topics, with a special focus on computer based data acquisition. Three lectures and one laboratory session per week.
Prerequisites: Biol 111-112 or Biol 203-204.

**BIOL 304 Marine Biology** ................................................................. 4
A concentrated field study in the Florida Keys to enable the student to recognize common shallow-water marine plants and animals and appreciate various marine ecosystems. Requires completion of a comprehensive collaborative field research project. The course is given on location.
Prerequisites: Biol 111-112, application process and consent of instructors. Moderate extra cost.

**BIOL 307 Molecular Cell Biology** ......................................................... 4
Examination of the structure and function of cells. Includes individual and group demonstrations of how cells are studied including genomics. Emphasis on molecular organization and phenomena associated with eucaryotic cells. One lecture, two three-hour labs. Prerequisites: Biol 301 and Chem 111-112 or consent of instructor. (Alternate year offering)

**BIOL 308 General Entomology** ............................................................. 4
A general study of insect structure, development, classification and habits. Laboratory sessions particularly directed at identification of insects and their economic roles. Three lectures and one three-hour lab per week. Prerequisite: Biol 111-112. Biol 200 strongly recommended. (Alternate year offering)
BIOL 309 General Ecology ................................................................. 4
A study of the distribution and abundance of organisms. The course will include studies of the dynamics of natural Biol communities and the interaction of these communities with the abiotic environment. The impact of humans on natural ecosystems and concepts of sustainable living will be addressed. Taught as a concentrated field course at the Merry Lea Environmental Learning Center.
Prerequisites: Biol 111-112. (Alternate year offering)

BIOL 310 The Plant Kingdom .......................................................... 4
An in-depth study of the classification, structure and relationships of organisms that botanists have traditionally studied. Algae, bryophytes and primitive vascular plants are given extensive coverage. Taught as field course at the Merry Lea Environmental Learning Center with minimal lecture time.
Prerequisite: Biol 111.

BIOL 312 Land Management ......................................................... 4
Basic principles of the management of natural ecosystems for various values or functions. Includes principles of restoration of disappeared or damaged ecosystems. Focus on wetlands, prairies and natural grasslands and forests, primarily as a field course. Field work at Merry Lea. Prerequisite: Biol 111-112.
(Alternate year offering)

BIOL 315 Conservation ................................................................. 3
A study of the need for and the best methods of conservation of our natural resources from an ecological approach. Emphasis on ecological principles related to populations, soil, water, forest, wild life pesticides, waste, pollution and energy. Includes first-hand study of natural areas, erosion, conservation practices, impact of humans and some all-day field trips. Prerequisites: one physical science and one biological science course at the college level. Extra cost for field trips.

BIOL 316 Vegetable Crops ............................................................ 3
This course provides an understanding of the role of the environment in plant growth and development and focuses on the basic principles of sustainable vegetable production. Topics will include environmental factors influencing plant growth and crop production, preparing and planting the field, extending the growing season, and handling crops after harvest. Students will practice production techniques on college-operated acreage. This course constitutes one of the four courses taught during the summer agroecology program.
Permission of the director of environmental science is required.

BIOL 318 Agroecology ................................................................. 3
Study of sustainable food production, investigating the ecological impacts of manipulating natural systems to produce food, feed, fiber and medical products. Ecological concepts are discussed and their principles applied to sustainable food production that supports community culture and economy. Topics will include the theoretical basis of agroecology, alternative production systems, and ecological management of diseases, insect pests and weeds. This course constitutes one of the four courses taught during the summer agroecology program. Permission of the director of environmental science is required.
BIOL 320 Human Pathophysiology I ............................................................. 3
An introductory study of the principles of disease. Examines causes of disease and bodily response processes. A survey of both disorders that affect the body as a whole and disease of individual organs. Intended for students in allied health professions. Prerequisite: Biol 203-204 or consent of instructor.

BIOL 321 Human Pathophysiology II ............................................................ 3
An introductory study of the principles of disease. Examines causes of disease and bodily response processes. A survey of both disorders that affect the body as a whole and disease of individual organs. Intended for students in allied health professions. Prerequisite: Biol 203-204 or consent of instructor.

BIOL 322 Vertebrate Physiology ................................................................. 4
A concentrated study of the principles of vertebrate physiology. Material covered includes various topics of significance in the biomedical field, such as cellular, nervous, muscular and cardiovascular physiology. Laboratory activities will cover the same topics, with a special focus on computer based data acquisition. Three lectures and one laboratory session per week. Prerequisites: Biol 111-112 or Biol 203-204.

BIOL 330 Biology Research Seminar ......................................................... 1
An exploration of opportunities in research at the undergraduate level, graduate level and for a career. Includes an introduction of ongoing departmental research programs, discussion and demonstrations by current student participants of their projects, examination of new discoveries reported in the current literature and discussions of opportunities for student participation in our research program for advanced biology credit.

BIOL 335 Natural Resources Policy Seminar .............................................. 1
To be taken in conjunction with Introduction to Public Policy, PoSc 210. Focus on U.S. natural resources policy (clean air, clean water, forest service policy, etc.) and the structure of the governmental agencies responsible for natural resources (Forest Service, Army Corps of Engineers, EPA, IDNR, IDEM, etc.). (Alternate year offering)

BIOL 340 Field Experience Environmental Biol ........................................ 2 (1-3)
Participants will develop and conduct interpretive programs in nature study for visiting school groups; observe practices related to managing a natural area and participate in discussions of environmental issues. Instruction takes place at the Merry Lea Environmental Learning Center. Enrollment by permission of instructor only. Not offered in spring semester. Prerequisite: one semester of college-level biology.

BIOL 345 Forest Resources ........................................................................... 4
Study of the function, value and use of forest resources, including management of forests for harvest, water quality, biodiversity, aesthetics and recreation. Significant time spent in the field at forestland sites. Prerequisite: Biol 111-112. (Alternate year offering)

BIOL 350 Ornithology ..................................................................................... 4
Natural history, taxonomy, and conservation of birds. Includes much work on visual and aural identification of birds in the field. Taught during the May term
at Merry Lea Environmental Learning Center. Prerequisite: Biol 111-112.
(Alternate year offering)

BIOL 355 Limnology ................................................................. 4
Study of the geochemistry and biological communities of wetlands, lakes and
streams. Primarily a field course, with significant time spent at Merry Lea and
environs. Prerequisite: Biol 111 and one other biology course

BIOL 375 Topics in Biology: ................................................................. 4 (1-4)
Classroom and/or laboratory study in a major area of biology not covered by
regular courses. Prerequisite: consent of instructor.

BIOL 400 Biology Research ................................................................. 1 (1-4)
On-campus participation in a research project. Prerequisite: consent of faculty
supervisor.

BIOL 409 Biology Internship ................................................................. 3 (1-3)
Practical experience in biology including professional levels of responsibility.
Activities may be similar to those described for Biol 209, but with a higher
degree of independent responsibility in the experience, as would be
appropriate for a traditional apprenticeship. Students are encouraged to
develop their own ideas. Taken only as credit/no credit. Prerequisite: consent
of adviser.

BIOL 410 Biology Senior Seminar ................................................................. 3
An exploration of the interactions between biology and other areas of human
concern, especially ethics and theology. Includes lectures, discussion and
preparation of a paper. Prerequisite: senior standing.

Business

Professor R. Rupp
Associate Professors M. Horning, J. Richer, T. Yoder
Adjunct Professors J. Alvarez, D. Birky, K. Deary

Introduction
The business department offers three majors, five minors and a certificate:

- Major in accounting
- Major in business
- Major in business information systems
- Minor in accounting
- Minor in business
- Minor in business information systems
- Minor in global economics
- Minor in entrepreneurship
- Certificate program in business administration.

Adult students interested in an evening program should see the Division of
Adult and External Studies (DAES) section for a major in organizational
leadership.
Some students seek a double major, or a major and minor, in our department. Note that a double major is not possible for accounting plus business, nor business information systems plus business, since there is very significant overlap in the courses required for these majors. A major plus minor is appropriate in these areas.

In addition to degree programs, the business department sponsors a student-run coffee shop, Java Junction, in the Connector between Kratz, Miller and Yoder residence halls.

The department also sponsors two continuing education programs in business: Family Business and Management Development. Participation in the Family Business Program is on an annual membership basis and is open to both family business firms and professional firms that serve family businesses. The Management Development Program provides a variety of short courses and seminars for the local business and professional community. Special programs can be designed for “in-house” presentation for individual organizations. Participants can earn continuing education units. More information about both of these programs is available from the business department office, (574) 535-7450.

Visit the business department Web site at www.goshen.edu/business/Home.

**Career and postgraduate opportunities**

Students with a degree from the business department are prepared for career opportunities in a broad range of businesses and nonprofit organizations. Students may also become successful entrepreneurs. Numerous graduates have completed graduate work in business, information systems, law, public policy and economics at the master’s and doctoral level.

**Accounting** – Accounting majors have career opportunities in auditing, financial analysis, financial planning, taxation, as chief financial officers and controllers. Successful accountants possess a balance of quantitative and qualitative skills.

**Business Information Systems (BIS)** – BIS majors are in demand as consultants; to provide system-related support in a variety of positions and fields; to help maintain networks; to design and produce information systems, including e-commerce related functions.

**Business** – Business graduates are currently working in business, industry, education, banking, overseas development, church offices and many not-for-profit settings. Their careers span the fields of marketing, human resources, management, finance and operations. Many also work in consulting or start their own businesses.

**Economics** – Global economics minors continue to find employment with business, government and in education.

**Entrepreneurship** – An entrepreneurship minor can complement any major course of study. Coursework is designed for students who may want to work in a family business, start their own business, manage a small business or start a professional practice or skill-based business.
Teacher education certification
Teacher certification in business is available for grades 5-12. Courses needed in addition to business major requirements are Bus 102, Bus 322, Bus 328, and Econ 306 or Bus 350. Also required are 30 credits of education courses, including a semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Admission to department
All students are welcome to take courses in the business department, guided by their interest and course prerequisites (if any). To be officially admitted as a major in the business department the student must:

a. Complete all 100-299 level major and related requirements with a grade point average of 2.0 or above.
b. Formally apply for admission to the business department with signature of academic adviser.

Major in accounting
52-62 credit hours

- Acc 201-202, Principles of Accounting ............................... 6
- Acc 210, Accounting Information Systems ........................ 3
- Acc 301, Cost Accounting .................................................. 3
- Acc 302-303, Intermediate Accounting ............................... 6
- Acc 304, Federal Income Tax: Individual ............................. 3
- Acc 405, Auditing ............................................................... 3
- Bus 310, Business Law ...................................................... 3
- Bus 405, Business Career Planning ..................................... 1
- One of the internships below: .......................................... 3-12
  Bus 409, Business Internship
  Acc 408, Accounting Internship
- Bus 410, Management Policy and Social Responsibility .... 3
- BIS 220, Office Software Productivity ................................. 3
- Econ 201-202, Principles of Economics .............................. 6
- Econ 207, Introduction to Statistics .................................... 3
- One mathematics course selected from the following: .... 3-4
  Math 102, Precalculus Mathematics
  Math 141, Finite Mathematics
  Math 211, Calculus I
  Math 205, Discrete Math
- One elective course in the business department ............... 3

Planning guide
First year
General education
Mathematics
Introduction to Entrepreneurship (optional elective)
Principles of Accounting: Financial
Office Software Productivity
Second year
General education
Principles of Accounting: Managerial
Principles of Economics
Introduction to Statistics
Accounting Information Systems
Cost Accounting
SST

Third year
General education
Intermediate Accounting
Federal Income Tax: Individual
Business Law
Business Career Planning

Fourth year
Balance of general education
Balance of accounting major
Internship
Management Policy and Social Responsibility

Planning and advising notes
Bus 121 is an excellent first-year elective course for students exploring their business interests; Acc 201 and 202 must be completed in the first two years; Acc 210 is intended for the second year; SST should come in the first two years or summer of the third year. Math course is dependent upon high school record and SAT/ACT math scores.

In many states, 150 credit hours of undergraduate or graduate education is required before individuals can sit for the Certified Public Accounting (CPA) examination. Goshen College offers several options for students desiring to complete 150 hours at Goshen College. Programs combine accounting with either business or business information systems emphases, or both. Detailed information is available from business department advisers. Students can also meet the state’s 150-hour requirement by completing an accounting degree at Goshen College and transferring to another institution to complete a master's degree. Goshen College is committed to developing and maintaining articulation agreements with various Indiana institutions to facilitate this option.

Major in business
58-59 credit hours
- Acc 201-202, Principles of Accounting ............................... 6
- Bus 310, Business Law ...................................................... 3
- Bus 315, Principles of Management ............................... 3
- Bus 316, Principles of Marketing ........................................ 3
- Bus 317, Financial Management ........................................ 3
- Bus 403, Management Strategy ........................................ 3
- Bus 405, Business Career Planning ...................................... 1
- Bus 409, Business Internship ............................................. 3
- Bus 410, Management Policy and Social Responsibility .... 3
- BIS 220, Office Software Productivity ............................... 3
- Econ 201-202, Principles of Economics ............................... 6
- Econ 207, Statistics .......................................................... 3
• Additional business department courses, at least 9 credit hours upper level (300-499) ............................................. 12
• One mathematics course selected from the following: Math 102, Precalculus Mathematics
  Math 141, Finite Mathematics
  Math 211, Calculus I
  Math 205, Discrete Math
• Social science course: Soc 200, Soc 220, Psyc 100 or PoSc 200 ................................................................. 3

Planning guide
First year  General education
  Introduction to Entrepreneurship (optional elective)
  Mathematics
  Principles of Accounting: Financial
  Principles of Economics, 202
  Office Software Productivity
Second year General education
  Principles of Economics, 201
  Principles of Accounting: Managerial
  Introduction to Statistics
  SST (spring or summer)
Third year  General education
  Management, Marketing, Financial Management,
  Business Law
  Upper-level courses in major
  Business Career Planning
  A summer internship between third and fourth year is strongly encouraged
Fourth year Balance of general education
  Balance of major
  Management Strategy
  Management Policy and Social Responsibility

Planning and advising notes
Bus 121 is an excellent first-year course for students exploring their business interests. Acc 201 and 202, Econ 201 and 202 and 207 and SST should normally be scheduled in the first two years. Math course is dependent upon high school record and SAT/ACT math scores. Additional math courses are encouraged for students anticipating graduate school.

Major in business information systems
56-57 credit hours
• Acc 201-202, Principles of Accounting ...................... 6
• Bus 315, Principles of Management ....................... 3
• Bus 405, Business Career Planning ....................... 1
• Bus 410, Management Policy and Social Responsibility .... 3
• BIS 220, Office Software Productivity .................... 3
• BIS 250, Introduction to Business Programming ........... 3
• BIS 305, Introduction to Information Systems .................... 3
• BIS 310, Information Technology Hardware and Networks 3
• BIS 335, Systems Analysis and Design .............................. 3
• BIS 340, Database Management Systems ......................... 3
• BIS 405, Project Management and Practice .......................... 3
• BIS 407, Web Application Development .............................. 3
• BIS 409, Internship ............................................................. 3
• CoSc 200, Programming Techniques ................................ 4
• Econ 201-202, Principles of Economics ............................. 6
• Econ 207, Statistics ............................................................ 3
• One mathematics course selected from the following: .... 3-4
  Math 102, Precalculus Mathematics
  Math 141, Finite Mathematics
  Math 211, Calculus I
  Math 205, Discrete Math

Planning guide

First year  General education
           Introduction to Entrepreneurship (optional elective)
           Mathematics
           Principles of Economics, 202
           Principles of Accounting: Financial
           Office Software Productivity

Second year  General education
            Principles of Economics, 201
            Principles of Accounting: Managerial
            Introduction to Statistics
            Introduction to Business Programming
            SST (spring or summer)

Third year  General education
           Principles of Management
           Upper-level courses in major
           Business Career Planning
           Programming Techniques

Fourth year  Balance of general education
             Balance of major
             Management Policy and Social Responsibility

Planning and advising notes
Bus 121 (an elective) may be helpful as a first-semester exploratory course.
Math course is dependent upon high school record and SAT/ACT math scores.

Minor in accounting

18 credit hours
• Acc 201-202, Principles of Accounting ............................. 6
• Econ 201 or 202, Principles of Economics .......................... 3
• Acc 302, Intermediate Accounting ................................. 3
• Additional accounting courses ................................. 6
Note to business and BIS majors: Business and BIS majors must take 12 credit hours in accounting beyond the major, including Acc 302. Courses must be approved by academic adviser.

Minor in business

18 credit hours

- Acc 201, Principles of Accounting: Financial ..................... 3
- Econ 201 or 202, Principles of Economics ....................... 3
- Additional business department courses, at least 9 credit hours upper level (300-499) ................................................... 12

Note to accounting and BIS majors: Accounting and BIS majors must take nine credit hours in business and economics beyond the major. Courses must be approved by academic adviser

Minor in business information systems

18 credit hours

- Acc 201, Principles of Accounting: Financial ..................... 3
- Bus 315, Principles of Management .................................. 3
- BIS 220, Office Software Productivity .............................. 3
- BIS 305, Introduction to Information Systems .................... 3
- BIS 310, Information Technology Hardware and Networks 3 or BIS 335, Systems Analysis and Design
- Econ 201 or 202, Principles of Economics ....................... 3

Note to business and accounting majors: Business majors must take 12 credit hours in BIS beyond the major. Accounting majors must take Bus 315, plus 12 credit hours in BIS beyond the major. Courses must be approved by academic adviser.

Minor in global economics

18 credit hours

- Econ 201-202, Principles of Economics ............................. 6
- Econ 207, Introduction to Statistics ................................. 3
- One of the following:..................................................... 3
  Econ 306, International Economics
  Econ 308, Introduction to Economic Development
- Additional economics course ........................................... 3
- One of the following related courses: ............................... 3
  Bus 350, International Business
  Bus 375, Topics: Business in Spain
  Hist 315, War and Peace in 20th Century Europe
  PoSc 308, International Politics

Planning and advising notes

Students should complete Econ 201 and 202 in first or second year. These two courses may come in any order. Additional mathematics beyond Math 211, Calculus I is strongly urged if graduate work in economics is anticipated. Teacher education program is available for students seeking to teach social
studies in high school. See history department pages and the *Teacher Education Handbook* for more details.

**Note to accounting, business and BIS majors:** To earn a minor in global economics, students with a business department major must take both Econ 306 and Econ 308, an additional 300-499 level course in economics, and either Bus 350, Bus 375, Hist 315 or PoSc 308.

**Minor in entrepreneurship**

18 credit hours

- Bus 121, Introduction to Entrepreneurship ......................... 3
- Bus 215, Entrepreneurship Finance .................................... 3
- One of the following: ......................................................... 3
  - Bus 315, Principles of Management
  - Bus 316, Principles of Marketing
- Bus 328, Venture Planning ......................................................... 3
- Two courses selected from the following: ......................... 6
  - Bus 217, Personal Finance
  - Bus 319, Leading Nonprofit Organizations
  - Bus 327, Internet Business Strategies
  - Bus 330, Entering Family Business
  - Bus 402, Applied Entrepreneurship
  - Bus 409, Internship in Business
  - Econ 202, Principles of Economics (Microeconomics)

**Planning and advising notes**

Bus 315 or Bus 316 may be taken as one of the two elective courses.

**Note to accounting, business and BIS majors:** To earn a minor in entrepreneurship, students with a business department major must take Bus 121, Bus 328 and two courses selected from Bus 217, Bus 319, Bus 330 or Bus 402.

**Certificate: business administration**

30 credit hours

Usually scheduled for completion in one academic year. Courses selected with approval from academic adviser.

- Bus 121, Introduction to Entrepreneurship ......................... 3
- Acc 201, Principles of Accounting: Financial ..................... 3
- Bus 315, Principles of Management ................................... 3
- Econ 201-202, Principles of Economics ............................. 6
- Elective course in business ............................................... 3
- Bible or religion class ..................................................... 3
- Other electives ............................................................... 9
- May/Summer SST term (optional)

**Accounting courses**

**ACC 201 Principles of Accounting: Financial** ........................................... 3

Development of principles underlying financial statements and accounting
procedures. Basic accounting terminology and concepts of both financial and managerial accounting. Emphasis on analyzing and understanding financial statement information.

**ACC 202 Principles of Accounting: Managerial** ........................................... 3
Development of principles used in planning, controlling and evaluating organizational decision making. Primary topics are cost behavior, costing systems, profitability analysis and budgeting. At the conclusion of this course students will be able to conduct cost-volume-profit analysis, compute break-even points, prepare budgets, conduct variance analysis, do job costing, relevant cost analysis and capital budgeting. Prerequisite: Acc 201.

**ACC 210 Accounting Information Systems** ................................................. 3
Create an accounting system using a popular business software package. Gain understanding of internal control systems and organizational relationships with utilization of a computerized business system. Concentrates on the transaction cycles of cash receipts, cash disbursements, purchasing, sales, inventory control and management reporting. Prerequisite: Acc 201.

**ACC 301 Cost Accounting** ............................................................................. 3
A study of how accounting information is used and communicated by managers to plan, control and evaluate decisions. Primary topics include cost behavior, cost-volume-profit analysis, costing systems, variance analysis, cost-allocation issues, budgeting, and pricing decisions. This course is a continuation of the principles learned in Acc 202. Case studies are used extensively in this course. Prerequisite: Acc 201-202, BIS 220 or Bus 150.

**ACC 302 Intermediate Accounting** ............................................................. 3
Development of accounting theory and practice by critically analyzing each element of the financial statement. Concentration on a conceptual approach to accounting information and reporting. Courses must be taken in sequence. Prerequisite: Acc 201-202.

**ACC 303 Intermediate Accounting** ............................................................. 3
Development of accounting theory and practice by critically analyzing each element of the financial statement. Concentration on a conceptual approach to accounting information and reporting. Courses must be taken in sequence. Prerequisite: Acc 201-202.

**ACC 304 Federal Income Tax: Individual** .................................................... 3
A comprehensive study of the current income tax laws as they apply to individuals and sole-proprietorships. Emphasis is placed on applying the tax laws for tax return preparation. Students are also introduced to tax research and tax planning. Students will participate in a tax preparation program for the Goshen community. Prerequisite: Acc 201 and 202.

**ACC 375 Topics:** .................................................................................... 3 (1-4)
Depth study on a selected topic in accounting. Intended to accommodate student interest and/or faculty expertise in specific accounting issues. Issues may vary from year to year.

**ACC 400 Selected Readings** ................................................................. 1 (1-4)
Special topics for majors and minors.
ACC 405 Auditing ................................................................. 3
Study of the attest function and the responsibility of a Certified Public Accountant as an independent auditor of financial information. Includes study of the CPA Code of Professional Ethics and the legal liability of auditors. Prerequisite: Acc 302-303.

ACC 408 Accounting Internship ....................................... 12 (6-12)
Work experience in professional accounting. Limited to accounting majors. Student must be approved by department faculty and accepted by a firm through an interview. Interested students should contact the supervising instructor during the junior year.

ACC 409 Internship in Accounting ........................................... 3
Work experience in, or student observation of, a business enterprise or problem. Each student's project is individually arranged with the instructor. The course is designed to integrate and apply theoretical learning with experience.

ACC 432 Government & NFP Accounting .............................. 3
The study of accounting theory and practice relating to governmental entities and not-for-profit organizations. Prerequisite: Acc 201-202.

ACC 434 Federal Income Tax:Corporate ............................. 3
Study of the current tax laws applicable to C corporations, S corporations, partnerships and limited-liability companies. Students are introduced to tax research and tax planning for these business entities. Also included is an introduction to tax law related to not-for-profit organizations, trusts, estates and gift taxation. Prerequisite: Acc 304.

Business courses

BUS 102 Advanced Keyboarding ...................................... 3
Manipulative skill development in the use of computer/typewriter keyboards, including numerical keypad. Skills development in the production of letters, reports, tables and other word processing communications using a leading software package. (Available as independent study.)

BUS 121 Introduction to Entrepreneurship ........................... 3
Introduces the various activities that entrepreneurs undertake, from recognizing an opportunity to launching a business. Provides an overview of developing and testing a business concept, the components of a business plan, and planning for growth and change. Additional attention is given to the nature of entrepreneurial thinking and the ethical environment of entrepreneurship.

BUS 150 Introduction to Microcomputer ............................. 3
An introduction to personal computers and their common uses. Hands-on experience with word processing, spreadsheets, data base management, presentation graphics, the Windows operating systems and the Internet. Students work in a hands-on computer lab and gain experience with the software and concepts through completion of exercises and lab problems.

BUS 210 Basic Spreadsheet Applications ............................ 1 (1-2)
Introduces the student to the features and functions of a commercial spreadsheet software for the microcomputer. Hands-on exercises and cases
illustrate the use of spreadsheet software in common business applications. A working knowledge of microcomputers is required. (Credit not available for this course and Bus 150.)

**BUS 215 Entrepreneurial Finance** ................................................................. 3
Designed to introduce the basics of business finance and accounting to nonfinancial managers or students anticipating acquiring or starting a new venture. Builds understanding of key financial statement and day to day accounting and finance issues, tips for improving financial efficiency and strategies for pursuing financial growth.

**BUS 217 Personal Finance** ................................................................. 3
Designed to introduce students to the basics of personal finance. A survey course of personal and family financial planning with an emphasis on financial recordkeeping, planning your spending, tax planning, consumer credit, making buying decisions, purchasing insurance, selecting investments and retirement and estate planning.

**BUS 306 Human Resource Management** ............................................. 3
Provides a comprehensive understanding of what effective firms in competitive environments are doing to manage their human resources as successfully as possible. Topics include the major issues facing human resource management and the various human resource activities.

**BUS 308 Office Administration & Technology** 3 (2-3)
Principles of management, problem-solving, systems and communications as applied to office administration; the role of people in using the tools of information technology to increase productivity; records management, space, furniture, equipment and office automation. (Available as independent study.)

**BUS 310 Business Law** ........................................................................ 3
Survey of legal principles. Topics include liability, contracts, sales and negotiable instruments; also, secured transactions, agency, partnerships, corporations and antitrust.

**BUS 315 Principles of Management** ..................................................... 3
Founded on the four major managerial functions: planning, organizing, leading and controlling. The process of management is applied to the functions of a business enterprise. Other topics include motivation, problem-solving and the coordination, communication and human relations aspects of management.

**BUS 316 Principles of Marketing** ......................................................... 3
The nature of marketing in our society; how organizations develop marketing strategies that enable them to meet their objectives and the needs of their customers; the relationship of marketing to other management functions.

**BUS 317 Financial Management** .......................................................... 3
Introduces students to the primary elements of organizational finance such as time value of money, stock and bond valuation, forecasting, working capital management, capital budgeting and structure and dividend policy. Prerequisite: Acc 201-202, Bus 150 or BIS 220, Econ 202.

**BUS 318 Production/Operations Management** .................................... 3
Decision-making and quantitative analysis of production problems arising in
areas of methods analysis, plant location, facilities design, production planning and control, inventory management, work measurement, job design, worker safety and health, materials handling and quality control.

**BUS 319 Leading Nonprofit Organizations** ................................................................. 3
An exploration of how business principles apply to leading nonprofit organizations. Course provides students with the concepts, techniques and illustrations needed for effective nonprofit organizational management. Topics covered will include management and motivation of staff, trustees and volunteers, marketing, financial management, fund raising, planning, ethics, social responsibility, partnerships and sustainability.

**BUS 320 Marketing Research** ........................................................................ 3
A comprehensive overview of the nature and scope of marketing research and its role in decision support systems. Course focuses on the practical aspects of marketing research and provides a framework for conducting quantitative and qualitative research. Prerequisite: Bus 316 or consent of instructor.

**BUS 322 Organizational Communication** ..................................................... 3
(Cross-listed from Comm 322) An exploration of communication within organizations, as well as communication between organizations and the larger society. Topics include theories of communication and organizational structure; examination of power, culture, and conflict in organizations; and analysis of verbal and nonverbal messages in interpersonal, small-group and public settings. Assignments will assist students in developing skills in listening, analysis, speaking and writing. Prerequisite: Comm 240 or Bus 316.

**BUS 327 Internet Business Strategies** ......................................................... 3
The Internet is a powerful global force that is influencing, and in some cases significantly changing business practices. The Internet can be a valuable business tool for marketing, customer and supplier relationship management, supply chain and inventory management and of course product sales. This course uses a strategic business planning approach to evaluating and implementing business functions on the Internet.

**BUS 328 Venture Planning** ............................................................................ 3
In this course students write business plans for an entrepreneurial venture. Areas of exploration include recognition of opportunity, pre-venture planning, start-up, strategy, negotiation and funding. Emphasis is also placed on the management of organizational growth and change. Attention is given to special concerns of small-firm management.

**BUS 330 Entering Family Business** .............................................................. 3
The business, personal and interpersonal issues associated with a family-owned and managed firm are explored in this course. Topics include: the competitive strengths and weaknesses of a family firm; the dynamics of family interactions and the family business culture; conflict resolution; estate planning, and planning for succession.

**BUS 332 Investments** ..................................................................................... 3
In this course students will learn how to research, formulate and implement investment plans through portfolios constructed and monitored by students. Analytical frameworks and investment strategies that target objectives will be
established and utilized. Also, decision making tools such as security valuation and leverage analysis models will be explored. Prerequisite: Bus 317 or consent of instructor.

**BUS 336 Advertising** ........................................................................................................ 3
A managerial approach to developing advertising strategies; the use of advertising as a marketing tool; the creative process; evaluation of the effectiveness of advertising; the role of advertising in our society. Prerequisite: Bus 316 or consent of instructor.

**BUS 338 Sales** .................................................................................................................. 3
An introduction to the dynamic world of selling. A pragmatic approach to the techniques and skills used by professional sales persons. Includes role playing and the development of a sales presentation.

**BUS 340 Adv Spreadsheet App** ..................................................................................... 1 (1-2)
Further practice in applying the features and functions of a commercial spreadsheet are provided. Emphasis is on overall spreadsheet design as well as the use of macros and spreadsheet publishing features. Much of the work is done independently by the student, in consultation with the instructor. Applications are drawn from common business and accounting problems. Prerequisite: Bus 150 or BIS 220 or consent of instructor.

**BUS 350 International Business** ..................................................................................... 3
International business is the field of study that focuses on business activities that cross national boundaries. It includes exports and imports - the subject of traditional international trade discussions - as well as foreign direct investment, international banking, the international transfer of technology and global business strategy. The cultural environment of international business is considered in some detail. The course presents the important activities of an international firm and a framework for analysis from a manager's perspective. Case studies are used in the course. Prerequisites: Econ 201-202 and Acc 201-202 or consent of instructor.

**BUS 360 Java Junction Management** ............................................................................. 3
Gives students the opportunity to manage a real business. Java Junction, a coffee shop located in the KMY Connector, is completely student-run and student-managed. Student managers, under the supervision of a business faculty member, have full responsibility for all management and operating decisions. Management positions include accounting, human resources, marketing, operations, purchasing and special events planning and coordination. The management teams reports regularly to an Advisory Board who serves as Java Junction’s Board of Directors. Managers are selected by the business department through an application process. Entrepreneurial students and those energized by challenges are encouraged to apply. This course is repeatable.

**BUS 375 Topics:** .............................................................................................................. 3
Depth study on a selected topic in business. Intended to accommodate student interest and/or faculty expertise in specific business issues. Issues may vary from year to year (example: Business in Spain).
BUS 400 Selected Readings ................................................................. 1 (1-4)
Special topics for majors and minors.

BUS 402 Applied Entrepreneurship .............................................................. 3
This course is awarded to recipients of Entrepreneurship Grants to provide
time and business departmental guidance for student to start a business.

BUS 403 Management Strategy ................................................................. 3
A study and evaluation of management strategies to achieve organizational
goals and objectives. Utilizes management principles, financial analysis and
control, personnel decisions and marketing strategies to solve case/simulation
problems. Prerequisites: Bus 315, 316 and 317 or consent of instructor.

BUS 405 Business Career Planning ............................................................. 1
The course will provide a framework within which to appraise career options,
set goals and implement a plan to reach goals. Topics include self-appraisal,
resumes, developing a job-search strategy, interviewing for jobs, choosing the
first job and graduate-school opportunities.

BUS 409 Internship in Business ................................................................. 3
Work experience in, or student observation of, a business enterprise or
problem. Each student's project is individually arranged with the instructor. The
course is designed to integrate and apply theoretical learning with experience.

BUS 410 Mngmnt Policy & Soc Responsibility ............................................ 3
A broad examination of the responsibilities of business to society and social
expectations of business. Topics include: business and its environment;
corporate social responsibility; the manager and personal ethics; government
regulation of business. Intended as the capstone senior seminar. Prerequisite:
Senior standing in department or consent of instructor.

Business information systems courses

BIS 220 Office Software Productivity ........................................................... 3
Advanced skills in commonly-used office-suite software, such as spreadsheets,
word processing, presentation graphics and personal databases. An
introduction to Hypertext Markup Language (HTML) is also included. The focus
is on using these tools in an organizational setting to improve personal and
organizational productivity and effectiveness. The course currently uses the
Microsoft Office Suite on personal computers. Prerequisites: Bus 150 or
consent of instructor

BIS 250 Intro to Business Programming ..................................................... 3
This course will provide an understanding of algorithm development, computer
concepts and the design and application of data and file structures. It includes
an understanding of the logical and physical structures of both programs and
data. The course will be taught from a business perspective with business
software development projects. Course will use the Visual Basic language.

BIS 305 Introduction to Information Systems .............................................. 3
A broad introduction to the Information Systems (IS) field. Accessible to
anyone interested in learning about the various aspects of the IS field who may
not be able to schedule additional, in-depth IS courses. Topics range from
security and ethical challenges, to hardware, software, networking, e-business, and IS strategy. Attention is also given to emerging trends in IS and their potential impact on organizations. Prerequisites: BIS 220 or consent of instructor.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIS 310</td>
<td>Information Tech Hardware&amp;Networks</td>
<td>3</td>
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<tr>
<td>BIS 335</td>
<td>Systems Analysis &amp; Design</td>
<td>3</td>
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<td>BIS 340</td>
<td>Database Management Systems</td>
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<td>BIS 375</td>
<td>Topics in BIS:</td>
<td>3 (1-4)</td>
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<td>BIS 400</td>
<td>Selected Readings:</td>
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<td>BIS 405</td>
<td>Project Management &amp; Practice</td>
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<tr>
<td>BIS 407</td>
<td>Web Application and Development</td>
<td>3</td>
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-BIS 310 Information Tech Hardware&Networks .......................................................... 3
This course addresses hardware and operating systems and includes data communications and networking, and management of telecommunications networks. Prerequisite: BIS 305 or consent of instructor.

-BIS 335 Systems Analysis & Design ................................................................. 3
A structured approach to solving organizational problems in the context of Information Systems. The focus of the course is on determining the needs of the organization and meeting those needs through the design of an information system. Topics such as feasibility analysis, determining business requirements, documenting processes and data requirements through modeling tools, designing a new system, and implementation issues are covered. An appropriate course for those considering a career as a business analyst in the consulting field. Prerequisite: BIS 305 or CoSc 215 or consent of instructor.

-BIS 340 Database Management Systems ............................................................. 3
Properly designed and constructed databases are crucial to ensuring business success. This course focuses on the proper design of databases and their construction. Students learn to design databases through diagramming tools, as well as learning the "language" of databases, SQL. Attention is also given to form and report development, data warehouse and data mining issues, and administrative issues such as user security. Students gain experience in robust database environments such as Oracle. Prerequisite: BIS 335 or CoSc 215 or consent of instructor.

-BIS 375 Topics in BIS: ........................................................................ 3 (1-4)
Depth study on a selected topic in business information systems. Intended to accommodate student interest and/or faculty expertise in specific business information systems issues. Issues may vary from year to year.

-BIS 400 Selected Readings: ........................................................................ 1 (1-4)
Special topics for majors and minors.

-BIS 405 Project Management & Practice ............................................................. 3
Practice in managing the system life cycle; requirements determination for logical design, physical design, testing and implementation of a system. Other topics: system and database integration issues; metrics for project-management and system-performance evaluation; managing expectations of superiors, users, team members and others related to the project; determining skill requirements and staffing the project; cost effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project. Prerequisite: BIS 335 or SoSc 215.

-BIS 407 Web Application and Development ......................................................... 3
This course will cover advanced system development for the Internet with business-to-business application projects as the focus. It includes an understanding of advanced HTML concepts and database access using ASP.
(active server pages) and ADO (active data objects). The development environment will include Microsoft Access, Oracle, VB script, Java script and XML. Prerequisite: BIS 250 and BIS 340 or consent of instructor.

**BIS 409 Internship in BIS** ................................................................. 3
Work experience in, and student observation of, an organization or problem related to the information systems field. Each student's project is individually arranged with the instructor. The course is designed to integrate and apply theoretical learning with experience.

**Economics courses**

**ECON 201 Principles of Economics** .................................................. 3
A general survey of economic relationships and processes in modern society. Focuses on macroeconomic topics: national-income accounting, aggregate-income determination, money and banking and international trade. Either Econ 201 or 202 may be taken first; both are prerequisites for most upper-level courses in economics.

**ECON 202 Principles of Economics** .................................................. 3
A general survey of economic relationships and processes in modern society. Analyzes market and price behavior under competitive and monopolistic conditions and reviews the economic activities of government, with emphasis on spending and taxing patterns. Either Econ 201 or 202 may be taken first; both are prerequisites for most upper-level courses in economics.

**ECON 207 Introduction to Statistics** .................................................. 3
Collection, presentation and analysis of numerical data. Descriptive measures; index numbers; probability, sampling, estimation and hypothesis testing; linear regression and correlation. Prerequisite: a knowledge of algebra.

**ECON 301 Money and Banking** ....................................................... 3
Monetary theory and policy; commercial bank management and the study of other financial institutions; the money markets; central banking and the Federal Reserve System. Prerequisite: Econ 201.

**ECON 304 Public Sector Economics** ............................................... 3
Basis for public sector in an economy; mechanisms of governmental allocation. The financing of federal, state and local governments; principles and economic effects of taxation and expenditures. Prerequisite: Econ 202.

**ECON 306 International Economics** ............................................... 3
Factors in international economic relations; international trade theory; balance of international payments; foreign exchange; commercial policy of the United States and other countries; foreign investment and economic development; international economic cooperation. Prerequisite: Econ 201-202, or consent of instructor.

**ECON 308 Intro to Economic Development** ..................................... 3
Provides a general overview of the development field and surveys major issues from a range of viewpoints. Topics include trade and financial problems faced by developing countries, evaluation of various models of development and
application of economic techniques to development problems. Prerequisites: Econ 201-202 or consent of instructor.

**ECON 375 Topics** 3 (1-4)
Depth study on a selected topic in economics. Intended to accommodate student interest and/or faculty expertise in specific business issues. Issues may vary from year to year.

**ECON 400 Selected Readings** 1
Special topics for majors and minors.

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**Chemistry**

*Professor D. Smith (chair)*  
*Associate Professor D. Schirch*

**Introduction**
The chemistry department offers one major and also collaborates with the biology department on the molecular biology/biochemistry major. In addition, a cooperative “3+2” program in chemical engineering is available, with three years completed at Goshen College and two years at a cooperating engineering school. See chemistry department faculty members for more information.

- Major in chemistry

Visit the chemistry department Web site at [www.goshen.edu/chemistry/Home](http://www.goshen.edu/chemistry/Home).

**Career and postgraduate opportunities**
Chemistry graduates are currently working at many levels in business and industry. They also serve as medical doctors, professors and teachers, laboratory chemists, librarians and administrators.

**Teacher education certification**
Teacher certification is available for grades 5-12 in two areas related to chemistry. Courses needed in addition to chemistry major requirements are:  
**Chemistry** - 30 credit hours of education courses.  
**Life Sciences and Chemistry** - Biol 111-112; Biol 200 or 201; Biol 203 or 303; Biol 300; Biol 301; and Biol 215, 309 or 315; and 30 credit hours of education courses. In addition, PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. For more details see education department catalog page and the *Teacher Education Handbook*.

**Major in chemistry**

51 credit hours

- Chem 111-112, General Chemistry ......................... 8
- Chem 200, Analytical Chemistry ............................. 4
- Chem 303-304, Organic Chemistry .......................... 8
- Chem 310, Thermodynamics ................................. 4
- Chem 312, Quantum Mechanics I ............................ 4
• Chem 409, Chemistry Internship ..................................... 0-3
• Chem 410, Senior Seminar ................................................ 3
• Chem 415, Inorganic Chemistry ......................................... 4
• Math 211-212, Calculus I & II ............................................. 8
• Phys 203-204, General Physics I & II ................................. 8

Planning guide – option A

First year  General education
            General Chemistry
            Calculus I, II
            Calculus III recommended
            (May)

Second year  General education
            Organic Chemistry
            Analytical Chemistry
            SST (summer)

Third year  General education
            General Physics
            Quantum Mechanics I
            Inorganic Chemistry

Fourth year  Balance of general education
            Biochemistry (recommended)
            Thermodynamics
            Internship
            Senior Seminar

Planning guide – option B

First year  General education
            General Chemistry
            Calculus I, II
            Calculus III recommended (May)

Second year  General education
            Organic Chemistry
            General Physics
            SST (summer)

Third year  General education
            Analytical Chemistry
            Biochemistry (recommended)
            Thermodynamics
            SST (fall or summer)

Fourth year  Balance of general education
            Quantum Mechanics I
            Inorganic Chemistry (May)
            Internship
            Senior Seminar

Planning and advising notes
Fundamental computer competency is expected. Chem 409, Chemistry Internship or an equivalent noncredit experience is required. Two planning
guides are given because some courses are offered only in alternate years. Additional recommended courses for chemistry majors: Chem 350, Environmental Chemistry; Chem 420, Organic Analysis; Chem 430, Biochemistry; Chem 450, Introductory Research Problems; Math 213, Calculus III.

Chemistry courses

CHEM 100 Chemical World ................................................................. 3
An introduction to chemistry in our society for non-science majors. The course is a hands-on laboratory course based on important and intriguing problems from the world around us. Topics may include forensics, biochemical, environmental, household, medicinal and nuclear chemistry. Modern instruments and analysis will be used to collect and discuss data. Lectures and laboratory. Prerequisite: one year of high school algebra.

CHEM 101 Chemistry & Physics of Life ........................................... 3
Designed for non-chemistry majors. Chem 101 gives students a condensed foundation of chemistry principles. Students who have taken at least two semesters of high school chemistry with grades of B- or higher may enroll in Chem 102 without taking 101. Lectures and laboratory.

CHEM 102 Chemistry & Physics of Life ........................................... 4
Designed for non-chemistry majors. Chem 102 focuses on organic and biochemistry. Students who have taken at least two semesters of high school chemistry with grades of B- or higher may enroll in Chem 102 without taking 101. Prerequisite: Chem 101 or consent of the instructor or at least two semesters of high school chemistry with grades of B- or higher.

CHEM 111 General Chemistry ......................................................... 4
An introduction to the basic particles of matter, the modern concept of the atom, chemical bonding and the structure of chemical compounds. The physical and chemical properties of some elements and compounds are examined. Reaction equilibrium and kinetics, acid-base theory, electrochemistry, radiochemistry and thermodynamics are included. Lectures and laboratory. Prerequisite: Chem 100 or high school chemistry (grade C or better) and adequate pre-calculus math.

CHEM 112 General Chemistry ......................................................... 4
An introduction to the basic particles of matter, the modern concept of the atom, chemical bonding and the structure of chemical compounds. The physical and chemical properties of some elements and compounds are examined. Reaction equilibrium and kinetics, acid-base theory, electrochemistry, radiochemistry and thermodynamics are included. Lectures and laboratory. Prerequisite: Chem 100, Introductory Chemistry, or high-school chemistry (grade C or better) and adequate pre-calculus math.

CHEM 200 Analytical Chemistry ..................................................... 4
Quantitative analysis using traditional and instrumental methods. Lectures and laboratory. Prerequisite: General Chemistry, Chem 111-112 or consent of instructor.
CHEM 220 Human Nutrition ................................................................. 3
A study of the nutritive needs of the body in normal stages of growth and development, food sources of nutrients, nutrient functions and factors affecting nutrient utilization. Current U.S. and global nutritional problems are explored. Prerequisite: Chem 101 or 111 (Biol 203 and 204 recommended).

CHEM 303 Introduction to Organic Chemistry ................................. 4
Covering structure, nomenclature, stereochemistry, and principal reactions for the major functional groups of organic chemistry, this is a one-semester survey course that gives an overview of the field. Laboratory exercises introduce basic purification techniques. This can be a stand-alone course for students majoring in biology and not continuing to medical school, veterinary school, or other graduate programs in biology and chemistry-related fields. For students with graduate school plans, this is the first in a two-course sequence in organic chemistry. Prerequisite: Chem 111-112.

CHEM 304 Intermediate Organic Chemistry ................................. 4
Using Chem 303 as a foundation, this course presents additional reactions (with an increased emphasis on mechanisms) and material on stereochemistry, as well as introducing spectroscopy (IR, NMR, GC-MS and UV-Vis). Together, the Chem 303-304 sequence covers all topics traditionally covered in two-semester organic chemistry courses. Laboratory experiments teach techniques for organic syntheses, instruments (GC/MS, FT-IR, FT-NMR), and chemical information retrieval. Prerequisite: Chem 303.

CHEM 310 Thermodynamics ......................................................... 4
A study of classical thermodynamics in the formulation of Gibbs. Thermodynamic potentials, characteristic variables, stability, homogeneous and heterogeneous systems, chemical kinetics are treated. An introduction to statistical mechanics is presented. Applications include studies of material properties and engineering systems. Lectures and laboratories. Prerequisites: Phys 203-204, Chem 111-112, Math 212 or consent of the instructor.

CHEM 312 Quantum Mechanics I ................................................ 4
Principles of quantum mechanics are discussed beginning with a hydrogen atom and concluding with many atom molecules. The material is examined using the physical evidences that support the theory of quantum mechanics, particularly spectroscopy. The course also discusses symmetry of molecules, theory of NMR, and X-ray diffraction. Lectures and laboratory. Prerequisites: Phys 203-204, Chem 111-112, Math 212 or consent of the instructor.

CHEM 350 Environmental Chemistry ............................................ 4
A laboratory intensive course with two lectures and two three-hour labs each week. Will include sampling, statistics and techniques involved in determining the level of contaminants in the environment. Although some instrumental theory will be discussed, the course will emphasize experimental technique. Students will gain hands-on experience collecting authentic environmental samples and using modern instrumentation and methods for detecting the presence of a variety of inorganic and organic compounds. Instruments used in the laboratory will include AA, HPLC, GC and GC-MS as well as standard commercial test kits. The students will gain experience using EPA methods for
determining the level of contaminants in their samples. Prerequisite: Chem 111-112 and Chem 303.

**CHEM 400 Advanced Preparations** .......................................................... 1 (1-2)
Projects involving advanced laboratory techniques.

**CHEM 409 Chemistry Internship** ............................................................ 3 (0-3)
Designed to give the student practical experience in chemistry. May involve work in a chemical industrial laboratory or production facility or an academic research activity. Students may also propose their own projects. 120 hours of work experience is required.

**CHEM 410 Senior Seminar** ............................................................................ 3
(Cross-listed from Phys 410) An exploration of the relations between the natural sciences and other broad areas with special emphasis on ethical and theological concerns. Discussion, lectures, preparation and presentation of papers. Prerequisite: Senior standing.

**CHEM 415 Inorganic Chemistry** ................................................................. 4
Emphasis on models of structure and bonding as related to chemical and physical properties. Discussions will include descriptive chemistry of the elements, coordination and organometallic compounds and solid state materials. The laboratory component emphasizes synthesis and characterization of inorganic compounds. Prerequisites: Chem 200, Chem 303-304, Chem 312.

**CHEM 420 Organic Analysis** ................................................................. 4
Structure elucidation using instrumental techniques (NMR, FT-IR, MS, UV). Advanced synthesis and identification of organic compounds. Lectures and laboratory. Prerequisite: Chem 303-304, Organic Chemistry.

**CHEM 430 Biochemistry** ........................................................................... 4
Introduction to the chemical processes of living organisms. This course (which complements Biol 327) focuses primarily on proteins (including enzymes) and metabolism, with introductions to carbohydrates, lipids, and cell membranes. Students planning to continue on to graduate programs in medicine, biochemistry, or related fields should take both Chem 430 and Biol 327 to get a solid background in the areas of biochemistry and molecular biology. Lectures and laboratory. Prerequisite: Chem 303-304, Organic Chemistry.

**CHEM 450 Introduction to Research Problems** ..................................... 1 (1-3)
Laboratory and conference. Prerequisite: consent of instructor.
Communication

Associate Professors R. Johnson, P. McFarlane, D. Stoltzfus (chair)
Assistant Professors R. Lapp, M. Milne, J. Samuel

Introduction
The communication department offers four majors and four minors. Two additional minors are offered in collaboration with other departments. In addition, secondary education certification is available in journalism. The four majors prepare students to engage in meaningful service and fulfilling careers in communication fields. The four communication department minors can combine with any major to provide valuable professional skills. The writing minor, offered in collaboration with the English department, may focus on either journalistic or creative writing. The multimedia communication minor is offered in collaboration with art, computer science and business information systems departments. Students in this program learn to design and develop Web sites and CD-ROM presentations that convey information effectively and aesthetically.

- Majors in broadcasting, communication, journalism and public relations
- Minors in broadcasting, communication, journalism, public relations, multimedia communication and writing

Communication students at Goshen College have numerous opportunities to apply their classroom learning and to test their vocational interests. Students can develop leadership skills in broadcasting (WGCS: The Globe), journalism (Maple Leaf and Record), public address (the C. Henry Smith Peace Oratorical Contest) and video production (GC-TV). Student journalism organizations are based in a Communication Center with a full-service newsroom and suite of offices. The Globe studios feature state-of-the-art digital and computer-based equipment with satellite connections; GC-TV also is equipped with digital and computer-based production and editing equipment. Faculty members are especially attuned to contemporary ethical issues in communication fields and attempt to bring the college’s Christian orientation to bear on these issues.

Visit the communication department Web site at www.goshen.edu/communication/Home.

Career and postgraduate opportunities
Graduates have pursued vocations as broadcasters, reporters, editors, public relations and advertising practitioners, educators, attorneys, business executives and church leaders.

Teacher education certification in journalism
Teacher certification is available for grades 5-12 in journalism education. Courses needed in addition to the journalism major are Comm 190, Comm 260, and 30 credits of education courses, including a semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore
Major in broadcasting

42 credit hours

- Comm 190, Introduction to Radio ........................................ 1
- Comm 195, Television News Reporting and Videography .......... 1
- Comm 200, Communication Practice ................................. 2
- Comm 204, Expository Writing ........................................... 3
- Comm 212-312, Broadcast Media Production I & II ............. 6
- Comm 240, Communication Research ................................. 3
- Comm 250, Writing for Media ............................................. 3
- Comm 260, Broadcast Writing ............................................ 3
- Comm 270, Media Law and Ethics ................................... 3
- One of the following courses: ......................................... 1
  Comm 290, Radio Operations
  Comm 295, TV News Producing and Directing
- Comm 360, Broadcasting for the Public Good .................... 3
- Comm 383, Communication and Society ........................... 3
- Comm 409, Internship ................................................... 4
- Comm 410, Senior Seminar ............................................ 3
- One of the following courses: ....................................... 3
  Comm 314, Broadcast Media Production III
  Comm 324, Principles of Public Relations
  Comm 326, Creating for the Web
  Comm 386, Film
  Comm 412, Special Project
  Thea 325, Power of Story
  Thea 320, Expressive Voice
- At least four semesters participation in WGCS and/or GCTV

Planning guide for all communication department majors

**First year**  General education
  Communication Research
  Oral Communication (3 credit hours)
  100-299 level courses in major

**Second year**  General education
  Media Law and Ethics
  Expository Writing
  Other courses in major
  SST

**Third year**  General education (including humanities requirement)
  Communication and Society
  Courses in major

**Fourth year**  Balance of general education
  Balance of major
Internships  
Senior Seminar  

Planning and advising notes for all communication department majors
All students majoring in communication are required to take the general education course Comm 202, Oral Communication for three credit hours. Comm 200, Communication Practice should be with a co-curricular closely related to the area of concentration. The Comm 409, Internship should be in the student’s area of concentration. The Broadcasting, Journalism and Public Relations majors require two internships: one for three credit hours and a second for one credit hour. A portfolio or its equivalent is required for graduation.

A maximum of 45 credit hours in communication courses may be applied to a degree. Also, no more than 12 credit hours in experiential learning (Comm 200, 209, 409 or 412) may be applied.

Major in communication

38 credit hours (core and one concentration area)

Core courses (20 credit hours):
- Comm 200, Communication Practice ................................................... 2
- Comm 204, Expository Writing ......................................................... 3
- Comm 240, Communication Research ........................................ 3
- Comm 270, Media Law and Ethics .................................................. 3
- Comm 383, Communication and Society ........................................ 3
- Comm 409, Internship ........................................................................ 3
- Comm 410, Senior Seminar .............................................................. 3

Film studies concentration (19 credit hours)
- Comm 212, Broadcast Media Production I ....................................... 3
- Comm 386, Film ............................................................................... 3
- CCCU Film Studies Program ......................................................... 13
- At least four semesters participation in GCTV and/or theater ................................................................. NC

Note: The film studies concentration cannot be completed solely in residence at Goshen College. Requires one full semester at the Council for Christian Colleges and Universities’ Los Angeles Film Studies Center, or an approved alternative off-campus program, including Comm 409. Recommended electives: Comm 255, Comm 312, Comm 412, Engl 230, Thea 235, Thea 245, Thea 332, Thea 334, Thea 338.

Generalist concentration (18 credit hours)
- Any communication courses, with adviser's approval ........... 9
- Any upper level (300-499) communication or related courses, with adviser's approval ................................. 9
- At least four semesters participation in communication department productions ........................................ NC

Multimedia communication concentration (18 credit hours)
- BIS 220, Office Software Productivity ........................................... 3
- Comm 108, Digital Design ................................................................. 3
• Comm 326, Creating for the Web ........................................... 3
• Comm 375, Animation ......................................................... 3
• Two courses selected from the following: .......................... 6
  Art 107, Design
  Art 208, Graphic Design
  BIS 310, Information Technology Hardware and Networks
  Comm 190, Introduction to Radio
  Comm 212-312, Broadcast Media Production I & II
  Comm 255, Photocommunication
  Comm 412, Special Project
• At least four semesters participation in WGCS, GCTV, or
  The Record ........................................................................ NC

Major in journalism

42 credit hours
• Comm 200, Communication Practice .................................... 2
• Comm 204, Expository Writing ............................................. 3
• Comm 212, Broadcast Media Production I .............................. 3
• Comm 240, Communication Research ................................... 3
• Comm 250, Writing for Media ............................................. 3
• Comm 270, Media Law and Ethics ....................................... 3
• Comm 326, Creating for the Web ......................................... 3
• Comm 350, Reporting for the Public Good ........................... 3
• Comm 383, Communication and Society ............................ 3
• Comm 409, Internship ......................................................... 4
• Comm 410, Senior Seminar ................................................ 3
• Selected from the following courses: ................................. 9
  Comm 108, Digital Design
  Comm 190, Introduction to Radio
  Comm 255, Photo Communication
  Comm 260, Broadcast Writing
  Comm 290, Radio Operations
  Comm 308, Feature Writing
  Comm 312, Broadcast Media Production II
  Comm 324, Principles of Public Relations
  Comm 385, Studies in Communication: Religious Journalism
  Comm 386, Film
  Comm 412, Special Project
  Engl 334, Writing Creative Nonfiction
  Thea 235, The Power of Story
  WoSt 375, Women in Text and Image
• At least four semesters participation in GCTV, Record,
  Maple Leaf, and/or WGCS ................................................... NC

Major in public relations

43 credit hours
• Bus 316, Principles of Marketing .......................................... 3
• Bus 336, Advertising .......................................................... 3
• One of the following courses: .............................................. 3
  Comm 108, Digital Design
  Art 107, Design
• Comm 200, Communication Practice .................................... 2
• Comm 204, Expository Writing ............................................ 3
• Comm 240, Communication Research ................................... 3
• Comm 250, Writing for Media .............................................. 3
• Comm 270, Media Law and Ethics ....................................... 3
• Comm 322, Organizational Communication .......................... 3
• Comm 324, Principles of Public Relations ............................ 3
• Comm 383, Communication and Society ............................. 3
• Comm 409, Internship ....................................................... 4
• Comm 410, Senior Seminar ............................................... 3
• Comm 412, Special Project: Events ..................................... 1
• Selected from the following courses: ................................. 3
  Art 208, Graphic Design
  Bus 121, Introduction to Entrepreneurship
  Bus 315, Principles of Management
  Bus 319, Leading Nonprofit Organizations
  Bus 338, Sales
  BIS 220, Office Software Productivity
  Comm 190, Introduction to Radio
  Comm 255, Photocommunication
  Comm 260, Broadcast Writing
  Comm 308, Feature Writing
  Comm 326, Creating for the Web
  Comm 350, Reporting for the Public Good
  Comm 412, Special Projects
  Thea 235, The Power of Story
• At least four semesters participation in GCTV, Record, Maple Leaf, and/or WGCS .............................................. NC

Minor in broadcasting

18 credit hours

• Comm 212, Broadcast Media Production I ............................ 3
• Comm 260, Broadcast Writing .......................................... 3
• Comm 360, Broadcasting for the Public Good ...................... 3
• Comm 409, Internship ..................................................... 3
• Courses selected from the following, at least 2 credit hours
  upper level (300-499): ................................................. 6
  Comm 190, Introduction to Radio
  Comm 195, Television News Reporting and Videography
  Comm 204, Expository Writing
  Comm 240, Communication Research
  Comm 250, Writing for Media
  Comm 270, Media Law and Ethics
  Comm 290, Radio Operations
  Comm 295, Television News Producing and Directing
Comm 312, Broadcast Media Production II
Comm 383, Communication and Society

Minor in communication

18 credit hours

- Comm 240, Communication Research ......................... 3
- Comm 383, Communication and Society ....................... 3
- Concentration courses selected with adviser's approval .. 12

Planning and advising notes
In the minor concentration, at least 5 credit hours must be upper level (300-499), with at least 9 credit hours in communication and at least 6 taken at Goshen College.

Minor in journalism

18 credit hours

- Comm 212, Broadcast Media Production I ..................... 3
- Comm 250, Writing for Media ..................................... 3
- Comm 350, Reporting for the Public Good .................... 3
- Comm 409, Internship ............................................ 3
- Courses selected from the following, at least 2 credit hours upper level (300-499): ............................................. 6
  Comm 108, Digital Design
  Comm 190, Introduction to Radio
  Comm 255, Photojournalism
  Comm 260, Broadcast Writing
  Comm 290, Radio Operations
  Comm 308, Feature Writing
  Comm 312, Broadcast Media Production II
  Comm 326, Creating for the Web
  Comm 385, Studies in Communication: Religious Journalism
  Comm 412, Special Projects

Minor in public relations

18 credit hours

- Bus 316, Principles of Marketing ................................. 3
- Comm 250, Writing for Media ..................................... 3
- Comm 322, Organizational Communication .................... 3
- Comm 324, Principles of Public Relations ..................... 3
- Courses selected from the following: ........................... 6
  Bus 319, Leading Nonprofit Organizations
  Bus 336, Advertising
  Comm 108, Digital Design
  Comm 190, Introduction to Radio
  Comm 200, Communication Practice
  Comm 212, Broadcast Media Production I
  Comm 240, Communication Research
  Comm 255, Photocommunication
Comm 260, Broadcast Writing
Comm 270, Media Law and Ethics
Comm 290, Radio Operations
Comm 308, Feature Writing
Comm 312, Broadcast Media Production II
Comm 326, Creating for the Web
Comm 385: Studies in Communication: Religious Journalism
Comm 409, Internship
Comm 412, Special Project

**Minor in multimedia communication**

**18 credit hours**
- Art 108, Digital Design ........................................................ 3
- BIS 220, Office Software Productivity ................................. 3
- Comm 326, Creating for the Web ....................................... 3
- Art/Comm 375, Animation ................................................... 3
- Two courses selected from the following, at least 2 credit hours upper level (300-499) ............................................... 6
  - Art 107, Design
  - Art 208, 308, 408, Graphic Design I, II and/or III
  - Bus 336, Advertising
  - BIS 310, Information Technology Hardware and Networks
  - Comm 212, Broadcast Media Production I
  - Comm 250, Writing for Media
  - CoSc 105, Introduction to Computer Science
  - CoSc 375, Special Topics (related to multimedia communication)
  - CoSc 400, Independent Study (related to multimedia communication)

**Minor in writing**

**18 credit hours**
The writing minor is administered by the communication and English departments. Students may focus on exposition/journalism or creative writing while augmenting those with courses in production or internships. See the [English department pages](#) for more details.

**Communication courses**

**COMM 108 Digital Design** ........................................................ 3
(Cross-listed from Art 108) This course in visual expression and communication will introduce students to relevant computer programs including Adobe InDesign, Adobe Illustrator and Photoshop. Through exercises, projects and critiques, students will learn both creative visual design and technical aspects of computer-generated images and composition.

**COMM 190 Introduction to Radio** ............................................ 1
This applied course, offered on a credit/no-credit basis only, prepares students
for work at WGCS-FM. Students attend lecture-discussion periods, engage in self-study and learn to operate the station through tutorial shifts.

COMM 195 TV News Reporting & Videography ......................................................... 1
Applied learning, involving work assignments on GC Journal, the campus television news program. Focuses on television news reporting, basic news videography and newscast studio operations.

COMM 200 Communication Practice .................................................................... 1 (1-2)
Applied work in communication with the student newspaper, yearbook, GC-TV, WGCS or other on-campus communication activity. A maximum of two hours applicable toward a communication major or minor. Consent of instructor required.

COMM 202 Oral Communication .......................................................................... 3 (2-3)
A study of communication theories as applied to oral communication. Practical experience in a variety of activities including interpersonal communication, public speaking, small-group communication, persuasion and nonverbal communication. Attention is given to communicating in a culturally diverse society. Theories and principles of oral communication will be studied in all sections though individual professors may structure their courses around specific themes such as Border Crossings and Oral History. Communication, theater and education majors should take this course for three credits.

COMM 204 Expository Writing ............................................................................ 3 (Cross-listed from Engl 204) Theory and practice of written communication. Assignments in a variety of prose forms aim at developing the student's control of logic, organization, rhetoric and usage. Prerequisite: Engl 110 or Engl 210 or equivalent.

COMM 206 Communication Across Cultures ...................................................... 3
A study of cultures, comparative message systems and principles of cross-cultural communication. A focus on current issues having to do with cultural interactions. Students analyze cultural dynamics through ethnographic projects, films and simulations. This course is designed as preparation for SST or for living in settings unlike one's native home.

COMM 209 Field Experience .............................................................................. 3 (1-3)
Experiential learning, usually in an off-campus professional setting, for communication majors and minors. The student contracts with a faculty member in regard to goals, performance expectations, supervision, evaluation and course subtitle. The 209 level is intended for first year and sophomore students. Upper level students should enroll in 409. Prerequisite: Comm 202 or Comm 204.

COMM 212 Broadcast Media Production I ............................................................ 3
An introduction to broadcast media production with an emphasis on audio and video production. The primary goal of the course is the development of the necessary skills and understandings needed to create effective broadcast media messages. Secondary goals are to give an overview of media production tools and techniques and to explore aesthetic and ethical issues of media. This course places emphasis on the "craft" roles of media production
personnel. Students will gain production craft experience as members of a production team.

COMM 240 Communication Research .......................................................... 3
An introduction to theory building and research methodology of mass communication. Course focuses on the practical aspects of communication research, providing a framework for conducting quantitative and qualitative research.

COMM 250 Writing for Media ................................................................. 3
An introductory newswriting course devoted to print, broadcast and multimedia environments. The course will cover new judgments and new values; reporting strategies; research techniques; forms of journalistic writing and Associated Press style. Prerequisite: Engl 110 or equivalent.

COMM 255 Photo Communication .......................................................... 3
A first course including camera work, digital image workflow and printing. Technical fluency, visual composition, photojournalistic approaches, and expression are components of the course. Students must provide a camera on which f-stop and shutter speed can be controlled.

COMM 260 Broadcast Writing ................................................................. 3
Students will study the principles, forms and techniques of writing for broadcast media. Assignments will focus on the writing and editing of broadcast news and commercial messages. Prerequisite: Comm 250.

COMM 270 Media, Law & Ethics ............................................................... 3
A course devoted to models of ethical decision making as they are applied to mass media issues, with special attention given to Christian perspectives. The course will cover issues like access to information, accuracy, conflicts of interest, deception, fairness, libel, obscenity, plagiarism and privacy.

COMM 290 Radio Operations ................................................................. 1
An applied course providing advanced instruction and experience in radio station operations, emphasizing four areas: announcing, systems operations (computer-based operations, satellite downlinking, basic productions, etc.) programming and management. Course work includes assisting WGCS managers in such areas as programming, production, and operations. Prerequisite: Comm 190.

COMM 295 TV News Producing & Directing ............................................. 1
Applied learning, involving leadership of GC Journal. Focuses on television news producing, directing and newscast studio operations. Prerequisite: Comm 195.

COMM 308 Feature Writing ................................................................. 3
Students will study nonfiction writing forms, including narrative journalism, and learn the process of publishing articles in newspaper, magazine and online markets. Students will prepare articles for submission. Prerequisite: Comm 204 or Comm 250 or equivalent.

COMM 312 Broadcast Media Production II ............................................. 3
Advanced study of broadcast media production with an emphasis on audio and video production. The primary goal of the course is the development of
advanced skills and understandings needed to create effective broadcast media messages. Secondary goals are to give extended development of media production tools and techniques and to explore aesthetic and ethical issues of media. This course places emphasis on the "creative" roles of media production personnel as producers, directors and designers. Students will take creative responsibility for media productions, including supervision of a production team. Prerequisite: Comm 212.

**COMM 314 Broadcast Media Production III** ................................................. 3
The primary focus of this course is on advanced integration of audio and video elements in program-length productions. Capabilities of computer-aided editing and digital audio and video will be explored in depth. The major project for the class will accommodate an individual's interest in either audio or video. Prerequisite: Comm 312 or consent of instructor.

**COMM 322 Organizational Communication** ................................................. 3
An exploration of communication within organizations, as well as communication between organizations and the larger society. Topics include theories of communication and organizational structure; examination of power, culture, and conflict in organizations; and analysis of verbal and nonverbal messages in interpersonal, small-group and public settings. Assignments will assist students in developing skills in listening, analysis, speaking and writing. Prerequisite: Comm 240 or Bus 316.

**COMM 324 Principles of Public Relations** ................................................. 3
Introduction to public relations contexts, issues and practices - research, planning, communicating and evaluating. Emphasis on skills in analyzing public opinion and in communication with internal and external publics, with special attention to not-for-profit organizations. Prerequisite: Comm 240 or Bus 216.

**COMM 326 Creating for the Web** ............................................................... 3
The class focus will be on creating Web pages for Internet and Intranet use. Class work will be entirely on the World Wide Web. Issues of design, Web graphics and the language(s) of page development will be a major part of the study.

**COMM 340 Audio Production** ................................................................. 3
(Cross-listed from Mus 340) An introduction to the recording studio presenting its function in commercial music production. Areas include basic electronics, studio setup and engineering fundamentals. Lecture/lab.

**COMM 350 Reporting for the Public Good** ................................................. 3
Journalism’s role in serving the public good will be in the forefront as students discuss civic journalism, the watchdog function of the news media, tensions between profits and public service, and the advocacy of peace and justice. Students will focus on significant independent reporting projects intended to advance the public good. Prerequisite: Comm 250 or equivalent.

**COMM 360 Broadcasting for the Public Good** ......................................... 3
This course examines the philosophical, historical, technological and social aspects of broadcast and new global electronic media industries. Students will study aspects of broadcasting and new media economics, management,
audience analysis, programming, media effects, government policy and FCC regulations for the public good.

**COMM 375 Animation** ................................................................. 3
Focuses on digital animation. Students will learn the skills needed to bring characters to life as well as create visual effects using computer software. Issues in the international contemporary visual culture will also be studied. Prerequisite: Comm 326.

**COMM 383 Communication and Society** ........................................ 3
A study of communication issues in modern society with attention to the persons, institutions, media and systems that facilitate social interaction. An overview of communication philosophy as a basis for ethical and aesthetic perspectives. Prerequisite: Comm 240 or consent of instructor.

**COMM 385 Studies in Communication** ........................................ 3
Investigations into particular communication issues: social, scientific, philosophic, historical, aesthetic, political or institutional. Focus on an institution or topic of current interest.

**COMM 386 Film** ........................................................................ 3
Survey of film as art, literature and mass medium. Historical development; authors and genres; philosophical, economic and political issues. A selection of 12 films for detailed study. Emphasis on "reading" film, understanding the medium's function and exploring contemporary cinematic issues.

**COMM 409 Internship** ................................................................. 3 (1-3)
Experiential learning, usually in an off-campus professional setting, for communication majors and minors. The student contracts with a faculty member in regard to goals, performance expectations, supervision, evaluation and course subtitle. Prerequisite: consent of instructor.

**COMM 410 Senior Seminar** .......................................................... 3
A consideration of ethical and professional issues in contemporary communication. Information interviews with practitioners in communication. Writing of resumes. Required of all communication majors.

**COMM 412 Special Project** ......................................................... 1 (1-3)
Students may conduct research of particular interest or pursue specialized applied projects in communication under faculty supervision. Prerequisite: consent of instructor.

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**Computer science**

*Professors D. Housman, P. Oakley (chair), F. Saner*

**Introduction**

The computer science department offers a major and minor in computer science and collaborates with the mathematics department on a second major. Also, the computer science, business, art and communication departments cooperate to offer a minor in multimedia communication. A degree and minor in business information systems is described in the business department pages.
Major in computer science
Major in computer science and applied mathematics
Minor in computer science
Minor in multimedia communication

The computer science program at Goshen College is an academic discipline that provides theoretical and applied perspectives on computer systems, software and hardware. Areas of study include problem-solving techniques, algorithm design and analysis, software design and development, computer hardware, mathematics, human-computer interaction and ethics.

Computer laboratories provide students free access to PC and Macintosh computers. Software available for student use includes various programming language compilers, mathematical and statistical analysis programs, computer-aided drafting software, multimedia software, database programs, spreadsheet programs and word processing programs. Students in upper-level computer science or business information systems courses have access to an advanced computing lab equipped with state-of-the-art PC computers, current software and several servers and networks.

Visit the computer science department Web site at www.goshen.edu/computerscience.

Career and postgraduate opportunities
The liberal-arts context of Goshen's computer science program produces graduates who are prepared for life-long learning in a rapidly changing discipline, who can communicate well and who have a broad understanding of other disciplines – characteristics that employers value highly. Computer science graduates are employed as programmers, analysts, teachers, business owners, project managers, Web developers and network specialists. They work in business, insurance companies, banks, accounting firms, computer consulting agencies, telecommunications firms, higher education institutions and many other settings. Graduates who choose to pursue further education are successful in earning master's and Ph.D. degrees.

Academic requirements
Students majoring in computer science or computer science and applied mathematics must obtain a grade of C or better in each course counted for the major. Any student taking a computer science course must obtain a grade of C or better in all prerequisites for that course prior to taking the course.

Major in computer science

50 credit hours

- One of the following courses: .................................................. 3
  BIS 335, Systems Analysis and Design
  BIS 405, Project Management and Practice
- BIS 340, Database Management Systems ....................... 3
- CoSc 200, Programming Techniques ................................. 4
- CoSc 215, Data Structures & Algorithms ............................ 4
- CoSc 315, Advanced Programming ..................................... 4
- CoSc 410, Senior Seminar ............................................... 3
• CoSc electives, upper level (300-499) .............................. 9
• Math 205, Discrete Mathematics ................................. 3
• Math 211, Calculus I .................................................... 4
• Science elective selected from: ..................................... 4
  Biol 111/112, Chem 111/112, or Phys 203/204
• Related elective courses selected from: ......................... 9
  BIS 305, BIS 407, Comm 326, Art/Comm 375, Phil 305, any
  mathematics course 212 or higher, any upper level
  (300-499) science or CoSc courses

Planning guide
First year  General education
  Discrete Mathematics
  Programming Techniques
  Calculus I
Second year General education
  Data Structures & Algorithms
  Advanced Programming
  Database Management
  Systems
  Science elective
  SST (spring or summer)
Third year  General education
  Related and upper level electives
Fourth year General education
  Upper-level electives
  BIS 335 or BIS 405
  Senior Seminar

Major in computer science and applied mathematics
60 credit hours

Computer science core (23 credit hours)
  • BIS 340, Database Management Systems ...................... 3
  • CoSc 200, Programming Techniques ............................... 4
  • CoSc 215, Data Structures & Algorithms ........................... 4
  • CoSc electives, upper level (300-499) ............................ 9
  • Math 205, Discrete Mathematics .................................... 3

Mathematics core (24 credit hours)
  • Math 211, 212, 213, Calculus I, II, & III .......................... 12
  • Math 301, Linear Algebra .............................................. 3
  • Math 341, Numerical Analysis ....................................... 3
  • Mathematics electives, upper level (300-499) ................... 6

Required related courses (13 credit hours)
  • Science elective: Biol 111/112, Chem 111/112, or Phys 203/204
    ............................................................................. 4
• Any upper level (300-499) mathematics, science or CoSc courses ............................................................................... 6
• Senior seminar: CoSc 410 or Phys 410 ............................. 3

Planning guide

First year
General education
Discrete Mathematics
Calculus I, II, III
Programming Techniques

Second year
General education
Data Structures & Algorithms
Database Management
Systems
Linear Algebra
General Physics (203 or 204)
SST (spring or summer)

Third year
General education
Upper-level computer electives
Upper-level math elective
Upper-level physics/math/computer electives

Fourth year
Balance of general education
Numerical Analysis
Balance of major
Senior Seminar

Planning and advising notes
This degree is a rigorous, yet flexible, applied science degree. It offers excellent preparation for a career in applied mathematics, programming in science, industry or engineering. It also offers a strong base for graduate study in computer science or in applied mathematics. The 18 hours of electives permits students to individualize the program. The program is close to a double major in computer science and mathematics and can be completed in four years.

Minor in computer science

18 credit hours
• CoSc 200, Programming Techniques ................................. 3
• Math 205, Discrete Mathematics ........................................ 4
• Other CoSc courses, at least 8 credit hours upper level (300-499) ................................................................. 11

Minor in multimedia communication
The multimedia communication minor is offered by the art, business, communication and computer science departments. For further information, see the full description in the communication department pages and website.

Computer science courses
COSC 105 Introduction to Computer Science .................................................. 3
An introduction to basic computing concepts, hardware and software. Topics include a history of computing devices, Web and Internet use, an introduction to algorithmic solutions to problems, programming concepts such as variables, loops and iteration, elementary programming, the function of an operating system, careers in computing and social and ethical considerations in computer science.

COSC 200 Programming Techniques .................................................. 4 (3-4)
An introduction to problem solving, algorithm development and structured programming techniques. Topics include pseudo-code, language syntax and semantics, applets and applications, loop and control constructs, primitive data types, objects, arrays, lists, files, graphical user interfaces, recursion, sorting and searching. Includes three lectures and one 75-minute lab each week. Computer-science majors are required to register for four credit hours. Others may register for three credit hours. In the three-hour option, students complete three-fourths of the course. No programming experience is necessary to take this course; however, either strong algebra skills or some computer programming experience is helpful.

COSC 215 Data Structures & Algorithms .................................................. 4
A continuation of Programming Techniques. Emphasis is placed on program specifications, data abstraction, information hiding, encapsulation and object-oriented programming. Traversing, sorting and searching algorithms are studied along with an analysis of time-space complexity. Data structures studied include lists, stacks, queues, trees, and graphs. Includes three lectures and one 75-minute closed lab each week. Prerequisite: CoSc 200, (4 credit hours); corequisite: Math 205.

COSC 315 Advanced Programming .................................................. 4
A programming course that emphasizes visual-based programming tools, and advanced programming concepts such as the use of APIs, development of GUIs, event-driven programming, multithreading, and client- and server-side programming. Actual topics included in the course may vary from semester to semester. Prerequisite: CoSc 215.

COSC 325 Data Communications .................................................. 3
Computer interfacing, serial and parallel I/O techniques, modems, file transfer, data communications and common computer networking protocols. Prerequisites: CoSc 200 (three or four credit hours), and Math 205.

COSC 335 Computer Architecture .................................................. 3
A study of computer organization, architecture, basic logic design and assembly level programming. Topics include logic gates, basic digital circuits, microprocessors, micro-programming, memory addressing, address buses, assembly level programming and addressing techniques. Prerequisites: CoSc 200 (three or four credit hours), and Math 205.

COSC 340 Intro to Artificial Intelligence .................................................. 3
An introduction to basic concepts in artificial intelligence: selected topics may include state spaces, search, heuristics, knowledge representation, problem-solving paradigms, rule-based systems, fuzzy reasoning, and neural
networks. Some examples of applications in natural language processing, speech, vision, robotics, expert system or machine learning are presented. Includes an introduction to LISP or Scheme, Prolog and an expert systems shell. Prerequisite: CoSc 215.

COSC 345 Theory of Computation .......................................................................................................................... 3
An introduction to topics in formal systems of computation: Turing machines, post productions, recursive functions, finite state automata, halting problem, undecidability, P/NP problems. Prerequisites: CoSc 215, and Math 211.

COSC 360 Operating Systems ............................................................................................................................. 3
A study of operating system concepts and structures with a major focus on process control, memory management, I/O management and concurrent processes. Prerequisite: CoSc 215.

COSC 375 Special Topics ................................................................................................................................. 1 (1-3)
Classroom study of advanced or special topics in computer systems. May be repeated. Offered according to demand. Prerequisite: Upper-level status and consent of instructor.

COSC 400 Advanced Projects/Topics .................................................................................................................. 1 (1-3)
Individual software development projects or independent study of advanced topics in computer systems. May be repeated. Grading plan CR/NC. Offered by individual arrangement with a professor.

COSC 409 Internship ........................................................................................................................................... 3 (1-3)
A work experience with computer systems either on or off campus. The purpose of the internship is to integrate theoretical knowledge with practical skills. Grading plan CR/NC. Offered by individual arrangement with a professor.

COSC 410 Senior Seminar .................................................................................................................................... 3
A study of the ethical and social implications of computer technology. Open to senior students in any discipline.

Education
Professors K. Meyer Reimer (chair), A. Stalter
Associate Professor M. Mast
Assistant Professors C. Bonfiglio, K. Gary
Adjunct Professors S. Ehst, M. Nolt

Introduction
Goshen College seeks to graduate teachers who interact with their students and the content they teach, lifelong learners who are professionally active and who put their faith into practice in all aspects of teaching and learning. Goshen College is authorized by the Indiana Division of Educator Licensing and Development to prepare teachers for elementary and secondary schools. The teacher education program has been accredited by the National Council for Accreditation of Teacher Education since 1954.
An important part of Goshen’s teacher education program is learning first-hand in the schools. Students will work in a variety of settings with diverse populations. If Study-Service Term (SST) is part of the international education experience, students will also have the opportunity to work with children or youth in another culture.

School systems in the area cooperate with Goshen College to provide strong and varied student teaching experiences. Pre-service teachers experience a broad spectrum of classroom situations. During the student teaching experience, students will work 12 or more weeks full time in a local school system and will be supervised by classroom teachers and college professors. After satisfactorily completing an approved teaching program and the Praxis II exam, students will apply and be recommended for licensure. Goshen graduates are generally eligible for initial or conditional certification in other states.

Visit the education department Web site at www.goshen.edu/education/Home.

**Education programs available:**

**Elementary education (K-6)**
Upon completion of a major in elementary education, pre-service teachers are eligible to be certified to teach kindergarten through sixth grade. Fieldwork takes place in a variety of classroom settings where pre-service teachers learn to teach language arts, math, social studies, science, art, physical education and music. Approaches to classroom management, discipline and evaluation are also explored.

**Elementary education/Special education (K-6)**
Goshen offers certification in Exceptional Needs: Mild Intervention for K-6 in conjunction with an elementary education certificate. It is a certification that must be completed at the same time as an elementary education certification, but does not stand alone as a separate program. To complete this program, 12 additional hours (Student Teaching: Exceptional Needs, Special Education Issues, Learning Disorders and Social Emotional Disorders) are added to the elementary education program.

**All-grade education in English as a new language, music, physical education or visual arts (K-12)**
All-grade education focuses on the content area while including requirements for general and professional education at all developmental levels.

**Secondary education (5-12)**
Pre-service teachers can be certified to teach fifth through 12th graders upon completion of teacher education requirements for teachers of early adolescence, adolescence and young adults and content requirements in the chosen field of instruction. Goshen offers teaching majors in:

- American Sign Language
- Bilingual/bicultural
- Business
- Chemistry
- English/Language arts
- English as a New Language (ENL)
- Journalism
- Life sciences
Special attributes of Goshen’s teacher education program

Elementary and exceptional needs dual certification program – Nationally, there is a critical shortage of special education teachers. Completing this dual certification program dramatically increases a candidate’s marketability. In addition, all classrooms include students with special needs. We believe that all special education teachers need to know what regular classroom teachers know, and all regular classroom teachers need to know what special education teachers know. The marriage of these two licensure content areas will prepare candidates to meet the needs of all students in their classrooms.

English as a New Language – Schools continue to need teachers who are skilled in working with students who do not speak English as their first language.

Conflict transformation – As school violence has increased, we have seen the need for teacher candidates to develop skills in conflict mediation. In collaboration with the peace, justice and conflict studies department, we are able to offer a series of three courses that equip our students in being able to help transform conflict peacefully. We strongly recommend that all teacher education candidates complete this sequence, which results in a Goshen College Certificate in Conflict Transformation (see below).

Environmental education – Merry Lea Environmental Learning Center, a 1,150-acre nature conservancy owned by Goshen College, hosts more than 5,000 school children each year for outdoor education. All elementary education majors have the opportunity to work in environmental education as part of their program.

Laboratory kindergarten - Since 1959, a laboratory kindergarten has been operated by the education department in the Church-Chapel Building. The laboratory kindergarten is an integral part of teacher education at Goshen College. It provides opportunities for (1) observation of child development and behavior; (2) observation of teaching procedures; and (3) field placements for the kindergarten internship.

Curriculum Library, Peace Curriculum Collection and Royer Reading Room - (Children’s Literature Collection) in the Harold and Wilma Good Library. This collection of materials provides excellent resources for teaching and research.

Admission to the teacher education program

Students generally apply for admission to the Goshen College teacher education program during the sophomore year. Admission to the program includes:
• Successful completion of the reading, writing and mathematics sections of the Pre-Professional Skills Test (Praxis I)
• A review of the high school record
• Successful performance in early fieldwork experiences
• Supportive references
• Demonstrated experience with children or youth
• Successful completion of the technology competency
• A written essay

Teacher education students must maintain a 2.5 GPA overall and a 2.8 in their content area. All content related courses for the license content area must be passed with a C or higher. Because the field of education is continually changing, education courses taken more than 15 years prior to admission to the program will not be accepted for transfer credit.

Major in elementary education (K-6)

Modified general education program (63-73 credit hours)

Language arts
Comm 202, Oral Communication ................................................................. 2
Educ 307, Children’s and Adolescent Literature ........................................ 3
Engl 110, Literature and Writing (or Engl 210) .......................................... 3
Engl 204, Expository Writing (strongly recommended) ............................. 3

Science
Phys 100, The Physical World (or alternate) ............................................ 3
Biol 100, The Biological World (or alternate) ........................................... 3
Biol 340, Field Experience in Environmental Education .......................... 3

Mathematics
Math 131, Math Concepts for Elementary Classroom I ............................. 3
Math 132, Math Concepts for Elementary Classroom II ............................ 3

History and Social Science
Hist 105 or 202, American History I or II ............................................. 3
Educ 310, Education Psychology: Elementary ......................................... 3

Physical education
PhEd 100, Wellness .................................................................................. 1
PhEd 309, Physical Education for Children .............................................. 2
Certification in first aid and CPR .............................................................. 0-1

Humanities
Hum 220-225, Humanities ....................................................................... 4
Educ 330, Fine Arts for Children ............................................................. 3

Bible/religion/philosophy/peace studies
Bibl 100 or Bibl 200 .................................................................................. 3
PJCS 210, Transforming Conflict and Violence ....................................... 3
Any Bible or religion class (except Greek or Hebrew language) ............... 3
International/intercultural education
Foreign language competency (or alternate) ................................................. 0-8
SST or alternate intercultural study ............................................................ 12-13

Professional education courses (K-6) (37 credit hours)
- Technology competency by exam
- Educ 201, Foundations of Education .................................................. 3
- Educ 300, Exceptional Students ............................................................ 3
- Educ 301, Curriculum Studies: Math .................................................... 2
- Educ 303, Literacy I: Developmental .................................................... 3
- Educ 304: Curriculum Studies: Social Studies .................................... 2
- Educ 308, Curriculum Studies: Science .............................................. 2
- Educ 344, Adaptation and Assessment ................................................ 3
- Educ 401, Child Development Practicum ............................................ 1
- Educ 402, Student Teaching: Elementary ........................................... 12
- Educ 406, Literacy II: Diagnostic ......................................................... 3
- Educ 409, Elementary Education Seminar ......................................... 3

Additional requirements for Exceptional Needs: Mild Intervention (K-6)
(12 credit hours)
- Educ 340, Learning Disorders ............................................................ 2
- Educ 342, Social and Emotional Disorders ........................................ 2
- Educ 346, Special Education Issues ..................................................... 3
- Educ 415, Student Teaching: Exceptional Needs ............................... 5

Planning guide elementary education
First year
- American History
- Biological World
- General education
- Foundations of Education
- Literature and Writing
- Oral Communication
- Physical World
- Technology Competency
- Transforming Conflict and Violence
- Expository Writing (strongly recommended)

Second year
- Children’s and Adolescent Literature
- Exceptional Students
- General education
- Humanities
- Math Concepts for Elementary Classroom I & II
- Mediation Processes (strongly recommended)
- Physical Education for Children
- SST (spring) or alternate

Third year
- Adaptation and Assessment
- Field Experience in Environmental Biology
- Curriculum Studies: Math
- Curriculum Studies: Science
- Curriculum Studies: Social Studies
- Educational Psychology
Fine Arts for Children
General education
Learning Disorders
Literacy I: Developmental
Literacy II: Diagnostic
Social and Emotional Disorders

*Fourth year*
Balance of general education
Elementary Education Seminar
Special Education Issues
Student Teaching (fall)
Student Teaching: Exceptional Needs (spring)
Conflict in Groups (strongly recommended)

Secondary education certification (grades 5-12 or K-12)

Modified general education requirement

Additional communication skills course, strongly recommended:
Engl 204, Expository Writing ................................................................. 3

For PJCS/Phil requirement:
PJCS 210, Transforming Conflict and Violence ....................................... 3

For social science requirement:
Educ 309, Educational Psychology: Secondary ..................................... 3

Professional education requirements (30 credit hours)

- Educ 201, Foundations of Education ........................................ 3
- Educ 302, Adolescent Exceptional Learners ................................. 3
- Educ 309, Educational Psychology: Secondary .......................... 3
- Educ 314, Curriculum & Instruction for Adolescent Learners:
  General Methods ........................................................................ 2
- Educ 315, Curriculum & Instruction for Adolescent Learners:
  Content Methods* ................................................................. 1
- Educ 321, Middle School Curriculum & Instruction ................. 3
- Educ 403, Secondary Education Seminar .................................... 3
- Educ 405, Student Teaching .................................................... 12

*For K-12 licensure, a content area methods course in the major department is required instead of Educ 315.

Planning guide secondary education

*First year*
General education
Literature and Writing
Oral Communication
Technology Competency
Transforming Conflict and Violence
Science/Math
Introductory courses in major
Second year  
General education  
Foundations of Education  
Educational Psychology  
Science/Math  
Expository Writing (strongly recommended)  
Mediation: Process, Skills and Theory (strongly recommended)  
Courses in major

Third year  
Child Development Practicum (K-12 only)  
Adolescent Exceptional Learners  
Middle School Curriculum & Instruction  
General education  
Curriculum & Instruction: General Methods  
Curriculum & Instruction: Content Methods (not K-12 programs)  
Courses in major/content area

Fourth year  
General education  
Balance of major and certification requirements  
Student Teaching (fall)  
Education Seminar  
Conflict in Groups (strongly recommended)

Certificate in conflict transformation for teachers

9 credit hours  
This certificate may be added to an elementary, middle school, or secondary education program. For further information, consult with a member of the teacher education faculty. Education students who wish to complete the conflict transformation studies minor at the conclusion of their certificate requirements should declare the minor and consult with a PJCS adviser for further details.

  - PJCS 210, Transforming Conflict and Violence .................. 3  
  - PJCS 325, Mediation: Process, Skills and Theory............ 3-4  
  - PJCS 426, Conflict in Groups............................................. 3

Transition to Teaching (grades K-6 or 5-12)

Transition to Teaching (TtT) is an alternative certification program based on the premise that a candidate already has the content knowledge in the licensing area. Candidates must have completed an undergraduate degree in their field with at least a 3.0 GPA to be eligible for this program, based on Indiana state law. An assessment of content knowledge and skills will be completed for each candidate by the GC licensure adviser before entering the program. Additional course work may be a prerequisite for admission to the program. The 18 credit hours required for secondary and 24 credit hours required for elementary programs are for education coursework only. Candidates must demonstrate basic technological proficiency by passing a placement test in the fall or transferring credit for a course approved by the licensure adviser.
Courses listed for two credit hours are in reality three credit courses, but because the state of Indiana has placed restrictions on credit hours, TtT students pay for only two credit hours. Field experience is required for some classes.

Secondary education (grades 5-12) curricula, as well as additional information about the TtT program is available at www.goshen.edu/education/Transition_to_Teaching.

**Elementary education TtT curriculum**

**24 credit hours**

**First year fall semester**

- Educ 301, Curriculum Studies: Math ......................................... 2
- Educ 302, Adolescent Exceptional Learners ............................ 2
- Educ 303, Literacy I: Developmental .................................... 3
- Educ 310, Educational Psychology ....................................... 2
- Technology Competency, by examination

**First year spring semester**

- Educ 304, Curriculum Studies: Social Studies ....................... 2
- Educ 307, Children's and Adolescent Literature ..................... 2
- Educ 308, Curriculum Studies: Science ................................ 2
- Educ 401, Child Development Practicum .............................. 1
- Educ 406, Literacy II: Diagnostic ...................................... 2

**First year spring semester**

- Educ 410, Transition to Teaching Practicum

**Education major: non-certification**

Goshen College offers a B.A. degree in education to students who want to study education, but who do not intend to meet requirements for teacher licensing or who meet all licensure requirements for a content area for which Goshen College offers no major. Students who might benefit from this option include (1) students who, for personal reasons, choose not to do student teaching; (2) students who do not qualify for certification because of grade point average or Praxis scores; (3) international students who choose to major in education, but do not seek U.S. teacher certification; and (4) students who are seeking licensure in French or German. For further information, see the *Goshen College Teacher Education Handbook*.

**Education courses**

**EDUC 201 Foundations of Education** ........................................ 3
Includes both campus and field study of learning environments, classroom management and instructional methods that meet the needs of diverse student populations. The course emphasizes race, gender, ethnicity, socio-economic status, family structures, language and exceptionalities from a social justice, critical perspective in light of the historical, philosophical, and social foundations of education.
EDUC 300 Exceptional Students ................................................................. 3
A study of exceptional students within a general education setting. Offers practical information on meeting exceptional needs within the context of general education. Provides basic information on identification procedures, characteristics of different categories of special education, instructional methods, materials, adaptations, and accommodations to meet the needs of diverse learners. Explores the professional context and collaborative nature of designing and implementing educational services for exceptional students. Tailored to meet developmental needs of elementary school learners.

EDUC 301 Curriculum Studies: Math ....................................................... 2
A study of mathematics pedagogy with an emphasis on conceptually sound and developmentally appropriate lessons. Includes selecting and evaluating topics of study, multiple representations of information and instructional strategies, interdisciplinary teaching, and using school and community resources. Also includes study of ways to adapt curriculum for special needs students. Field experiences in diverse classrooms. Enrollment limited to those who have been admitted to the teacher education program.

EDUC 302 Adolescent Exceptional Learners ........................................... 3
A study of exceptional students within a general education setting. Offers practical information on meeting exceptional needs within the context of general education. Provides basic information on identification procedures, characteristics of different categories of special education, instructional methods, materials, adaptations, and accommodations to meet the needs of diverse learners. Explores the professional context and collaborative nature of designing and implementing educational services for exceptional students. Tailored to meet developmental needs of middle and high school learners.

EDUC 303 Literacy I: Developmental ..................................................... 3
A study in the development of reading, writing, listening and speaking. Focus on instructional methods, assessment and developing authentic engagement that leads to a life-long enjoyment of reading and writing in many modes and styles. A study of literacy development, methodology and curricular options for K-6 learners. Includes study of literacy and exceptional needs learners. Opportunity to work with children and teachers in diverse classroom settings.

EDUC 304 Curriculum Studies: Social Studies ...................................... 2
A study of social studies curriculum and pedagogy with special emphasis on instruction and assessments, including connecting curriculum to student's prior learning, abilities and needs. Field experiences in diverse settings.

EDUC 307 Children's & Adolescent Literature ..................................... 3
A survey of children's and young adolescent literature studying genre, authors, illustrators, the art of writing and illustration; extensive reading in the field as well as writing a book for children.

EDUC 308 Curriculum Studies: Science ................................................. 2
A study of science pedagogy with an emphasis on conceptually sound and developmentally appropriate lessons. Includes selecting and evaluating topics of study; multiple representations of information and instructional strategies; and interdisciplinary teaching. Also includes study of ways to adapt curriculum
for special needs students. Field experiences in diverse settings. Enrollment
limited to those who have been admitted to the teacher education program.

EDUC 309 Educational Psychology:Secondary ................................. 3
A study of human developmental theories, learning processes and individual
preferences within the classroom. Offers theoretical information on how to
appreciate student diversity and identify successful, research-based teaching
practices for teaching diverse learners. Observation, hypothesis testing and
social scientist techniques are used to develop reflective teachers both in
theoretical knowledge and practice in a field placement. Classroom
management, motivation, and behavior analysis is a strong focus. Tailored to
meet developmental needs of elementary school learners.

EDUC 310 Educational Psychology:Elementary ................................. 3
A study of human developmental theories, learning processes and individual
preferences within the classroom. Offers theoretical information on how to
appreciate student diversity and identify successful, research-based teaching
practices for teaching diverse learners. Observation, hypothesis testing and
social scientist techniques are used to develop reflective teachers both in
theoretical knowledge and practice in a field placement. Classroom
management, motivation, and behavior analysis is a strong focus. Tailored to
meet developmental needs of middle and high school learners.

EDUC 314 Sec Curr & Instruct:General Methods ............................... 2
General class sessions emphasize planning, classroom management,
multicultural teaching, instructional strategies and school reform.
Subject-specific class sessions concentrate on curriculum and instruction in
those subject areas. To be taken concurrently with Educ 315 and 321 the year
prior to student teaching.

EDUC 315 Sec Curr & Instruct:Content Methods ............................... 1
Subject-specific class sessions concentrate on curriculum and instruction in
those subject areas. To be taken concurrently with Educ 314 the year prior to
student teaching. Not required for ENL, music, art or physical education
content areas.

EDUC 321 Middle School Curr & Instruction ................................. 3
Instructional methods, strategies and classroom management particularly as
they pertain to 5th-8th graders. Also includes a study of the development of
middle schoolers and how that influences which methods and strategies are
most appropriate to use. A tutoring clinic is embedded into the framework of
this course which will develop students' understanding of theory and practice
related to literacy skills in the content area.

EDUC 330 Fine Arts for Children .................................................... 3
A study of drama, art and music as it pertains to the elementary classroom.
Participatory experiences, integration across the arts and integration of the arts
into the classroom.

EDUC 340 Learning Disorders .................................................... 2
The study of assessment, identification, characteristics and instruction of
elementary students with learning disabilities provides a foundation for
accommodating students with learning challenges who do or do not qualify for
special education. Traditional and contemporary measures are explored and practiced with a field placement.

EDUC 342 Social and Emotional Disorders .......................................................... 2
The study of assessment, identification, characteristics and instruction of elementary students with emotional disabilities provides a foundation for accommodating students with difficult behaviors who do or do not qualify for special education. Legislative mandates (Functional Behavior Assessment/Behavior Intervention Plans) are explored and practiced within a field placement.

EDUC 344 Adaptation and Assessment .............................................................. 3
A study of multiple forms of assessment and record keeping provides a focus on selection, utilization and interpretation of a wide variety of formal and informal assessments. Communication of information to parents and colleagues is a focus. Using assessment to guide instruction and interventions for both individuals and groups is central.

EDUC 346 Special Education Issues ................................................................. 3
Issues and policy in special education that directly apply to schools and teachers are explored including law, politics, legislation, parent issues, community issues, and collaboration within the educational system. The dynamics of issues and policies with respect to the educational setting are explored. To be taken concurrently with Educ 415.

EDUC 401 Child Development Practicum ....................................................... 1
A study of child development. Focuses on learning theory and the importance of play for young children. Will include a field experience based on the application of developmentally appropriate practice. Required for K-12 art, ENL, music and physical education content areas.

EDUC 402 Student Teaching:Elementary .......................................................... 12
At least 12 weeks of full-day student teaching in elementary schools under the supervision of a licensed elementary teacher and a faculty member of the GC education department. Includes several workshops on campus to reflect on important teaching issues.

EDUC 403 Secondary Education Seminar ..................................................... 3
An intensive three-week seminar immediately following Educ 405. Uses licensure portfolio as a frame and aslo focuses on: educational philosophy, classroom management and discipline, evaluation, integration of faith and teaching. Includes student projects and presentations, group work, variety of approaches to individual reflection on teaching, and preparation of the licensure and presentation portfolios. Corequisite: Educ 405.

EDUC 405 Student Teaching:Secondary ......................................................... 12
At least 12 weeks of full-day student teaching in a secondary school under the supervision of a teacher licensed in the student teacher’s major teaching area and a GC faculty member. Includes several workshops on campus to reflect on important teaching issues.

EDUC 406 Literacy II: Diagnostic ................................................................. 3
A second course in literacy focusing on observing and recording children’s
literate behaviors closely to be able to support struggling readers and writers and prevent further difficulties in developmentally appropriate ways. Emphasis on strategic teaching based on the psychosocio-linguistic nature of language. Includes tutoring a struggling reader. Prerequisite: Educ 303.

EDUC 407 Field Studies ........................................................................ 1 (1-2)
Individual study, research or field experience on a variety of topics.

EDUC 408 Studies in Education ........................................................................ 1
Individual study, research or field experiences on a variety of topics.

EDUC 409 Elementary Education:Seminar ............................................. 3
An intensive three-week seminar immediately following Educ 402. Uses the licensure portfolio as a frame and also focuses on: educational philosophy, classroom management and discipline, evaluation, integration of faith and teaching. Includes student projects and presentations, group work and a variety of approaches to individual reflection on teaching and preparation of the licensure and presentation portfolios. Corequisite: Educ 402.

EDUC 410 Transition to Teaching Practicum .............................................. 6
Student teaching for those enrolled in the Transition to Teaching program (TtT). Requires at least 12 weeks of full-day student teaching under a supervising teacher. Also includes preparation for licensure and formation of a presentation portfolio.

EDUC 415 Student Teaching:Exceptional Needs ........................................ 5
Student teaching encompasses ten (10) weeks of half-day student teaching in a mild disability context under the close supervision of a supervising teacher licensed for mild disabilities and a Goshen College faculty member. This experience focuses on assessment, planning, instruction, and intervention following Indiana Division of Educator Licensing and Development Standards 3, 4, 5, 6, 7, & 8 for Teachers of Exceptional Needs. To be completed concurrently with Educ 346.

English

Professors B. Martin Birky (chair), A. Hostetler
Associate Professor C. Barnett
Assistant Professors J. Baldanzi, B. Meyer-Lee, K. B. Schlabach

Introduction
The English department offers two majors and three minors:

- Major in English
- Major in teaching English to speakers of other languages (TESOL)
- Minor in teaching English to speakers of other languages (TESOL)
- Minor in English
- Minor in writing

Visit the English department Web site at www.goshen.edu/english/Home.
The English department fosters skills in critical thinking, reading, and writing, as well as literary analysis, criticism, theory, and language use. We pay particular attention to the contexts of literary creation – cultural, philosophical, historical, aesthetic, and rhetorical. Literature courses teach the historical narrative of western and nonwestern literature along with the analytical skills required to study authors, genres, and literary and cultural topics in depth. In both survey and seminar courses, we teach the theoretical framework and critical apparatus involved in interpreting texts. We are committed to examining both the production of and response to literature in diverse cultural contexts and offering a range of interdisciplinary courses featuring national and global literary traditions. Writing courses teach the expository, creative, and research writing strategies needed for students to express themselves professionally and personally. While developing skills in purposeful thinking, logical organization, and clear expression, students also have opportunities to share their writing through publication or public presentation. Language courses teach historical and sociological frameworks for language development, as well as a respect for both the power and limits of language as a social and artistic tool.

Students choosing the major in English may customize their degree by selecting electives to create an emphasis in, for example, creative writing or the literatures of ethnicity, gender, and race. The English minor offers students the opportunity to hone their analytical and writing skills, as well as increase their understanding of and appreciation for literature. The writing minor enables students to expand and mature their abilities as authors of poetry, fiction, and creative non-fiction; students considering a Masters in Fine Arts degree in creative writing choose courses with an academic adviser to emphasize a particular area of expertise.

The TESOL major prepares students within a strong intercultural framework for certification to teach English as a New Language (ENL) in public schools and elsewhere. The TESOL minor provides students with the fundamental skills needed to be successful teachers of English to speakers of other languages in situations other than the public school system (for example, in service work abroad). The TESOL certificate may be earned by students with a minimum background of one year of college and skill in a second language equal to 102-college level; coursework for the certificate is usually completed in one year.

Every year the department brings a distinguished visiting writer to campus to host an intensive week-long writing workshop for a small group of students. Extracurricular opportunities in publishing include writing, editing, and producing student work through Broadside, Pinchpenny Press, and the Horswell Fellowship.

**Honors thesis**

Students who wish to complete a major scholarly or creative project as part of their English major may enroll in a three-credit hour independent study specially designed for this purpose. The prerequisites for the independent study are as follows: minimum GPA of 3.8 in English department courses; English 204; English 300; for literary research projects, two upper-level
literature courses; for creative writing projects, two creative writing courses; for TESOL projects, English 310 or English 315, and English 320. The independent study must be taken in the fall of the student’s senior year, be approved by the department in the previous spring, and include research in the intervening summer. The independent study will be given a letter grade and appear on the student’s transcript with the subtitle “Honors Thesis.” The independent study fulfills the senior project (English 409) requirement, but does not count as an English elective. As an independent study, extra tuition charges apply: see the relevant information under Academic policies and requirements and Financial information sections of the catalog. The independent study will be charged at the “readings” rate. For more information about specific requirements, see the department chair.

Career and postgraduate opportunities
English is a versatile major that prepares students for a wide range of jobs after graduation. English graduates are employed around the world, in occupations such as teaching, program management, service with church agencies, journalism, publishing, public relations, business, social services, and the professions, including law, medicine, library science, nonprofit management or administration, and the ministry. A significant number of TESOL graduates are engaged in teaching English as a second language in the U.S. and abroad. As this list demonstrates, an English degree provides a strong base for graduate schools in literary study as well as many other fields.

Teacher education certification in English and TESOL
The English department offers five different teacher education certification programs:

- **Grades 5-12 certification in English/language arts education**: in addition to, or as part of, the English major, students complete Engl 201 or 307; Engl 319; Comm 200; Comm 206 or Intl 256; Educ 307; a writing course; a film or performance course; and the Secondary Education track in the Education department, including a semester of student teaching.

- **Grades K-6 certification in English as a new language education (ENL)**: students complete the normal Elementary Education major and Engl 204, 310, 315, 319, 320 and 325 (unless student teaching is done in ENL).

- **Grades 5-12 certification in ENL**: students complete the TESOL major and the Secondary Education track in the Education department.

- **Grades K-12 certification in ENL**: students complete the TESOL major and the Secondary Education track and take Engl 325 for 2 credits.

- **Grades K-12 (ENL) and 5-12 (Language) certification in bilingual/bicultural education**: students complete the TESOL major, Educ 307, and 21 credit hours of foreign language (level 202 or higher), which should include a
semester overseas with BCA, and the Secondary Education track in the Education department.

All teacher certification programs require PJCS 210 for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Major in English

38 credit hours

- Engl 204, Expository Writing ............................................. 3
- Engl 300, Critical Theory and Practice .................................. 3
- Engl 301, British Literature to 1800 .................................. 3
- Engl 302, British Literature 1800 to Present ....................... 3
- Engl 303, American Literature Survey .............................. 3
- One of the following courses: ............................................. 3
  Engl 305, Genre Studies
  Engl 306, Major Author
- Engl 315, English Language Problems ............................ 3
- Engl 409, Senior Project .............................................. 1-2
- Engl 410, English Senior Seminar ................................... 1
- Elective courses in English ............................................. 12
- Related course selected from the following: ....................... 3
  Aesthetics, Art History, Bible/Religion, Children's and
  Adolescent Literature, Communication, History, Linguistics,
  Modern and Classical Languages and Literatures, Music
  History, Sociology, Peace/Justice/Conflict Studies,
  Philosophy, TESOL Methods, Theater, Women's Studies

Planning guide

First year General education
  Literature and Writing or Introduction to Literature
  World Literature in English/Introduction to Creative
  Writing/ Topics in Literature: Ethnicity, Gender and Race/
  Topics in Literature, Film, and Popular Culture

Second year General education
  Humanities
  Expository Writing
  Critical Theory and Practice
  British Literature to 1800
  SST

Third year General education
  American Literature Survey
  English Language Problems
  British Literature 1800 to Present
  Related courses

Fourth year Balance of general education
  Balance of major and related courses
Senior Project
Senior Seminar

Planning and advising notes
In general education, English majors are encouraged to choose Phil 200 to meet the Phil/PJCS requirement; however, teacher education students should select PJCS 210. English majors should normally take a humanities section that covers humanities fields other than literature.

Students earning AP or CLEP credit in English are strongly encouraged to take Engl 210, Engl 204 or both during the first year.

Students doing student teaching for English-Language Arts Secondary Education or TESOL Certification, or TESOL majors doing TESOL Field Experience must take Engl 319, English Syntax instead of Engl 409.

The related course may not be an applied courses (such as Record editing or music lessons or a studio art class) or be used to fulfill requirements of general education. The related course may be counted toward another major only if it is specifically required by that major. See Academic policies and requirements.

Major in teaching English to speakers of other languages (TESOL)

38-41 credit hours
- Comm 206, Communicating Across Cultures ................. 3
- Educ 303, Literacy I......................................................... 3
- Educ 406, Literacy II......................................................... 3
- Engl 204, Expository Writing ............................................. 3
- Engl 310, Introduction to Linguistics................................. 3
- Engl 315, English Language Problems ............................. 3
- Engl 319, English Syntax .................................................. 1
- Engl 320, Methods of TESOL............................................. 4
- Engl 325, Field Experience in TESOL ............................... 2-3
- Engl 410, Senior Seminar (or MCLL 410 or Educ 403)... 1-3
- Additional foreign language beyond the 102-level basic requirement .................................................................. 3
- Three intercultural studies courses selected from the following: ................................................................. 9
  Educ 307, Children's and Adolescent Literature (required for ENL license)
  Engl 201, World Literature in English
  Engl 207/307, Lit of Ethnicity, Gender, Race
  Any courses on the "SST Alternate" list in the International Education department (which may not double count as SST alternates)

Planning guide for TESOL major

First year: General education
- Literature and Writing or Introduction to Literature
- Language courses for 102-level prerequisite
Communicating Across Cultures
Intercultural studies elective

**Second year** General education
- Expository Writing
- English syntax
- Additional foreign language
- SST

**Third year** General education
- Introduction to Linguistics
- English Language Problems
- Intercultural studies courses
- Education courses
- Methods of TESOL
- TESOL Field Experience

**Fourth year**
- Balance of general education
- Balance of major and related courses
- Senior Seminar

**Planning and advising notes**
For the K-6 and 5-12 ENL certifications, students should either do student teaching in ENL (instead of Engl 325) or else do a non-ENL student teaching placement and then Engl 325 for 2 credits. For K-12 ENL certification, students should do ENL student teaching with one age group (e.g., elementary students) and then Engl 325 for 2 credits with another age group (e.g. high school students). Non-Teacher Education students should do Engl 325 for 3 credits.

To complete the major, students must demonstrate basic competence in some foreign language through the 102 level by testing or by courses. The "additional foreign language" requirement beyond the basic competence may be in the same language or a third language. Also, ASL may count as the basic foreign language or as the additional foreign language, but not as both.

**Minor in English**

18 credit hours
- Engl 300, Critical Theory and Practice ................................. 3
- Engl 315, English Language Problems ................................. 3
- Two of the following literature survey courses: .................. 6
  - Engl 301, British Literature to 1800
  - Engl 302, British Literature 1800 to Present
  - Engl 303, American Literature Survey
- Any two English department courses (Engl 204 strongly encouraged) ................................................................. 6

**Minor in writing**

18 credit hours
- Comm/Engl 204, Expository Writing ..................................... 3
• One of the following individualized courses: .................... 2-3
  Engl 409, Senior Project
  Comm 412, Special Project
• Courses in journalistic and/or creative writing selected from
  the following ................................................................. 12-13
  Comm 250, Writing for Media
  Comm 260, Broadcast Writing
  Comm 308, Feature Writing
  Comm 326, Creating for the Web
  Engl 120, Introduction to Creative Writing
  Engl 312, Poetry Workshop
  Engl 330, Writing Fiction
  Engl 332, Writing Poetry
  Engl 334, Writing Creative Nonfiction
  Thea 334, Playwriting

Minor in teaching English to speakers of other languages
(TESOL)
20-21 credit hours
• Engl 310, Introduction to Linguistics............................... 3
• Engl 315, English Language Problems ............................. 3
• Engl 319, English Syntax .............................................. 1
• Engl 320, Methods of TESOL .......................................... 4
• Engl 325, Field Experience in TESOL or Student Teaching
  in ENL............................................................................ 3
• Additional intercultural studies courses ......................... 6-7
  selected from the "SST Alternate" list (which may not double
  count as SST alternates) or additional foreign language
  courses above the general education prerequisite.

Planning and advising notes
To complete the minor, students must demonstrate basic competence in some
foreign language through the 102 level by testing or by courses. The "additional
foreign language" courses may be in the same language or a third language.
Also, ASL may count as the basic foreign language or as the additional foreign
language, but not as both.

Certificate in teaching English to speakers of other
languages (TESOL)
30 credit hours
• Engl 310, Introduction to Linguistics............................... 3
• Engl 315, English Language Problems ............................. 3
• Engl 319, English Syntax .............................................. 1
• Engl 320, Methods of TESOL .......................................... 4
• Engl 325, Field Experience in TESOL .............................. 3
• Additional intercultural studies courses ......................... 3-4
  selected from the "SST Alternate" list (which may not double
  count as SST alternates) or additional foreign language
  courses above the 102-level
• Bible or religion class ................................................................. 3
• Additional elective courses ......................................................... 9-10

**English courses**

**ENGL 105 Introduction to College Writing** ......................................................... 3
Introduction to college-level reading and writing skills. Next course is Engl 110 to fulfill General Education requirements. This course is required for students with Verbal SAT/ACT of 430/20 or below, low GPA in high school English courses, low overall GPA, or concern about college-level writing and study skills.

**ENGL 110 Literature and Writing** ................................................................. 3
Critical reading, thinking, and writing using literary and nonliterary texts focused on themes chosen by individual professors. Instruction in writing argumentative prose and the cross-disciplinary research essay. Prerequisite: Successful completion of Engl 105, or Verbal SAT/ACT score of 430/21 or higher. Fulfills the General Education requirement.

**ENGL 120 Introduction to Creative Writing** ......................................................... 3
An introduction to the writing of poems, short stories and creative nonfiction, with emphasis on writing, reading and discussion. Written evaluations for credit instead of letter grades. Enrollment limited to 15 per section.

**ENGL 201 World Literature in English** ................................................................. 3
Study of literature written in English outside of the United Kingdom and the United States that deals in a significant way with the intersection of cultures, particularly postcolonial literature from Africa, Asia, the Caribbean and Latin America.

**ENGL 204 Expository Writing** ........................................................................ 3
Theory and practice of written communication. Assignments in a variety of prose forms aim at developing the student's control of logic, organization, rhetoric and usage. Prerequisite: Engl 110 or Engl 210 or equivalent.

**ENGL 207 Lit of Ethnicity, Gender, Race** ................................................................. 3
Study of literature shaped distinctively by cultural and theoretical concerns related to ethnicity, gender and race. Specific topics, announced in advance, include the following:
- **Irish Literature in Ireland.** Field studies in the cultural geography of 20th-century Irish authors, including Yeats, Joyce, Synge, Mary Lavin, Peter Fallon and Seamus Heaney. Conducted during May or summer term at urban and rural locations in the Republic of Ireland.
- **American Indian Literature.** Contemporary fiction and poetry by such writers as M. Scott Momaday, Louise Erdrich, Leslie Silko and Sherman Alexie, with special emphasis on historical and cultural contexts and the revitalization of tribal practices, spirituality, ceremony and oral tradition.
- **African-American Literature.** Twentieth-century fiction, poetry and essays from W.E.B. DuBois to Toni Morrison, with an emphasis on the history of race in America as it informs the literary tradition. Literature integrated with music, art and performance.
- **Mennonite Literature.** Recent literature - mainly poetry and fiction - by U.S. and
Canadian Mennonite writers, studied in relation to Mennonite history, culture and theology. Authors include Rudy Wiebe, Sandra Birdsell, Armin Wiebe, Julia Kasdorf, Janet Kauffman, Jean Janzen, Jeff Gundy and others. 

Women in Literature. The study of literature written by women (mainly fiction and poetry) and of related issues such as the literary canon, gender representation and feminist literary theory. The syllabus will often include literature by Austen, Bronte, Woolf and Hurston and criticism by Gilbert, Gubar, Showalter and Fetterly.

ENGL 210 Introduction to Literature ............................................................. 3
Analysis of literary texts in a genre chosen by individual professors. Instruction in literary analysis essay and literary research essay. Prerequisite: Engl 110, AP or CLEP credit, SAT verbal or critical reading score of at least 630, ACT English score of at least 28 or permission of instructor.

ENGL 230 Literature and Popular Culture .................................................... 3
Study of literature in relation to film, television, or other media of popular culture. Specific topics, announced in advance, may include Arthurian Literature and Film, or Global Images in Film.

ENGL 300 Critical Theory & Practice ............................................................ 3
This course examines contemporary critical interpretative strategies and theories as applied to several literary genres. In addition, the course introduces students to important research skills involved in the production of literary criticism. Intended as an introduction to the English major and as an elective for other (usually upper-level) students. Prerequisite: Any college-level literature course beyond Engl 110.

ENGL 301 British Literature to 1800 ............................................................. 3
Development of British literature from Beowulf through the medieval period, Renaissance, and 18th century, with special attention to authors such as Chaucer, Shakespeare, Spenser, Milton, and Pope.

ENGL 302 British Literature: 1800-Present ................................................... 3
Development of British literature through the Victorian, modern and post-modern periods, with special attention to authors such as Arnold, Eliot, Conrad, Yeats and Woolf.

ENGL 303 American Literature Survey ........................................................ 3
Development of American literature from colonial times to the present. Study of literature that explores a range of American identities, including European-American, American Indian and African-American. Authors include Nathaniel Hawthorne, Emily Dickinson, Langston Hughes, William Faulkner, Adrienne Rich, among many others.

ENGL 305 Genre Studies ............................................................................... 3
Study of a single genre as announced, sometimes with focus on writings of a specific period or place. Typical offerings include: Contemporary Drama. Study of dramatic literature from the modernists to the present.

History of the Novel. The reading and study of significant works illustrating the development of the novel.

Contemporary Poetry. The reading and study of poetry and poets working
since 1945, including such authors as Allen Ginsberg, Galway Kinnell, Rita Dove, Li-Young Lee, Linda Hogan, Adrienne Rich, and Maxine Kumin. In addition to critical writing, each student will practice writing poems in an effort to better understand the creation and artistic nature of poetry.

Cultural Studies. The study of a genre of literature in relation to a specific cultural topic. Offerings may include Eugenics and Modernist Prose, or The Idea of Labor and Nineteenth-Century Fiction.

ENGL 306 Major Author .............................................................. 3
A study of a major author or of two authors in comparison. Shakespeare every other year. In the alternate years, recent choices include Chaucer, Faulkner and Morrison.

ENGL 307 Lit of Ethnicity, Gender & Race ........................................ 3
Same as Engl 207, with reading and assignments that broaden and deepen the student's engagement with the topic.

ENGL 310 Introduction to Linguistics ........................................... 3
Different ways of looking at language: how languages' systems of sounds, word structures, grammatical patterns and meaning constructions function. Insights useful for language learning, teaching and appreciation of English and language in general.

ENGL 312 Poetry Workshop ........................................................ 1
Intensive one-week workshop in writing poetry, usually conducted by a visiting poet during the first week of the spring semester. Repeatable. Written evaluations for credit instead of letter grades. Enrollment limited to 15 per section. Prerequisite: Any college-level creative writing course.

ENGL 315 English Language Problems ........................................ 3
The study of the sound system and history of the English language, followed by exploration of current developments in sociolinguistics, dictionaries and word formation. The course cultivates an informed attitude toward English usage.

ENGL 319 English Syntax ......................................................... 1
Independent study in English grammar verified by a final exam. Available only to TESOL majors and minors and English and Teaching English as a New Language education students. Prerequisite: Previous or concurrent enrollment in Engl 310 or 315.

ENGL 320 Methods of TESOL .................................................... 4
Primary topics addressed are theories of language learning, general TESOL approaches, methods for the teaching of specific language skills and materials preparation in ESL. A concurrent internship (teaching English to a nonnative speaker) brings reality to the theories. Prerequisite: Engl 310 or Engl 315.

ENGL 325 Field Experience in TESOL ........................................ 3
One-hundred twenty hours of supervised teaching in the U.S.A. or abroad when appropriate supervision can be arranged. Prerequisite: Engl 320 and consent of instructor.

ENGL 330 Writing Fiction .......................................................... 3
A workshop course in writing short fiction, with special attention to issues of setting, character, plot, dialogue and point of view. Readings by contemporary
writers. Written evaluations for credit instead of letter grades. Enrollment limited to 15 per section

**ENGL 332 Writing Poetry** ................................................................. 3
A workshop course in writing poetry in a variety of forms, with special attention to imagery, sound, line, meter and revision. Readings by classic and contemporary poets. Written evaluations for credit instead of letter grades. Enrollment limited to 15 per section

**ENGL 334 Writing Creative Nonfiction** ............................................ 3
A workshop course in writing the personal essay and nonfiction prose, with special attention to creating a personal voice and applying creative writing techniques to nonfictional subjects. Students will read and discuss examples of creative nonfiction and prepare two longer essays for a final portfolio. Written evaluations for credit instead of letter grades. Enrollment limited to 15 per section

**ENGL 409 Senior Project** ................................................................. 1 (1-2)
English majors propose independent projects in research, off-campus field experience, or internship or creative writing.

**ENGL 410 Senior Seminar** ............................................................. 1
Weekly meetings of departmental majors and faculty for an exchange of views on such topics as vocations, curriculum and ethical/spiritual issues related to a life-long study of literature and language.

**History and political science**

*Professors S. Nolt (chair), J. D. Roth, J. B. Shetler*

*Associate Professor L. R. Berry*

**Introduction**
The history and political science department offers two majors and a minor. Two additional minors in Anabaptist-Mennonite studies and social policy are offered in collaboration with several other departments.

- Major in history
- Major in history and investigative skills
- Minor in history
- Minor in Anabaptist-Mennonite studies
- Minor in social policy

Special resources for the study of history at Goshen College include the Mennonite Historical Library, the Archives of the Mennonite Church and *The Mennonite Quarterly Review*, a respected scholarly journal published by Goshen College.

Visit the history and political science department Web site at www.goshen.edu/history/Home.

**Career and postgraduate opportunities**
Recent graduates with history majors teach social studies in high school or a specialty in college. Some are employed in libraries, archives and education
administration. Others are in church vocations, law, business and administration.

Teacher education certification in social studies
Teacher certification in social studies education is available for grades 5-12. Required are 54 credits in social science, with at least 12 credits each in three areas chosen from economics, historical perspectives, geographical perspectives, government, psychology, or sociology. Other requirements of a Goshen College major in history, psychology or sociology must be met as well. In addition, 30 credits of education courses are required, including a fall semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Major in history

42-43 credit hours (core and one concentration area)

Core requirements (30-31 credit hours)

- Comm/Engl 204, Expository Writing ........................................ 3
- U.S. and world history courses, at least 10 credit hours upper level (300-499) ....................................................... 19
- Hist 409, Internship (or student teaching for education majors)................................................................. 2-3
- Hist 410, History Seminar: Analysis ................................. 3
- Hist 411, History Seminar: Synthesis ................................. 3

Social science concentration (12 credit hours)

- Courses selected from at least three of the fields below:
  Economics
  Political science
  Sociology
  Peace, justice and conflict studies

Humanities concentration (12 credit hours)

- Courses selected from at least three of the fields below:
  Literature
  Philosophy
  Bible or religion
  Art history or Music history or theory

Planning guide

First year
- General education
- World and/or European
- History
- American History I

Second year
- General education
- World Geography
- History of Global Poverty
- Courses in concentration
- SST (fall or spring)
Third year
General education
History Seminar: Analysis
Upper-level history
Balance of concentration

Fourth year
Balance of general education
Balance of major
History Seminar: Synthesis
Internship

Planning and advising notes
All history majors are encouraged to acquire proficiency in a foreign language equal to the intermediate (202) level.

Major in history and investigative skills

44-45 credit hours
• CoSc 105, Introduction to Computer Science .................... 3
• Econ 207, Introduction to Statistics .................................... 3
• History courses, at least 10 credit hours upper level (300-499).......................................................................... 24
• Hist 409, Internship (or student teaching for education majors)............................................................................. 2-3
• Hist 410, History Seminar: Analysis ................................. 3
• Hist 411, History Seminar: Synthesis ................................. 3
• Soc 200, Principles of Sociology ........................................ 3
• Soc 391, Methods of Social Research .................................. 3

Planning and advising notes
Internship and Senior-Seminar work should utilize various research skills. The student’s faculty adviser will encourage taking additional elective courses in economics, sociology and political science. This major is designed to provide the student with library, statistical and field-research skills useful in business, public administration, law and other practical pursuits. A variety of history courses provides a broad perspective rather than merely a technical orientation.

Minor in history

18 credit hours
• Hist 100, 101, 102 or 105....................................................... 3
• Additional history courses, at least 9 credit hours upper level (300-499) ................................................................. 15

Minor in Anabaptist-Mennonite studies

18 credit hours
• Core courses selected from the following list: .................... 12
  Engl 207/307, Mennonite Literature
  Hist 318, Anabaptist/Mennonite History
  Hist 321, History of Mennonites in America
  PJCS 312, War, Peace and Nonresistance
  Topics course or Independent study: Hist 375 or Soc 351
Elective courses selected from core courses above or the following list: .................................................. 6
Hist 304, Renaissance and Reformation
Mus 311, Topics in Music Literature (church music)
Rel 320, Christian Faith
Soc 334, Race, Class and Ethnic Relations
French, German or Spanish special project with Anabaptist/Mennonite focus
Related course taken at Associated Mennonite Biblical Seminary
Internship with a Mennonite organization or congregation

Planning and advising notes
It is assumed that students who apply these courses to the minor will do a focused study (paper or project, e.g.) that makes an explicit connection with an Anabaptist-Mennonite topic.

Minor in social policy
The social policy minor at Goshen College is a collaborative cross-disciplinary program for students who want to work for social change within the public sector or nonprofit organizations. The minor is described in the sociology, social work and anthropology department pages.

History courses

HIST 100 Human Stories-Colloquium ........................................................... 3
A topic course designed for the first-year colloquium. Provides an introduction to historical modes of inquiry based on themes of particular interest to the instructor. Topics in the recent past have included: "Leadership in American History," "History of Childhood" and "Utopian Thought in the Western Tradition."

HIST 101 World History I ................................................................................ 3
History of the world from the agricultural revolution to European expansion, concentrating on the establishment and interaction of classical traditions in the non-western world. Also introduces the study of history as an academic discipline and how the historian uses primary sources.

HIST 102 European History ........................................................................... 3
Selected topics in European civilization from the Middle Ages through the Renaissance, Reformation, Age of Absolutism to the 18th-century Enlightenment and French Revolution.

HIST 105 American History I ......................................................................... 3
History of the American colonies and the United States through the Civil War and Reconstruction. Also introduces the study of history as an academic discipline.

HIST 202 American History II ........................................................................ 3
U.S. from the period of rapid industrialization and immigration to the present with an emphasis on social history. Also introduces the study of history as an academic discipline.
HIST 203 World History II ................................................................. 3
History of the world from European expansion to the present, with an emphasis on understanding the foundations of a global society. Also introduces the study of history as an academic discipline through the analysis of approaches to historical causation.

HIST 240 World Geography .............................................................. 3
Survey of the world’s geographic regions with emphasis on the impacts humans have had on the physical environment and explanation for variation of the world's regions. Course includes regular discussion of current issues in world affairs.

HIST 255 History of Global Poverty .................................................... 3
Examination of the phenomenon and roots of global poverty in the colonial expansion of Europe, the rise of nationalism in the colonies and post-colonial globalization and development. Emphasis will be placed on viewing this problem and its solution from the perspective of common people in the global south.

HIST 304 Renaissance and Reformation .............................................. 3
Topical survey of European civilization in the period from about 1300 to 1550. Intellectual, cultural and religious changes will receive most attention.

HIST 315 War/Peace 20th Century Europe ............................................ 3
Exploration of major European political, cultural, intellectual and economic developments since the 1890s. Major themes include: modernism, the onset of totalitarianism and totalitarian regimes in Europe and the Soviet Union, war as an agent of social change, the Cold War, the dissolution of Soviet-style communism in Eastern Europe and peace-making efforts throughout the century.

HIST 318 Anabaptist/Mennonite History .............................................. 3
Introduction to Mennonite history and thought. About one-third of the course is devoted to Anabaptism. Special attention given to distinctive Anabaptist religious ideas, changes in Mennonite religious ideas and practice in Europe, migrations, contrasts in social-communal practices among Mennonites and related groups.

HIST 321 History of Mennonites in America ........................................... 3
Emphasis on Mennonites as a people developing and interacting with the larger American society, using themes such as migration, community formation, beliefs, acculturation and pacifist citizenship in war and peace.

HIST 323 Colonial & Revolutionary America ....................................... 3
Focus on cultural encounters and conflicts. Colonialism begs the question, how are cultures transported, replicated, and transformed? A look at contact between Europeans and Native Americans, between Europeans and Africans, between different European colonial projects, and finally between Anglo-American colonists and Britain. All involved sharp cultural conflict.

HIST 324 U.S. 1790-1877: Nationalism & War ........................................ 3
Having rejected the one thing they had in common - British rule - Americans created an identity and constructed the myths needed to sustain a new
nationalism. Slavery was a central and contested part of this identity, leading to frightful Civil War. Through it all, American nationalism continued to claim the power to "reconstruct" society.

**HIST 325 U.S. 1877-1945: Identity & Diversity** .......................................................... 3
The U.S. became the first highly diverse nation state, but only gradually came to understand the implications of that fact. Economic divisions, urban and Western population growth, debates over race and ethnicity, and international consciousness all shaped a society that faced Depression and global war, and began to link its plurality to notions of pluralism.

**HIST 326 Recent American History** ................................................................. 3
A look at events that shaped the most recent generations of Americans. From grand expectations of the Civil Rights movement, faith in science, and the possibilities of affluence and social reform, society confronted the realities of Vietnam, Watergate and environmental destruction - producing cynicism, culture wars and continued efforts to balance liberty and equality.

**HIST 327 Am. Immigration & Ethnic History** .................................................. 3
An examination of the development of ethnic and racial identities in the United States, from the colonial period(s) to the present. Immigration patterns, forced migration, assimilation, ethnicization, nativism, family and gender dynamics, immigration and naturalization law and multicultural debates were important factors in these processes.

**HIST 328 African-American History** ............................................................. 3
Historical study of the experience of African-Americans as a group, especially their political and economic situations, their community life, some of their outstanding organizations and leaders, their forms of adjustment and resistance and their participation and contributions in U.S. life. Prerequisite: any 100- or 200-level history course or consent of instructor.

**HIST 330 Gender in World History** ............................................................... 3
A comparative studies in world history course. Women have been left out of the world's history, particularly women in the non-Western world who are stereotyped as oppressed and passive. Putting women back into the center of world history unsettles older historical paradigms and challenges our ethnocentric assumptions. Explores the diverse experiences of women as active agents in shaping their world through a comparative case-study approach.

**HIST 335 History of Ethnic Conflict** ............................................................ 3
A comparative studies in world history course. The world seems plagued with increasing conflict between ethnic groups. Explores the historical roots of this problem through a comparative case-study approach and takes an interdisciplinary approach both to analysis of the problem and its solution. Students will present an in-depth research paper on the historical roots of one conflict.

**HIST 340 Religious History of Africa** ............................................................. 3
A comparative studies in world history course. Examination of the development and interaction of the three major religious traditions of Africa--African religion, Christianity and Islam-- from earliest times to the present. The course will look
at the particularly African forms of Christianity and Islam that were created by converts in various contexts and the social and political implications of religious practice. There will be some attention to the spread of African religious forms within the diaspora.

HIST 344 Latin American Hist: National Period ............................................. 3
A study of the history of the Latin American republics since independence, with special attention given to Mexico, Cuba and the ABC countries (Argentina, Brazil and Chile).

HIST 345 Environmental History ................................................................. 3
A comparative studies in world history course. Exploration of human interaction with the environment over time particularly in the non-Western world. Examination of the material and ideological conditions which have lead to preservation or destruction of the environment through a comparative case-study approach.

HIST 350 African History ............................................................................. 3
African history from ancient times to the present with an emphasis on topical studies of land and food, slavery and social reciprocity, and colonial transformations in political authority. Encourages historical analysis for the purpose of responding positively to pessimistic predictions of Africa’s future and appreciating Africa’s strengths.

HIST 375 Topics ............................................................................................ 3
Study on a selected topic in American or world history. Examples: The United Nations, History of Childhood in America. Students may be invited to help shape the topic.

HIST 400 Advanced Study ................................................................. 1 (1-4)
Special topics for majors and minors.

HIST 409 Internship .................................................................................... 3
Using research, writing and organizational skills in a setting outside the classroom; deliberate reflection on the process of historical or legal inquiry.

HIST 410 Seminar: Analysis ................................................................. 3
Philosophy and purposes of history; principles and methods of historical research; history and Christian faith; choice of a topic and bibliographical work and initial research on that topic. Course to be taken in the fall semester of the junior year. Required of all majors.

HIST 411 Seminar: Synthesis ................................................................. 3
Continued research on topic chosen and presentation in forms of oral report and written thesis paper. Course to be taken in the spring semester of the senior year. Required of all majors. Prerequisite: Hist 410.

Political science courses

POSC 200 Introduction to Political Science ..................................................... 3
General comparative survey of political institutions and behavior in various types of regimes, with special emphasis on the American political system. The most appropriate course for students required to take one course in political science. Collateral reading may be adjusted to individual needs and interests.
POSC 210 Introduction to Public Policy ....................................................... 3
Explores the nature of the policy-making process in the United States and, to a lesser extent, other pluralist polities. Topics will include constitutional and structural framework in which policies are shaped, interest articulation, policy formulation and the feedback process.

POSC 305 United States Government .......................................................... 3
A basic introduction to the federal system of government in the Untied States. Focus on the constitutional arrangements established at the nation's founding, critical points in the constitution's evolution and the contemporary setting. Topics include the legislative process, the judiciary branch and the nature of the presidency. The regulatory process, interest groups, political parties, the press, campaigning and voter behavior, civil rights and federal-state relations will also be examined.

POSC 308 International Politics ................................................................. 3
Examination of the structure, development and operation of the present international political system and its possible alternatives.

POSC 318 Latin America Politics ................................................................. 3
Analyzes Latin America's contemporary political and socio-economic institutions and issues; relates them to the area's development and need for change; includes the meaning of revolution in Latin America.

POSC 320 Issues in Politics and Society ........................................................ 3
Contemporary (and often controversial) political issues in the U.S. and Latin America, e.g.: African-Americans and the U.S. judicial system; educating legal professionals; the church and Latin American politics. Analysis through class discussions, some lectures by the instructor, student papers and contribution from resource persons with involvement in the subject matter.

Humanities

Humanities courses at Goshen College are interdisciplinary courses, team-taught by professors from several different departments. Each of these interdisciplinary courses studies the history of artistic expression, provides opportunities for participating in artistic activities and examines the relationship between the arts and students’ own lives. Fulfills the general education requirement for humanities study. Two or three courses are offered each year.

HUM 220 Humanities: Literature and Art..................................................... 4
HUM 221 Humanities: Literature and Music ................................................. 4
HUM 222 Humanities: Theater and Literature ............................................. 4
HUM 223 Humanities: Music and Art.......................................................... 4
HUM 224 Humanities: Music and Theater ................................................... 4
HUM 225 Humanities: Art and Theater ....................................................... 4
Interdisciplinary studies

Associate Dean R. Peterson-Veatch

An interdisciplinary major is for students who wish to engage in substantial study in several academic fields. It also gives students the opportunity to design a major that fits their unique interests and needs. An interdisciplinary major provides preparation for careers or professional programs where a broad educational background is appropriate.

Interdisciplinary major

47-52 credit hours

Core requirements
  • Nine credit hours of core requirements in each of three majors or minors................................. 27

Elective courses
  • Six additional credit hours in each of the three selected majors or minors........................................ 18

Senior seminar and internship
  • Senior seminar from one of the majors selected above .. 1-4
  • Internship from the same major as the senior seminar ... 1-3

Courses are selected from three academic departments in which Goshen offers a major or a minor. If the international studies minor is selected as one of the three areas of study, 15 credit hours of courses must be selected from the "SST alternate" list in the International education section of the catalog. At least one three-credit core course in each department must be completed in residence at Goshen College. Not including the senior seminar and internship, a minimum of at least 18 credit hours in the major must be upper-level courses (300-499).

Students interested in investigating an interdisciplinary major should contact the associate dean to discuss interests and options. The student’s academic adviser will usually be a professor from the department in which the student elects to complete the senior seminar and internship.

Career opportunities
Interdisciplinary graduates are working in nonprofit agencies, education, business, church ministries, community development, journalism, law and many other fields.

Mathematics

Professors D. Housman, R. Milne, P. Oakley (chair)

Introduction
The mathematics department offers a major and minor and collaborates with the computer science department on a combined major.
Major in mathematics
Minor in mathematics
Major in computer science and applied mathematics

A satisfactory score on a competency test (or equivalent) is required before taking any mathematics course for credit at Goshen College. The study of mathematics is framed within the context of a Christian liberal arts environment that fosters critical and innovative thinking, promotes ethical awareness, views all disciplines as inter-disciplinary, develops an openness to other people and ideas, and prepares persons for a life of continued personal growth, development and learning. Visit the mathematics department Web site at www.goshen.edu/math/Home.

Career and postgraduate opportunities
Graduates with mathematics majors are currently working in education, administration, computer technology, insurance, statistics, overseas development, mass communication and engineering.

Teacher education requirements
Teacher certification in mathematics is available for grades 5-12. Courses needed in addition to the Mathematics major core requirements are Math 302, Math 305, Math 323, Math 390 or 351, and a teaching internship with Math 131 or 132. Also required are 30 credits of education courses, including a semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Academic requirements
- Mathematics majors must achieve a grade of C or better in every course counted for the major.
- All students taking mathematics courses must earn a grade of C or better in prerequisite courses.

Major in mathematics

43-46 credit hours
- CoSc 200, Programming Techniques ......................... 3
- Math 205, Discrete Mathematics ................................... 3
- Math 211, 212, 213, Calculus I, II & III ....................... 12
- Math 300, Conjecture and Proof ................................ 3
- Math 301, Linear Algebra .......................................... 3
- One of the following courses: ..................................... 3
  Math 302, Abstract Algebra
  Math 305, Modern Geometry
  Math 311, Real Analysis
- Electives in Mathematics (9 credit hours for math education students)................................................................. 9-12
  Any of the three courses above
  Math 321, Differential Equations
  Math 323, Probability and Statistics
Math 341, Numerical Analysis  
Math 390, Problem Solving Seminar  
Math 409, Senior Project/Internship  
• Phys 203, General Physics I .............................................. 4  
• CoSc/Phys 410, Senior Seminar ........................................ 3

Planning guide

First year
General education  
Discrete Mathematics  
Calculus I, II, III  
Programming Techniques  
General Physics

Second year
General education  
Conjecture and Proof  
Linear Algebra  
Upper-level math  
SST (summer)

Third year
General education  
Upper-level math  
SST (fall or summer)

Fourth year
Balance of general education  
Balance of major  
Senior Project/Internship or Student Teaching  
Senior Seminar

Minor in mathematics

19 credit hours
• Math 205, Discrete Mathematics ........................................ 3  
• Math 211, 212, Calculus I & II ............................................ 8  
• Elective upper level mathematics courses (300-499) ........ 8

Planning and advising notes
A typical way to complete upper level mathematics requirements for the minor is to take Math 300, 301 and 351.

Major in computer science and applied mathematics
A combined major in computer science and applied mathematics is available. For a full description, see computer science.

Math courses

MATH 105 Quantitative Reasoning .................................................. 3  
Emphasis on the ability to critically interpret mathematical information commonly found in public discourse and positions of responsibility and leadership. Topics will include measurement and units, proportions, estimation, simple functions, graphs and their interpretation, appropriate use of technology (e.g., spreadsheets and calculators), probability, and descriptive statistics. Examples incorporating mathematical arguments will be taken from a wide variety of fields including social science, sports, finance, environmental issues, education, and health. This course can be used to meet the general education
Mathematics competency requirement and is intended for students who have not met the competency requirement by exam scores or transfer credit.

**MATH 110 Mathematical World** ................................................................. 3
A survey of selected content chosen to help build basic number sense, develop skills in pattern recognition, use mathematical modeling to represent and investigate practical problems. Basic arithmetic computational skills are assumed. Prerequisite: general education mathematics competency requirement.

**MATH 120 Intermediate Algebra** ............................................................... 4
Basic algebra as preparation for Math 141 or Math 170. Prerequisite: one unit of high school algebra or Math 105; and general education mathematics competency requirement.

**MATH 131 Math Concepts Elem Classroom I** .............................................. 4
Theory of natural, rational, and real number arithmetic; computation in different numeration systems; elementary set theory and logic; number theory; probability and statistics; problem solving strategies. Linkage to mathematics education in the elementary school. Prerequisite: general education mathematics competency requirement.

**MATH 132 Math Concepts Elem Classroom II** ............................................. 3
Formal and informal approaches to Euclidean geometry; patterns, symmetries, classification of geometric figures in two and three dimensions; transformations in the plane; measures, measurement and approximate data; computer software applications to geometry. Linkage to mathematics education in the elementary school. Prerequisite: Math 131 or high school geometry; general education mathematics competency requirement.

**MATH 141 Finite Mathematics** ................................................................. 3
Linear systems of equations and inequalities including linear programming set theory, elementary counting principles, probability, Markov chains. Applications to problems from business and the social sciences. Prerequisite: Two units of high school algebra or Math 120.

**MATH 170 Precalculus Mathematics** ....................................................... 4
Families of functions and their graphs. Polynomial, rational, exponential, logarithmic, and trigonometric functions and related applications. Graphing calculators and computer software are used. (Includes weekly computer lab.) Prerequisite: Three units of high school algebra and geometry or Math 120.

**MATH 205 Discrete Mathematics** ............................................................. 3
Number systems and arithmetic, logic and Boolean algebra, enumeration, problem solving and proof techniques, functions and relations, set theory and applications, elementary graph theory and probability. Prerequisites: three and one-half units of high school mathematics including trigonometry or Math 170.

**MATH 211 Calculus I** ............................................................................... 4
Differential and integral calculus of elementary algebraic and trigonometric functions with applications to geometry and physics; use of graphing calculators and mathematical computer software. (Includes weekly computer
Prerequisites: three and one-half units of high school mathematics including trigonometry or Math 170.

**MATH 212 Calculus II** ................................................................. 4
A continuation of differential and integral calculus of a real variable; exponential, logarithmic, inverse trigonometric, and hyperbolic functions; techniques of integration; introduction to differential equations; sequences and series; vectors in the plane; polar coordinates. (Includes weekly computer lab.) Prerequisite: Math 211.

**MATH 213 Calculus III** ............................................................... 4
Differential and integral calculus of three-space; vectors, lines, planes, and surfaces in three-space; vector valued functions; functions of several variables; partial derivatives; multiple integrals; vector calculus. (Includes regular computer lab.) Prerequisite: Math 212.

**MATH 300 Conjecture and Proof** ............................................... 3
An introduction to the exploration and formalization of mathematical phenomena, techniques of proof and the rudiments of logic, sets, real analysis, and axiomatic geometry. Provides a preparation for the study of abstract mathematics. Prerequisite: Math 211 and either Math 205 or Math 212, or permission of instructor.

**MATH 301 Linear Algebra** ......................................................... 3
Linear systems of equations, vector spaces, linear transformations, matrices, determinants, characteristic vectors and values, inner products, computational aspects, and applications. Prerequisite: Math 211 and either Math 205 or Math 212.

**MATH 302 Abstract Algebra** ..................................................... 3
An introduction to algebraic structures such as groups, rings and fields. Prerequisites: Math 300 and Math 301.

**MATH 305 Modern Geometry** .................................................. 3
A survey of geometrics. Comparison of Euclidean, hyperbolic, elliptical, and projective geometries. Integral and fractional dimension; transformation groups; implications for computer graphics. Prerequisites: Math 300.

**MATH 311 Real Analysis** ............................................................ 3
A rigorous study of differentiation and integration of both one and several variables. Infinite series. Distance, compactness, limits of sequences, convergence, and introduction to the topology of Euclidean n-space. Prerequisites: Math 213, Math 300 and Math 301.

**MATH 321 Differential Equations** ............................................. 3
The solution and application of ordinary differential equations; analytic solutions for linear systems; qualitative behavior of nonlinear systems; approximation and computer methods. Prerequisite: Math 213 or Math 301.

**MATH 323 Probability and Statistics** ......................................... 3 (3-4)
An introduction to the theory, practice and computer simulation of probability and statistics. Data exploration, sample spaces, random variables, probability distributions and their derivations, probability simulations and statistical inference. The optional fourth credit hour consists primarily of an independent
data collection and analysis project. Prerequisites: Math 213 or permission of the instructor.

**MATH 341 Numerical Analysis** ................................................................. 3
Numerical methods and error analysis for approximating solutions of mathematical problems. Includes linear and nonlinear numerical methods, interpolation and approximation techniques, numerical differentiation and integration. Prerequisite: CoSc 200 and one of Math 301 or Math 321.

**MATH 351 Mathematical Modeling** .......................................................... 3
The modeling process, built around a study of applications from a variety of both social as well as natural sciences. A variety of mathematical and computing techniques will be employed including discrete structures, probability, calculus, differential equations and algorithms. Completion of modeling projects will be a major component of the course. Prerequisites: CoSc 200 and one of Math 213, Math 301, or Math 323.

**MATH 390 Problem Solving Sem** .............................................................. 1
The problem-solving process in the context of nonroutine problems, including a wide variety of general heuristics for approaching such problems. May be repeated. Prerequisite: Math 300 or permission of instructor.

**MATH 400 Selected Topics:** ................................................................. 3 (1-3)
For mathematics majors with consent of the department. May be repeated.

**MATH 409 Senior Project/Internship** .......................................................... 3
Project designed to give the student practical experience in mathematics. Each student's project is individually arranged with the instructor. Arrangements must be made at least one semester in advance.

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**Modern and classical languages and literatures (MCLL)**

*Professors R. Falcon, P. Keim*

*Associate Professor E. D. Rhodes (chair)*

*Assistant Professors J. Armstrong, S. Yoder*

*Adjunct Professor K. Massanari*

**Introduction**

The MCLL department offers majors and minors in American Sign Language and in Spanish. Both majors have teacher education options. The mission of MCLL is to foster in our students intercultural openness with the ability to function effectively with people of other world views as well as to develop in our students the ability to communicate in a variety of language systems.

- Major in American Sign Language
- Major in Spanish
- Minor in American Sign Language
- Minor in Spanish

In addition to the majors and minors above, French courses and German courses are also offered. Visit the modern and classical languages and

Major in American Sign Language

59-71 credit hours (core and one concentration)

Core courses (31 credit hours)

- ASL 101-102, Elementary ASL I & II .................................. 8
- ASL 104, North American Deaf Culture ............................. 3
- ASL 106, Introduction to the Interpreting Profession........... 2
- ASL 201-202, Intermediate ASL I & II ............................. 8
- ASL 205, Advanced Fingerspelling and Numbers.............. 2
- ASL 206, The Deaf Community, Church & Religion........... 2
- ASL 305, Linguistics of ASL ............................................... 3
- ASL 408, Specialized Vocabulary .................................. 2
- ASL 410, Senior Seminar ............................................... 1

Concentration in ASL-English interpreting (28 credit hours)

- ASL 301-302, Interpreting I & II.......................................... 8
- ASL 304, Certification Overview ...................................... 1
- ASL 306, Deaf American Literature .................................... 3
- ASL 401, Interpreting III ..................................................... 4
- ASL 407, Topics in Interpreting .......................................... 2
- ASL 409, Interpreting Internship ....................................... 10

Concentration in ASL teacher certification (40 credit hours)

- Secondary education courses (see education department pages) ................................................................. 30
- Engl 310, Introduction to Linguistics ................................. 3
- Engl 320, Methods of Teaching English to Speakers of Other Languages .................................................... 4
- PJCS 210, Transforming Conflict and Violence ................. 3
- Two semesters immersion in ASL (ASL SST and/or Gallaudet University)

Planning guide

First year
- General education
- Elementary American Sign Language I and II
- North American Deaf Culture
- Introduction to the Interpreting Profession

Second year
- General education
- SST (recommended)
- Intermediate American Sign Language I and II
- Other courses in major
- Recommended electives

Third year
- Courses in major
- General education
- Recommended electives

Fourth year
- Balance of general education
- Balance of major courses
Interpreting Internship or Student teaching
Senior Integrating Seminar

Planning and advising notes
Recommended elective courses for ASL-English interpreting majors include:
Comm 206, Communicating Across Cultures; Engl 310, Introduction to Linguistics; Engl 315, English Language Problems; Soc 200, Principles of Sociology; Soc 230, Cultural Anthropology; and Soc 334, Race, Class and Ethnic Relations.

For ASL teacher education majors, the course Educ 201 should be taken in May term of the first year or fall semester of the second year. The two-semester study immersion program is usually completed through a semester at Gallaudet University during the junior year and participation in the ASL language related SST semester.

Minor in American Sign Language

23 credit hours
- ASL 101-102, Elementary ASL I & II .................................. 8
- ASL 104, North American Deaf Culture ............................. 3
- ASL 201-202, Intermediate ASL I & II ............................... 8
- ASL 205, Advanced Fingerspelling and Numbers............... 2
- ASL 206, The Deaf Community, Church & Religion .......... 2

Major in Spanish

37-40 credit hours
- Spanish courses 202 level and higher (3 credit hours may be French or German) .............................................. 21
- MCLL 300, International Classics .................................... 3
- MCLL 410, Senior Seminar ............................................. 1
- Related courses selected from the following: .................... 12
  Art 341-343, Art History I, II & 20th Century
  Engl 201, World Literature in English
  Engl 310, Introduction to Linguistics
  Engl 320, Methods of Teaching English to Speakers of Other Languages
  Hist 344, Latin American History
  PoSc 318, Latin American Politics
  Mus 301-302, History of Music I & II
  Thea 245, Aesthetics
  Thea 388, Themes in Drama
- Junior year abroad (or approved alternate) ...................... NC
- Internship (may be met by extended residence in Spanish-speaking country) .................................................. 0-3

Planning guide
**First year**
General education
Level 202 or higher
Second language (or second year)
Second year
General education
Advanced language courses
Second language
SST (recommended)

Third year
Junior Year Abroad (advanced language and related courses)

Fourth year
Balance of general education
Balance of major and related courses
International Classics
Senior Integrating Seminar

Planning and advising notes
While most language majors begin to study another language in high school, it is possible to complete the major successfully if the student begins at Goshen College and participates in either a full junior year with Brethren Colleges Abroad (BCA) or a combination of one semester of BCA/SST or another approved program. (See international education pages.) While SST is not required to complete the major, it is highly recommended. Most required upper level related courses are taken on location through BCA.

Teacher education certification requirements
Teacher certification is available for grades 5-12 in two related areas. Courses needed in addition to the Spanish major core requirements are as follows:

Spanish education – Engl 310, Engl 320, at least 33 credit hours of Spanish language (up to 12 credit hours for level 101-201 may be earned by exam).


Also 30 credits of education courses, including a semester of student teaching. PJCS 210 must be taken for the PJCS/Phil general education requirement. The first education course, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Minor in Spanish
12 credit hours
- Spanish courses 202 level and higher ........................................ 12
- One semester of study abroad in a Spanish-speaking country (may be SST) ........................................ NC

American Sign Language and Interpreting courses

ASL 101 Elementary American Sign Language I ................................................. 4
An introduction to American Sign Language and the deaf community; focuses on frequently used signs, basic rules of grammar, nonmanual aspects of American Sign Language and some cultural features of the deaf community.

ASL 102 Elementary American Sign Lang II .................................................... 4
Emphasizes further development of receptive and expressive skills, vocabulary building and grammatical structures. Introduction to language forms used in
American Sign Language poetry and theater. Prerequisite: ASL 101 or consent of instructor.

**ASL 103 Elementary American Sign Lang III** ............................................... 4  
Emphasis on basic communication skills in the target language and culture. Normally offered only on SST. Pre-requisite ASL 102 or equivalent.

**ASL 104 North American Deaf Culture** ......................................................... 3  
Explores the American deaf community, examining the educational, sociological and cultural features which shape this group of people. Prerequisite: none.

**ASL 106 Intro to Interpreting Profession** ....................................................... 2  
Introduces students to the professional field of interpreting: code of ethics, employment opportunities, professional organizations, etc. Prerequisite: ASL 102 or consent of instructor.

**ASL 201 Intermediate American Sign Lang I** ............................................... 4  
Continues development of expressive and receptive language skills through student-led discussions and prepared reports on topics related to the deaf community. Prerequisite: ASL 102 or consent of instructor.

**ASL 202 Intermediate American Sign Lang II** ............................................... 4  
Develops further expressive and receptive language skills. Prerequisite: ASL 201 or consent of instructor.

**ASL 203 Intermediate American Sign Lang III** ............................................... 4  
Continuation of grammar practice with emphasis on ASL practice. Normally offered only on SST. Prerequisite: ASL 201 or equivalent.

**ASL 205 Advanced Fingerspelling & Numbering** ........................................ 2  
Concentrated instruction and practice in expressive and receptive fingerspelling and the complex numbering system of ASL. Prerequisite: ASL 201 or consent of instructor.

**ASL 206 Deaf Community, Church & Religion** ............................................. 2  
Explores the variety of deaf community's experiences with churches and religion. Models of ministry and mission in the deaf community will be presented and critiqued. Out-of-class visits to local deaf ministries are required. Prerequisite: ASL 104.

**ASL 301 Interpreting I** .................................................................................... 4  
Introduces theory and skills of the interpreting process, presenting both consecutive and simultaneous methods. Prerequisite: All 200-level ASL courses or consent of instructor.

**ASL 302 Interpreting II** ................................................................................... 4  
Introduces spontaneous ASL/English interpreting and provides extensive practice utilizing videotapes and audiotapes. Prerequisite: ASL 301 or consent of instructor.

**ASL 304 Certification Overview** ........................................................................ 1  
Studies various quality assurance/state licensure assessments established across the United States. Prepares students for the written portion of the
national certification of the Registry of Interpreters for the Deaf. Prerequisite: All 200-level ASL courses or consent of instructor.

**ASL 305 Linguistics of American Sign Lang** .................................................. 3
Investigates the major grammar rules of American Sign Language. Studies specific aspects of phonology, morphology, syntax and semantics. Prerequisites: ASL 205, Engl 310.

**ASL 306 American Sign Language Literature** ............................................. 3
Focuses on various genres of literature by and about deaf people. Concentrates on deaf characters and the influences deaf culture and deaf history have on literary works. Prerequisite: All 200-level ASL courses or consent of instructor.

**ASL 401 Interpreting III** ............................................................................. 4
Continues the development of interpreting skills through role-playing and participating in out-of-class interpreting opportunities. Prerequisite: All 300-level ASL courses or consent of instructor.

**ASL 407 Topics in Interpreting** ................................................................. 2
Practical and ethical issues in interpreting. Decision-making, assignment assessment, environmental management, policies and procedures within agencies and organizations. Prerequisite: All 300-level ASL courses or consent of instructor.

**ASL 408 Specialized Vocabulary** ............................................................. 2
Examines and develops the vocabulary necessary for interpreting in specific settings including education, medicine, mental health, legal, religious, etc. Taken during the first four weeks of the internship semester. Prerequisite: ASL 401 or consent of instructor.

**ASL 409 Interpreting Internship** ............................................................... 10
Supervised interpreting experiences through placement in various community settings. Course offered the last 10 weeks of the senior year. Prerequisite: All preceding 400-level ASL courses.

**ASL 410 Senior Seminar** ........................................................................ 1
Students reflect on ethical dilemmas, problems or conflicts encountered during their 10-week internship (ASL 409) with the goal of learning and growing from the collective discussion and experiences. In addition, students will set goals for themselves related to career, vocation and job procurement and create tools to assist in achieving their goals following graduation. Prerequisite: All preceding 400-level ASL courses.

**Spanish courses**

**SPAN 101 Elementary Spanish I** .......................................................... 4
Basic skills in understanding, speaking, reading and writing Spanish for beginners; class work includes collaborative learning.

**SPAN 102 Elementary Spanish II** ......................................................... 4
Basic skills in understanding, speaking, reading and writing Spanish for beginners; class work includes collaborative learning.
SPAN 201 Intermediate Spanish I ................................................................. 3
A review of grammar and intensive oral practice. Prerequisite: Span 102 or equivalent.

SPAN 202 Intermediate Spanish II ............................................................. 3
Reading and discussion of short story, drama and topics in Spanish culture. Major emphasis on improving reading, writing and conversational skills. Prerequisite: Span 201 or equivalent.

SPAN 203 Intermediate Spanish III .......................................................... 4
Continuation of grammar practice with emphasis on spoken Spanish. Normally offered only on SST. Prerequisite: Span 201 or equivalent.

SPAN 204 Spanish for Spanish Speakers .................................................. 3
A course for native speakers of Spanish in orthography, syntax and lexicography with extensive practice in reading and composition. Fulfills prerequisite for any upper-level Spanish course in the department.

SPAN 205 Spanish Conversation & Culture ............................................. 3
Extensive practice in spoken Spanish. Topics related to life in Spanish-speaking countries. Course especially designed to meet interests of returned SST students. Prerequisite: Span 201 or equivalent.

SPAN 301 Introduction to Spanish Literature ......................................... 3
A survey of the currents in Peninsular literature. Beginnings through Golden-Age writers.

SPAN 302 Introduction to Spanish Literature ......................................... 3
A survey of the currents in Peninsular literature. Late-19th and 20th-century writers.

SPAN 303 Spanish Composition I ......................................................... 3
A thorough review of Spanish grammar with exercises in composition.

SPAN 304 Spanish Composition II ......................................................... 3
A thorough review of Spanish grammar with exercises in composition.

SPAN 305 Culture of Hispanic World ..................................................... 3
Course focuses on culture, history, literature and music of the Hispanic world, with particular emphasis on Spanish-speaking SST locations. Comprehensive experience in written and spoken Spanish.

SPAN 309 Spanish-American Novel ....................................................... 3
A study of selected 20th-century Spanish-American novels representing various types emerging from the Spanish-American scene.

SPAN 322 Spanish-American Literature ............................................... 3
A study of Spanish-American literature from 1880 to present time with special emphasis on the novels, the essay and the short story.

SPAN 349 Hispanic Short Stories .......................................................... 3
Presents Hispanic literature through short stories representative of the Hispanic world, originating in Spain, Latin America, United States and Canada, and integrating Spanish grammar and culture. Students read stories; review vocabulary and grammatical structures; study authors' lives and the historical context of the stories; and discuss cultural elements.
SPAN 350 Hispanic Film Studies ................................................................. 3
Presents Hispanic culture, conversation and grammar using films in Spanish. Prior to viewing, historical and cultural contexts, literary movements and influences of the era are discussed. Shows representative films, followed by activities which include written assignments, small-group presentations and discussions. Draws comparisons between books and the films based on them; encourages students to use vocabulary and grammar structures used in the films.

SPAN 400 Special Projects ..................................................................... 1 (1-4)
Projects vary from studies in literature to advanced practice of language skills. Reserved for Spanish majors.

French courses

FREN 101 Elementary French I ............................................................... 4
Basic skills in understanding, speaking, reading and writing French for beginners.

FREN 102 Elementary French II ............................................................. 4
Basic skills in understanding, speaking, reading and writing French for beginners.

FREN 103 Elementary French III ........................................................... 4
Emphasis on basic communication skills in the target language and culture. Normally offered only on SST. Prerequisite: Fren 102 or equivalent.

FREN 201 Intermediate French I ............................................................ 4
Grammar review with reading and discussion French. Normally offered only on SST. Prerequisite: Fren 102 or equivalent.

FREN 202 Intermediate French II ........................................................... 4
Reading and discussion of prose, poetry and drama. Grammar review, oral and written practice. Normally offered only on SST. Prerequisite: Fren 201 or equivalent.

FREN 203 Intermediate French III ......................................................... 4
Emphasis on conversational French. Normally offered only on SST. Prerequisite: Fren 201 or equivalent.

German courses

GERM 101 Elementary German I ............................................................ 4
Basic skills in understanding, speaking, reading and writing German for beginners; class work includes collaborative learning.

GERM 102 Elementary German II .......................................................... 4
Basic skills in understanding, speaking, reading and writing German for beginners; class work includes collaborative learning.

GERM 103 Elementary German III .......................................................... 4
Emphasis on basic communication skills in the target language and culture. Normally offered only on SST. Prerequisite: Germ 102 or equivalent.
GERM 201 Intermediate German I ................................................................. 4
Review of grammar related to readings in German literature and cultural texts with discussion based on readings. Prerequisite: Germ 102 or equivalent.

GERM 202 Intermediate German II ................................................................. 4
Reading and discussion of prose and poetry and topics in German culture. Emphasis on further development of oral and written skills. Prerequisite: Germ 201 or equivalent.

MCLL courses

MCLL 101 Elementary Latin I ........................................................................ 3
Provides a thorough introduction to the Latin prose of the classical period of Roman civilization. Primary attention to building a working knowledge of Latin grammar and vocabulary, basic Latin idioms and expressions. Students will cultivate an appreciation of the eloquence of Latin prose style through reading sentences and short texts of increasing difficulty.

MCLL 102 Elementary Latin II ....................................................................... 3
Provides a thorough introduction to the Latin prose of the classical period of Roman civilization. Primary attention to building a working knowledge of Latin grammar and vocabulary, basic Latin idioms and expressions. Students will cultivate an appreciation of the eloquence of Latin prose style through reading sentences and short texts of increasing difficulty.

MCLL 300 International Classics .................................................................. 3
Taught in English, this course offers an introduction to literary works of classic and/or contemporary authors in translation. Themes and texts vary from year to year. Topics may focus on a genre within comparative literature - such as epics, novels, or mythology - or on literatures of specific cultures such as those of Spanish speaking Latin America or of the French speaking Caribbean. Required for Spanish majors; appropriate for returning SST students and all who wish to deepen their knowledge of comparative literatures and cultures. Counts as SST alternative.

MCLL 400 Special Projects ............................................................................ 3
Special Projects: Poe

MCLL 409 Language Internship ..................................................................... 3 (1-4)
Required of all departmental majors. Requirement usually fulfilled in extensive residence or study abroad in the language of the major, internship abroad or student teaching. Majors may also propose projects.

MCLL 410 Senior Integrating Seminar .......................................................... 1
Majors and faculty meet regularly for an exchange of views on such topics as vocations in foreign language and other issues related to a life-long study of language, culture, and literature in a diverse and multi-lingual global community. Involves the final assembly of a portfolio in the language of the student's major, as well as field excursions to culturally diverse communities in the area. Independent projects in research or teaching.
Introduction
The music department at Goshen College is dedicated to the cultivation of excellence in the areas of musical performance, pedagogy and scholarship. We believe musical expression is a human manifestation of the divine impulse and, as such, serves as a window into the individual soul, as a bridge between human beings and as a means of shared religious experience. The music department offers a major with five possible concentration areas, three minors, two endorsement options and two one-year certificates:

- Major in music
- Minor in music
- Minor in piano pedagogy
- Minor in music in worship

Visit the music department Web site at www.goshen.edu/music/Home.

Career and postgraduate opportunities
Music graduates are currently working in public and private schools, colleges and universities, in private teaching, music technology, professional performance, in church music ministry and in music business. Some are also practicing music therapy, for which an undergraduate degree in music education is recommended. Many music graduates have gone on to earn degrees at our nation's most prestigious graduate schools.

Major in music

44-80 credit hours (Core and one concentration area)

Core courses (18 credit hours):
- Mus 201-202, Music Theory I & II ........................................ 8
- Mus 204, Survey of Music Literature .................................... 3
- Mus 301, History of Music I .................................................. 3
- Mus 303, Advanced Music Theory I .................................... 3
- Mus 410, Senior Seminar ..................................................... 1
- Sophomore qualifying recital ............................................. NC
- Keyboard proficiency ....................................................... NC
- Senior recital, project, or lecture recital ............................. NC

Generalist concentration (26-27 credit hours)
- Mus 212, Song Leading ..................................................... 1
- Mus 302, History of Music II ............................................. 3
- Mus 304, Advanced Music Theory II ................................. 3
- One specialty course matching primary area of study: ... 2-3
- Mus 208, Introduction to Piano Pedagogy
Mus 210, Learning and Teaching Concepts in Music  
Mus 241, Music Technology  
Mus 305, String Methods and Materials  
Mus 308, Vocal Methods and Pedagogy  
• Mus 311, Topics in Music Literature................................... 3  
• Applied music ................................................................... 14  
• Ensemble participation at least seven semesters ........... NC  
• Pianists only: accompany at least three sophomore recitals or equivalent .......................................................... NC

Music education concentration for K-12 certification (66 credit hours)  
• Mus 210, Teaching and Learning Concepts in Music ........ 3  
• Mus 302, History of Music II ............................................ 3  
• Mus 304, Advanced Music Theory II ................................. 3  
• Mus 305, String Methods and Materials ................................ 2  
• Mus 306, Woodwind Methods and Materials .................. 2  
• Mus 307, Brass Methods and Materials ............................. 2  
• Mus 308, Vocal Methods and Pedagogy ............................ 2  
• Mus 311, Topics in Music Literature ................................. 2  
• Mus 312, Conducting .................................................... 3  
• Mus 330, Teaching Secondary School Music .................. 2  
• Applied Music .................................................................. 12  
• Professional education courses (see education department pages for details)......................................................... 30  
• Ensemble participation at least seven semesters ........... NC  
• Pianists only: accompany at least three sophomore recitals or equivalent .......................................................... NC

Music business/technology concentration (35-36 credit hours)  
• Mus 241, Music Technology............................................. 3  
• Mus 302, History of Music II ............................................ 3  
• Mus 304, Advanced Music Theory II ................................. 3  
• Mus/Comm 340, Audio Production................................ 3  
• Mus 409, Internship ...................................................... 1-2  
• Applied music .................................................................. 8  
• Elective courses chosen from the following list: .............. 14  
  Acc 201-202, Principles of Accounting  
  Bus 315, Principles of Management  
  Bus 316, Principles of Marketing  
  Bus 328, Venture Planning  
  Comm 190, Introduction to Radio  
  Comm 212-312, Broadcast Media Production I & II  
  Comm 270, Media, Law and Ethics  
  Comm 326, Creating for the Web  
• Ensemble participation at least seven semesters ........... NC  
• Pianists only: accompany at least three sophomore recitals or equivalent .......................................................... NC
Music and worship concentration (30-31 credit hours)

- One of the following courses: ............................................. 3
  Mus 208, Introduction to Piano Pedagogy
  Mus 210, Learning and Teaching Concepts in Music
- Mus 212, Song Leading ..................................................... 1
- Mus 241, Music Technology ............................................... 3
- Mus 311, Topics in Music Literature: Music in Worship .... 2
- Mus 312, Conducting ......................................................... 3
- Mus 409, Internship .......................................................... 1-2
- Applied music ..................................................................... 8
- Three related courses chosen from the following: ............ 9
  Bibl 301, Hebrew Scriptures: Wisdom and Psalms
  Engl 120, Introduction to Creative Writing
  Psych 210, Developmental Psychology
  Rel 210, Introduction to Youth Ministry
  Rel 202, Religion in the Americas
  Rel 320, Christian Faith
  Thea 235, The Power of Story
  Thea 245, Aesthetics
- Ensemble participation at least six semesters ............... NC
- Public demonstration of leading chamber ensemble or
  congregational singing .................................................... NC
- Pianists only: accompany at least two sophomore recitals or
  equivalent ........................................................................ NC

Piano pedagogy concentration (29 credit hours)

- Mus 208, Introduction to Piano Pedagogy ......................... 3
- Mus 211, Group Piano Instruction ...................................... 2
- Mus 302, History of Music II ............................................... 3
- Mus 304, Advanced Music Theory II .................................. 3
- Mus 310, Private Teaching ................................................. 2
- Mus 311, Topics in Music Literature ................................... 2
- Mus 412, Piano Literature .................................................. 2
- Applied music ................................................................... 12
- At least six semesters of ensemble/accompanying......... NC
- Accompany at least two sophomore recitals or equivalent ... NC

Research and performance endorsement options

Research endorsement requirements:
1. Sophomore qualifying recital (15 min.) or lecture-recital (20 min.)
   involving live performance and sample of written scholarly work
   (3,000 words) on a music topic submitted to faculty.
2. Junior project: a lecture or lecture-recital (30 min.) or a presentation
   at the student research symposium. Paper must be submitted to
   faculty for approval one month in advance.
3. Senior presentation of a scholarly paper (60 min.), which may or may
   not include performance. A 9-10,000 word paper must be submitted
   to faculty one month prior to the public presentation.
Performance endorsement requirements:
1. Sophomore qualifying recital (20-25 min.)
2. Junior recital (30 min.)
3. Senior recital (50-60 min.) A permission performance is required one month prior to the public senior recital date.
4. Specific instrument requirements:
   - **Pianists** - learn at least one full concerto (may serve as junior recital) and accompany at least three sophomore recitals or comparable collaborative performances.
   - **Violinists** - learn at least one full concerto (may serve as junior recital)
   - **Other instrumentalists** - significant sonata repertoire and full concerto or other collaborative chamber project.

Additional requirements

**Keyboard proficiency.** Keyboard proficiency will require facility in sight-reading, keyboard technique, harmonization, transposition, improvisation and playing by ear. Prior to entering the first semester of music theory (Mus 201), an examination will be given to determine the student's keyboard proficiency level and placement in the keyboard theory labs. Keyboard proficiency exams will be given at the end of each semester. In order to pass the keyboard proficiency exam, most students require a sequence of study that begins with the 200-level music theory keyboard skills labs and continues with at least one semester of private applied piano study. Students earning a grade of B or higher in Mus 250 Class Piano automatically meet the requirement. Filling the keyboard proficiency requirement early on in the degree program (by the end of the junior year at the very latest) is strongly recommended.

**Departmental recitals.** All music majors are expected to perform at least once per semester in the music department weekly recitals. All music minors are expected to perform at least once a year.

**Sophomore qualifying recital.** All music majors, minors and interdisciplinary majors with a focus in music are required to present 15-20 minutes of music in a public recital by the end of their fourth semester of applied music study. Successful completion of this requirement, as well as acceptable work in other music studies, is a prerequisite for continuing as a major in the department.

**Junior recital/project.** Junior recitals/projects are required only for students pursuing the research or performance endorsements. See specific requirements under those headings and on the music department Web site.

**Senior recital/lecture-recital/project.** For those required to perform or present a senior recital or project, a permission performance is required one month prior to the public senior recital/presentation date. All program notes, translations and written documents must be submitted at the time of the permission for review and approval. Senior recitals are not required for music minors, but may be included (NC) if agreed upon by the student and music department adviser.

**Ensemble participation.** All music majors and minors are required to participate in a core ensemble (chorale, chamber choir, orchestra, or wind
symphony). Participation in non-core ensembles is also encouraged (jazz band, men's chorus, women's world music choir, Voices-n-Harmony, percussion ensemble, small chamber groups).

Planning guide

First year  
General education  
Music Theory or Foundations of Music Theory  
Applied music  
Survey of Music Literature

Second year  
General education  
Music Theory (if not taken in first year)  
Specialty Course: Learning & Teaching Concepts in Music, Introduction to Piano Pedagogy, Music Technology, Vocal Methods and Pedagogy, String Methods and Pedagogy  
Applied music  
Sophomore recital  
SST

Third year  
General education  
Advanced Theory  
Applied music  
Courses in concentration

Fourth year  
Balance of general education  
Balance of major  
History of Music  
Topics in Music  
Senior Seminar  
Recital or paper

Fifth year  
Student teaching in fall for music education majors

Minor in Music

20-21 credit hours

- Mus 201-202, Music Theory I & II ........................................ 8
- Mus 204, Survey of Music Literature ...................................... 3
- Mus 212, Song Leading .................................................... 1
- Applied music ..................................................................... 6
- One of the following courses: .......................................... 2-3
  - Mus 210, Learning and Teaching Concepts in Music
  - Mus 241, Music Technology
  - Other upper level Music course (300-499), not ensemble
- Ensemble participation at least six semesters .................... NC
- Sophomore recital or project (may be given in junior or senior year) ................................................................. NC

Planning and advising note

Students pursuing a minor in music, especially those receiving music scholarships, are strongly encouraged to complete all requirements by the end of their junior year, particularly the 201-202-204 sequence of courses.
### Minor in piano pedagogy

**22 credit hours**

- Mus 201-202, Music Theory I & I ........................................... 18
- Mus 204, Survey of Music Literature ...................................... 3
- Mus 208, Introduction to Piano Pedagogy ............................. 3
- Mus 310, Private Teaching .................................................... 2
- Applied music: piano .......................................................... 6
- Ensemble participation at least four semesters ................. NC
- Sophomore recital or project (may be given in junior or senior year) ................................................................. NC

### Minor in music in worship

**21 credit hours**

- Mus 201-202, Music Theory I & II ........................................... 8
- Mus 204, Survey of Music Literature ...................................... 3
- One of the following courses: ............................................. 3
  - Mus 208, Introduction to Piano Pedagogy
  - Mus 210, Learning and Teaching Concepts in Music
- Mus 212, Song Leading ..................................................... 1
- Mus 311, Topics in Music Literature: Church Music ........... 2
- Applied music ..................................................................... 4
- Ensemble participation at least four semesters ................. NC
- Sophomore recital or project (may be given in junior or senior year) ................................................................. NC

### Certificate programs

One-year certificates are available in music in worship or in piano pedagogy. See the department chair or the registrar for more information.

### Music courses

**MUS 102 Foundations of Music Theory** ..................................................... 2
An introduction to the reading and interpretation of musical notation for those with limited experience. The development of basic aural and keyboard skills, along with exposure to musical forms and styles will also be included. Intended as preparation for Mus 201-202 and as an exploratory experience for all aspiring musicians.

**MUS 201 Music Theory** ................................................................. 3
Designed to show how music is constructed artistically. Develops the ability to hear and perform music and teaches the technical elements necessary for original composition. Participation in the keyboard and aural-skills labs is required (.5 credit hours each). Prerequisite: successful diagnostic theory exam, or completion of Mus 102.

**MUS 202 Music Theory** ................................................................. 3
Designed to show how music is constructed artistically. Develops the ability to hear and perform music and teaches the technical elements necessary for original composition. Participation in the keyboard and aural-skills labs is required (.5 credit hours each). Prerequisite: Mus 201.
MUS 204 Survey of Music Literature ............................................................ 3
Designed to follow a year of music theory and precede the study of music history, this course presents an introduction to the basic style periods in Western music literature and acquaints the student with the main forms, composers and masterworks of those epochs.

MUS 208 Introduction to Piano Pedagogy ................................................... 3
This introductory course in the piano pedagogy sequence focuses on the beginning student and on the materials and teaching techniques most effective for this level of instruction. The course includes weekly lecture-discussion sessions, observation of class and private instruction, and the supervised teaching of weekly private lessons. This course is an alternative to Mus 210.

MUS 209 Music Field Experience ......................................................... 1 (1-3)
On-campus internships supervised by a professor. May include arts administration, audio recording technology, church music, private teaching or other fields.

MUS 210 Learning/Teaching Concepts in Music ......................................... 3
This is an introductory course for anyone who may someday teach music. It focuses on understanding the importance and power of melody, high quality diverse repertoire, song teaching strategies and developing skills for teaching children. The course also includes skill development on folk instruments: guitar, banjo, mountain dulcimer, autoharp and recorder. A fieldwork component provides real life experience with young singers.

MUS 211 Group Piano Instruction ............................................................ 2
This course will provide students with an introduction to the pedagogy of group piano instruction for older students. We will examine a four-semester curriculum that encompasses elementary to intermediary piano levels. The pedagogical approach will examine conceptual learning and problem solving in relation to the following: ear playing, reading, transposition, harmonization, improvisation, technique and repertoire. Primary aims of study: Learning the applied skills such as ear playing, harmonization and transposition and being able to utilize these materials to convey important musical concepts in a classroom situation; gaining a greater appreciation, through research, of the academic literature concerning group piano instruction; surveying several college-level class piano texts.

MUS 212 Song Leading .................................................................................. 1
A introductory course using Hymnal: A Worship Book as a primary text. Emphasis will be placed on learning how to be a confident song leader. Attention will also be given to incorporating a variety of quality worship music in a worship setting. No prerequisite. Nonmajors are welcome.

MUS 240 Class Voice ..................................................................................... 2
Breathing, diction and other beginning techniques of voice production learned through exercise and song. Musical and dramatic interpretation studied within a singing performance setting. This course serves as a prerequisite for private applied voice study for students without previous vocal instruction. Exceptions are determined by the voice faculty.
MUS 241 Music Technology .......................................................................... 2
Introduces student to MIDI, recording, digital audio, notation software and computer-aided instruction in music. Students produce projects relevant to individual areas of study. Explores the historical role of technological development on musical composition and the more practical applications of current technologies. Current issues such as duplication, distribution and intellectual property also discussed.

MUS 250 Class Piano ..................................................................................... 2
A course of study for the beginning adult pianist, this course will meet in the Yamaha Clavinova lab. Skill development in ear playing, reading, transposition, harmonization, improvisation, technique and repertoire. Students earning a grade of B or higher in this course will have automatically met their piano proficiency requirement.

MUS 260 Chamber Music ............................................................................... 1
Designed as an avenue to explore the intricacies of small ensemble playing. A pre-approved chamber group receives chamber coaching and general supervision with a music professor. The class is open to vocalists and instrumentalists.

MUS 261 Jazz Band ..................................................................................... 0 (0-1)
Lavender Jazz is Goshen College's big band. The group plays classic jazz standards and styles, such as swing, blues, waltz, mambo, cha cha and funk. Lavender Jazz performs in a variety of settings, including concert halls, malls, churches, high schools, and makes recruiting trips throughout the year.

MUS 262 Opera Workshop ................................................................... 0 (0-1)
Opera Workshop is open to music majors and nonmajors by audition, and may be taken with or without credit. In the spring semester of odd-numbered years, Opera Workshop will perform a complete production of a major opera, operetta, or musical. In the spring semester of even-numbered years, Opera Workshop will meet weekly as a class with the goal of performing a variety of shorter excerpts from opera, operetta and music theater. In the fall semesters, students may sign up for Opera Workshop as an independent study course with students assigned to smaller solo and ensemble scenes.

MUS 265 Composition .................................................................................... 2
Composition

MUS 269 Percussion ...................................................................................... 2
Percussion

MUS 270 Cello ................................................................................................. 2
Cello

MUS 271 Organ ............................................................................................... 2
Organ

MUS 272 Piano ................................................................................................ 2
Piano

MUS 273 Viola ................................................................................................. 2
Viola
MUS 274 Violin ................................................................................................ 2
Violin

MUS 275 Voice ................................................................................................ 2
Voice. Prerequisite: Mus 240.

MUS 277 Flute ................................................................................................ 2
Flute

MUS 278 Bassoon .......................................................................................... 2
Bassoon

MUS 279 Oboe ................................................................................................. 2
Oboe

MUS 281 French Horn .................................................................................... 2
French Horn

MUS 282 Trumpet ........................................................................................... 2
Trumpet

MUS 283 Clarinet ............................................................................................ 2
Clarinet

MUS 284 String Bass ........................................................................................ 2
String Bass

MUS 286 Guitar ............................................................................................... 2
Guitar

MUS 287 Saxophone ...................................................................................... 2
Saxophone

MUS 288 Harpsichord .................................................................................... 2
Harpsichord

MUS 290 Choir (Chorale) ...................................................................... 0 (0-1)
The Chorale is open by audition to all singers. Its members represents a wide variety of academic majors. The choir sings choral treasures from every continent and every period of music history. Often the Chorale joins with the Chamber Choir to perform a major work. Choral also performs concerts in the fall and spring, and at occasional off-campus events.

MUS 292 Orchestra ............................................................................... 0 (0-1)
The Goshen College Orchestra presents concerts of major orchestral works each semester. In addition, it accompanies the choirs, opera productions and student winners of the annual Concerto-Aria competition. The orchestra also performs in the department's annual Festival of Carols program, hosts world-renowned guest soloists and composers, and occasionally serves as the host ensemble for nationally advertised conducting workshops. The orchestra is open to all students by audition, regardless of major.

MUS 295 Harp ................................................................................................. 2
Harp

MUS 296 Trombone ........................................................................................ 2
Trombone
MUS 297 Tuba/Euphonium ................................................................. 2
Tuba/Euphonium

MUS 298 Wind Symphony ............................................................. 0 (0-1)
An opportunity for all brass, woodwind and percussion players to perform classic and contemporary works of the concert band and chamber winds repertoire. Open to music majors and nonmajors by audition. Auditioned high school students also participate in this group. Three-four on-campus and numerous off-campus concerts are presented each season, as well as periodic tours.

MUS 301 History of Music ............................................................... 3
History of musical style within Western civilization from the ancient Greeks to the modern day. Special emphasis on important trends and their relation to the other arts. Prerequisite: Mus 201-202, Mus 204 or permission of instructor.

MUS 302 History of Music ............................................................... 3
History of musical style within Western civilization from the ancient Greeks to the modern day. Special emphasis on important trends and their relation to the other arts. Prerequisite: Mus 201-202, Mus 204 or permission of instructor.

MUS 303 Advanced Music Theory .................................................. 3
Study of chromatic harmony through altered chords and modulation procedures of the late 18th and 19th centuries. Introduction of orchestration and 20th century composition techniques. Original composition. Continuation of analysis techniques. Prerequisites: Mus 201-202, Mus 204, or permission of instructor.

MUS 304 Advanced Music Theory .................................................. 3
Study of chromatic harmony through altered chords and modulation procedures of the late 18th and 19th centuries. Introduction of orchestration and 20th century composition techniques. Original composition. Continuation of analysis techniques. Prerequisites: Mus 201-202, Mus 204, or permission of instructor.

MUS 305 String Methods & Materials ............................................. 2
Study of a variety of pedagogical materials and procedures. Particular emphasis on the methods and ideas of Shinichi Suzuki. Class lessons on stringed instruments.

MUS 306 Woodwind Methods & Materials ..................................... 2
Study of pedagogical materials and teaching techniques appropriate to the woodwind instruments. Class lessons on woodwind instruments.

MUS 307 Brass Methods & Materials .............................................. 2
Study of pedagogical materials and teaching techniques appropriate to the brass instruments. Class lessons on brass instruments.

MUS 308 Vocal Methods & Pedagogy ............................................. 2
Required of all music-education majors and strongly recommended for all vocal performance majors. Study of basic concepts of singing in a class setting with the goal of assisting students in becoming effective teachers of singing. Emphases will include review of basic singing technique, vocal physiology, drill
in diagnosis and correction of vocal problems, diction and vocalizing for desired results. There will be a fieldwork dimension to this class.

**MUS 310 Private Teaching** ................................................................. 2
With special emphasis on the intermediate level student, this course focuses on the integration of theory, skills and repertoire; the reconstruction of transfer students; adolescent psychology and piano study; and a survey of intermediate materials.

**MUS 311 Topics in Music Literature** .................................................. 2
The study of a major composer, genre or style. The topic will be church music at least every other year. Prerequisites: Mus 201-202 and Mus 204 or consent permission of the instructor.

**MUS 312 Conducting** ........................................................................ 3
Principles of conducting theory and practice. Course begins with basic technique and progresses to score preparation and rehearsal planning for large ensembles. Students are encouraged, though not required, to take Mus 212 prior to Mus 312.

**MUS 330 Teaching Secondary School Music** .................................... 2
This course deals with the practical strategies needed to build a successful music program at the secondary level (grades 7-12). Topics studied will include: developing high quality repertoire including multicultural elements, understanding the male changing voice, program structure, student rapport and classroom management, concert programming, marketing and recruiting, assessment strategies, and teaching musical literacy. A field component provides hand-on experience to develop important teaching skills prior to student teaching.

**MUS 340 Audio Production** ............................................................... 3
An introduction to the recording studio presenting its function in commercial music production. Areas include basic electronics, studio setup and engineering fundamentals. Lecture/lab.

**MUS 355 Arts in London** ................................................................. 4
(Cross-listed from Thea 355) A May term class that encompasses theater, art and music study and experiences in London, England. Class activities include morning lectures, visits to art galleries, attending music and theater performances, and day trips to Coventry, Stratford-upon-Avon, Salisbury and other locations. Daily writing assignments and a major project required. Offered in alternate years. Extra cost.

**MUS 360 Chamber Music** ................................................................. 1
Designed as an avenue to explore the intricacies of small ensemble playing. Approved chamber groups of two to eight students work with the instructor on rehearsal techniques and music decision making in a master-class setting. The class meets weekly and is open to all vocalists and instrumentalists.

**MUS 362 Opera Workshop** ............................................................. 1
Opera Workshop is open to music majors and nonmajors by audition, and may be taken with or without credit. In the spring semester of odd-numbered years, Opera Workshop will perform a complete production of a major opera,
operetta, or musical. In the spring semester of even-numbered years, Opera Workshop will meet weekly as a class with the goal of performing a variety of shorter excerpts from opera, operetta and music theater. In the fall semesters, students may sign up for Opera Workshop as an independent study course with students assigned to smaller solo and ensemble scenes.

MUS 365 Composition ................................................................. 2
Prerequisite: Mus 265

MUS 369 Percussion ................................................................. 2
Prerequisite: Mus 269

MUS 370 Cello ................................................................. 2
Prerequisite: Mus 270

MUS 371 Organ ................................................................. 2
Prerequisite: Mus 271

MUS 372 Piano ................................................................. 2
Prerequisite: Mus 272

MUS 373 Viola ................................................................. 2
Prerequisite: Mus 273

MUS 374 Violin ................................................................. 2
Prerequisite: Mus 274

MUS 375 Voice ................................................................. 2
Prerequisite: Mus 275

MUS 377 Flute ................................................................. 2
Prerequisite: Mus 277

MUS 378 Bassoon ................................................................. 2
Prerequisite: Mus 278

MUS 379 Oboe ................................................................. 2
Prerequisite: Mus 279

MUS 381 French Horn ................................................................. 2
Prerequisite: Mus 281

MUS 382 Trumpet ................................................................. 2
Prerequisite: Mus 282

MUS 383 Clarinet ................................................................. 2
Prerequisite: Mus 283

MUS 384 String Bass ................................................................. 2
Prerequisite: Mus 284

MUS 386 Guitar ................................................................. 2
Prerequisite: Mus 286

MUS 387 Saxophone ................................................................. 2
Prerequisite: Mus 287

MUS 388 Harpsichord ................................................................. 2
Prerequisite: Mus 288
MUS 390 Choir (Chamber) ................................................................. 0 (0-1)
Chamber Choir is an auditioned group of 20-30 junior and senior singers, performing secular and sacred music from the Renaissance, Baroque, Classical and Modern periods. The Chamber Choir occasionally joins the Goshen College Orchestra for choral/orchestral works. Three or four on-campus and numerous off-campus concerts are presented each season, as well as periodic tours. Prerequisite: Mus 290

MUS 395 Harp ......................................................................................... 2
Prerequisite: Mus 295

MUS 396 Trombone .................................................................................. 2
Prerequisite: Mus 296

MUS 397 Tuba/Euphonium ................................................................. 2
Prerequisite: Mus 297

MUS 400 Special Projects in Music ................................................... 1
May be elected for additional individual work in music theory, analysis, music history, conducting, music recording or music technology. May be repeated.

MUS 409 Music Internship ................................................................. 3 (1-3)
Designed to give students practical experience in music-related fields such as arts administration, music business, audio recording technology, church music and music therapy. Internships are individually arranged with the work supervisor and faculty adviser.

MUS 410 Senior Seminar ................................................................. 1
Weekly meetings of music majors and faculty to discuss vocational, curricular and ethical/spiritual topics.

MUS 412 Piano Literature ................................................................. 2
A functional knowledge of piano literature is essential for all pianists and teachers. This course will present an historical survey of piano literature from J.S. Bach to the present day focusing on stylistic elements pertinent to particular composers. Special emphasis will be given to works that may be best suited for advanced students, both high school and at the college undergraduate level.

Nursing

Professor B. Srof
Associate Professors F. Brunner, M. Helmuth, J. Hoffman, V. Kirkton (director), R. Stoltzfus, J. Weaver-Yoder, S. Wenger, G. Weybright

Introduction
The nursing department is committed to excellence in nursing education and practice with an emphasis in liberal arts and the discipline of nursing. The nursing program provides opportunities for the student to gain knowledge and develop values for personal and professional growth and to prepare the student for entry into professional nursing practice as a generalist in settings where health care is provided. The study of the practice of nursing is based on nursing and related theories, scientific principles, intercultural perspectives and
Christian ethics. The program prepares graduates with a foundation for continuous intellectual inquiry, graduate study and/or eventual specialization in nursing.

Visit the nursing department home page at www.goshen.edu/nursing/Home.

Upon graduation, graduates in nursing will:

1. Utilize knowledge from the humanities, theology, natural and social sciences, nursing theories and intercultural experiences in providing nursing care.
2. Use the nursing process by employing strategic thinking, decision making, psychomotor and interpersonal skills.
3. Develop a sense of vocational direction by interpreting the historical role of nursing and participate in the present emerging roles of the professional nurse.
4. Collaborate and consult with clients and the interdisciplinary team in providing comprehensive health services that reflect a healthy understanding of self and others.
5. Assume leadership that empowers self and others, foster ability to resolve conflicts, function as a change agent and promote accountability.
6. Use the ability to think actively and strategically in applying selected research findings to improve nursing practice.
7. Demonstrate personal and professional growth by commitment to lifelong learning and involvement in professional and community activities.
8. Demonstrate a faith that is active and reflective; appreciate transcendent reality of aesthetic and spiritual experiences; and be sensitive and responsive to spiritual needs of self and others.

Two tracks, one degree.
The nursing program has both a basic and a B.S.N. completion track. Students who have just graduated from high school or have completed some college, follow the basic track. Students who have graduated from a three-year diploma or associate degree program in nursing and are registered nurses follow the completion track. It is also possible for registered nurses to fit into the basic track, however the completion track was designed to provide an accelerated option that builds on previous education, nursing practice and life experience. The program outcomes for graduates are the same for students enrolled in either track. At graduation, the bachelor of science in nursing degree is conferred.

Basic track

Admission process
Applicants should be in the upper half of their high school graduating class. The high school program should include foreign language, algebra, chemistry
and biology. Physics is also recommended. Applications to the professional nursing program are submitted during the second semester of the freshman year. Applications are due by March 1 and are processed by April 30. The first nursing course begins in the fall of the sophomore year. This course is also offered during the summer session. The applicant’s readiness for admission to the nursing major is determined by academic performance, references, health record and a security check.

**Transfer students from other nursing programs**

Students who wish to transfer to the nursing program at Goshen College from another pre-nursing or nursing program will be reviewed on an individual basis. Admission to the nursing program will be based on the academic and clinical performance of the student. The department of nursing may request a reference letter from the previous nursing programs regarding academic and clinical performance.

**Academic and professional requirements**

**General.** Admission to Goshen College as outlined in the Admission Web site.

**Professional.** Essential abilities necessary to learn the professional nurse role include critical thinking, conceptual and judgmental skills, neurological function so that the senses can be used to make correct clinical judgments and perform psychomotor skills safely; the ability to communicate clearly; effective emotional coping skills; accountability; and the ability to engage in activities consistent with safe nursing practice.

**Academic.** Grade of C or above in supporting and nursing courses and a cumulative college grade point average of 2.5 or higher.

**Mathematics requirement.** All first-year or transfer students who are enrolled in pre-nursing courses need to take the Math Competency exam during registration. A score of 60% or above is required on this placement test. Students who score below 60% must take Math 105, Understanding Our Quantitative World.

**Other.** The nursing department reserves the right to adjust the current admission criteria when outcome assessment data demonstrate the need for such changes.

**Continuation criteria**

A grade of C or above in all supporting and nursing courses and a college grade point average of 2.5 or higher is required for continuation in the nursing major. A grade of C- or below in a supporting or nursing course interrupts the student’s plan of study. The course must be repeated with a grade of C or higher prior to advancement to the next level. Nursing and supporting courses may be repeated only once. The number of repeated courses is limited to two supporting courses and two nursing courses. The nursing department reserves the right to place a student on probation or require a student to withdraw from the nursing major when that student displays behaviors deemed inappropriate to the practice of professional nursing.

**Graduation requirements**

Completion of 120 credit hours accepted by Goshen College, successful completion of all nursing courses, cumulative grade point average of 2.5 or higher in college course work.
Licensure exam
Upon completion of the degree, the student is eligible to take the National Council Licensure Examination - RN (NCLEX-RN) for licensure as a registered professional nurse. The program is accredited by the Commission on Collegiate Nursing Education and is approved by the Indiana State Board of Nursing.

Major in nursing (basic track)
87 credit hours

Modified general education program for nursing students
The same general education requirements apply as for students in other majors, with two exceptions:

1. Nurs 309, Health Care Ethics meets the PJCS/Philosophy requirement.
2. Nursing majors who elect alternate international education do not need to meet the language pre-requisite. Instead, one of the courses within the 12 credit hours taken must be in foreign language.

Supporting courses (41 credit hours)

Complete prior to enrolling in nursing courses:
- Chem 101-102, The Chemistry and Physics of Life ............ 7
- Biol 203-204, Human Anatomy and Physiology .............. 7

Complete prior to or concurrent with 200-level nursing courses:
- Biol 206, Microbiology .................................................. 3
- Chem 220, Human Nutrition ........................................... 3
- Psyc 100, General Psychology ........................................ 3
- Psyc 210, Developmental Psychology .............................. 3
- Soc 200, Principles of Sociology ................................... 3
- Soc 210, Sociology of the Family .................................... 3

Complete prior to or concurrent with 300-level nursing courses:
- Biol 320-321, Human Pathophysiology I & II ................... 6
- Psyc 306, Abnormal Psychology .................................... 3

Nursing courses (46 credit hours)
- Nurs 210, Introduction to Professional Nursing .............. 3
- Nurs 211, Concepts and Strategies in Nursing .............. 3
- Nurs 212, Holistic Client Assessment* ......................... 3
- Nurs 305, Pharmacology and Drug Administration* ...... 3
- Nurs 306, Nursing Care of the Adult I* ....................... 3
- Nurs 307, Nursing Care of the Adult II* ....................... 3
- Nurs 309, Health Care Ethics ....................................... 2
- Nurs 311, Nursing Care of the Expanding Family* .......... 3
- Nurs 312, Nursing Care of the Child* .......................... 3
- Nurs 403, Nursing Research ........................................ 2
- Nurs 404, Care of the Older Adult* ............................. 3
- Nurs 405, Psychiatric/Mental Health Nursing* ............. 3
- Nurs 406, Acute Care Nursing* .................................... 3
- Nurs 408, Community-Health Nursing* ....................... 3
• Nurs 409, Leadership in Nursing* ............................................. 3
• Nurs 410, Senior Seminar in Nursing .............................................. 3

*Denotes courses with a clinical component or practice-based project.

Planning and advising notes
Students who had two semesters of high school chemistry with a grade of B- or higher are exempt from Chem 101 but are required to take Chem 102. SoWk 221 Human Behavior may be substituted for Psyc 210 with approval of the director.

Nursing courses

NURS 210 Intro to Professional Nursing ...................................................... 3
Selected nursing theories, nursing process and research will be studied as foundations for nursing practice. Emphasis will be on the nurse as a person and the importance of self-understanding, accountability, communication and helping relationships. The role of the professional nurse is studied in terms of an ever-changing health care delivery system and emerging nursing practice settings. Introduction to client as individual, family and community.

NURS 211 Concepts & Strategies in Nursing ...................................................... 3
Selected concepts and strategies inherent in basic nursing practice are studied. These are organized according to classification systems of nursing diagnoses, interventions and outcomes. Related nursing skills are incorporated. Prerequisite: Nurs 210.

NURS 212 Holistic Client Assessment .......................................................... 3
Holistic client assessment focuses on collection of a database within the context of the nursing process. Components of the data include the health history and assessment of functional health patterns, body systems, growth and development, and cultural and spiritual dimensions. Assessment is linked with current health screening recommendations and a health promotion framework. Clinical and laboratory experiences are included. Prerequisite: Nurs 210, prerequisite or corequisite: Nurs 211.

NURS 305 Pharmacology & Drug Administration .............................................. 3
An introduction to drug therapy focusing on drug classifications with an emphasis on: 1) principles of drug therapy and the actions of a classification, 2) drug administration in a clinical setting, 3) problem solving with clinical situations, and 4) nursing interventions with rationale. Nonnursing majors may take the course for one or two hours. Prerequisites: Nurs 211 and Nurs 212 for nursing majors and by consent of instructor for nonnursing majors.

NURS 306 Nursing Care of the Adult I .......................................................... 3
The nursing process is used with adults and families experiencing illness. Content areas in this course include nursing care of adults with fluid and electrolytes imbalance, gastrointestinal disorders, orthopedic problems, chronic neurological problems, urinary/genital conditions, and autoimmune disorders. Clinical experiences consist of providing holistic nursing care to adults in medical/surgical clinical areas. Prerequisite: All 200-level nursing courses. Pre- or co-requisites: Nurs 305, Biol 320
NURS 307 Nursing Care of the Adult II .............................................................. 3
The nursing process is used with adults and families experiencing illness. Content areas in this course include nursing care of adults with cancer, lower respiratory problems, diabetes, and cardiovascular problems. Clinical experiences consist of providing holistic nursing care to adults in medical/surgical clinical areas. Prerequisite: All 200-level nursing courses. Pre- or co-requisites: NURS 305, BIOL 320.

NURS 308 Gerontological Nursing ................................................................. 3
Normal age changes and health needs of persons in the latter one-third of the life span are addressed. The content is applied during clinical experiences within the community and nursing-home settings. Prerequisites: NURS 211 and 212. Pre- or corequisites: NURS 305, BIOL 206, BIOL 320.

NURS 309 Health Care Ethics ........................................................................... 2
In this course, students will actively reflect on ethical issues which are present in health care for practitioners and consumers. The focus will be on the process of ethical inquiry rather than decision outcomes. In the process of analyzing bioethical issues, student will be introduced to ethical theory and modes of ethical analysis informed by the Christian faith. Prerequisites: Open to third- and fourth-year students from all departments.

NURS 311 Nursing Care of Expanding Family ............................................. 3
The nursing process and knowledge of normal and selected abnormal conditions experienced during the childbearing cycle are addressed. Clinical experiences occur with the family in the community and hospital. Pre- or corequisites: NURS 305, BIOL 320.

NURS 312 Nursing Care of the Child ............................................................. 3
The focus of this course is on common conditions and illnesses of children. The clinical focuses of the nursing care of the ill child. Developmental concepts, health promotion and prevention are emphasized in clinical and theory.

NURS 403 Nursing Research .......................................................................... 2
Basic concepts of nursing research are examined. Focuses on critical analysis of published nursing research as a basis for using research in clinical practice. Prerequisites: nine credit hours of 300-level clinical nursing courses.

NURS 404 Care of the Older Adult ................................................................. 3
The course examines health issues encountered during the final four decades of the life span, from active older adult through the end of life. Professional nursing roles incorporate a focus on how care fits within the concept of family for each client. Clinical experiences take place in the homes, long term care facilities, and community settings where older adults reside.

NURS 405 Psychiatric/Mental-Health Nursing ............................................... 3
A study of psychiatric/mental-health nursing practice. The clinical component provides opportunities in a psychiatric hospital and community mental-health settings. The role of the nurse as a member of the mental-health team is emphasized. Prerequisites: All 300-level clinical nursing courses, Psyc 306.
NURS 406 Acute-Care Nursing ................................................................. 3
Nursing concepts and theories are applied to the care of acutely ill adults and their families. Clinical experiences occur in an acute care facility and involve caring for acutely ill adults with complex nursing needs. Prerequisites: All 300-level clinical nursing courses.

NURS 407 Nursing Care in the Home .................................................. 3
Concepts from biological, behavioral and nursing sciences are applied to the care of ill clients and their families in the home. Students enhance their understanding of family theory and will apply this theory to their practice by performing one detailed family assessment of one client family. Loss theory is considered in the care of clients with complex needs, often including terminal illness. Understanding of family violence is emphasized. Prerequisites: All 300-level clinical nursing courses.

NURS 408 Community-Health Nursing ............................................... 3
Applies a synthesis of nursing and public health theories to the assessment and care of aggregates in the community. Community health planning for aggregates is done using various community agencies and resources. The public health delivery system is differentiated from the private health care delivery system in its emphasis on social justice. Prerequisites: All 300-level clinical nursing courses.

NURS 409 Leadership in Nursing ....................................................... 3
A three-credit-hour course that continues to focus on the use of the nursing process with clients. Content includes management and leadership theories. The clinical experience includes management of care for multiple clients. Prerequisites: All supporting courses and clinical nursing courses.

NURS 410 Nursing Senior Seminar .................................................... 3
A focus on integration of current professional practice issues. Students articulate their own philosophy of health care and nursing including their faith beliefs, rights of clients and responsibility to deliver quality nursing care. Prerequisites: All clinical nursing courses.

B.S.N. completion track

Introduction
Registered nurses may choose to take the either the basic track or participate in the B.S.N. completion track described below, designed for the working registered nurse. The B.S.N. completion program is offered in collaboration between the Goshen College nursing department and Division of Adult and External Studies (DAES). Transcripts from previous nursing education programs are evaluated individually and credits are transferred accordingly. Credit by examination is also an option for general education and supporting courses.

Structure of the program
This track allows registered nurses to complete a B.S.N. in about 19 months. The track is designed to affirm personal and professional strengths. Students are actively involved in identifying their strengths and their learning needs.
Study guides are provided to maximize off-campus study and in-class activity time. The collaborative education process makes student experiences and insights a vital part of classroom activities. Each group of R.N.s progresses through the courses as a cohort group. Classes meet one night a week for four hours and vary in length from two to 10 weeks. The same night of the week is used for a group throughout the program. Clinical experiences for specified courses will be arranged at other times during the week. Thirteen courses provide 40 credit hours, of which 28 are upper-level nursing credits and 12 are general education credits.

**Admission requirements**

- An associate degree or diploma in nursing from an accredited program.
- A cumulative grade point average of 2.5 or higher in prior academic work.
- Completion of all prerequisite supporting courses (listed below).
- Transfer of a minimum of 60 credit hours from an accredited college.
- Current licensure as an R.N. in Indiana or a neighboring state where the clinical component can be completed.
- Equivalence of one year of full-time employment as a registered nurse in a health-care delivery setting. Currency and relevance of work experience will be evaluated individually.

**Prerequisites**

Prior to assignment to a group and beginning progression through the track, the following courses (or their achievement test equivalent) must be completed.

**General education:** English composition course (3 credit hours)

**Supporting courses:** Anatomy and physiology course (4 credit hours) and Sociology or psychology course (3 credit hours)

**Graduation requirements**

1. Completion of 120 credit hours accepted by Goshen College.
2. Completion of the B.S.N. completion track.
3. Cumulative GPA of 2.5 or above in this program.
4. Completion of general education and supporting-course requirements outlined above.

**Courses for the B.S.N. completion program**

**Nurs 331 Philosophy and Theories of Nursing** ............................................. 3

Bridge course that prepares adult learners for upper-level college study. The metaparadigm of nursing is utilized as the organizing framework for exploration of self and nursing. The evolution of nursing science, theory, research, and practice are studied.
Nurs 332 Holistic Client Assessment* ........................................................... 3
Builds on prior learning, expanding history taking and physical assessment skills across the life span. Includes spiritual, cultural and family assessment.

Nurs 333 Nursing Research ........................................................................... 4
Basic concepts of nursing research are examined. Students will focus on applying these concepts by locating, reading and utilizing published nursing research reports to make recommendations for evidence based nursing practice. Nursing research is differentiated from research in other fields.

Nurs 334 Communication Skills for Professional Nurses ......................... 3
This course responds to the challenges of professional communication and the expectations for registered nurses who are baccalaureate students. The focus is on critique and the development of individual written and oral communication for content, style and effectiveness. Access and management of information will be discussed.

Reln 305 Enduring Issues in Christian Prospectives ................................ 3
Examines the biblical heritage and major doctrines of Christian faith. Explores basic issues such as individualism and community, personal decision-making, social justice, and relating to other religious traditions. Class members will be challenged to think through their own responses to these issues.

Socn 305 Social Systems ............................................................................... 3
Family and organizational systems within their cultural and societal context are examined from a social-theory perspective. Functional/dysfunctional systems and change theory are studied.

Hist 202 American History II (1877 to present) ............................................. 3
or Hist 203 World History II (1500 to present) ............................................... 3
See history section of the catalog for course descriptions.

Nurs 437 Cross-Cultural Aspects of Health and Illness .............................. 4
Health, illness and various health-care systems are explored. Theory relative to culture and specific aggregates will be studied.

Hum 223 Humanities: Music and Art ............................................................. 3
or Hum 224 Humanities: Music and Theater ............................................... 3
or Hum 225 Humanities: Art and Theater .................................................... 3
See humanities section of the catalog for course descriptions.

Nurs 438 Community Health Nursing* ........................................................... 4
Applies a synthesis of nursing, public health and community health theories to the assessment and care of "aggregate as client" in a community setting. Emphasis will be on aggregates or populations rather than individuals and families. Builds on prior courses that focus on assessment, social systems, culture, research, communications, and client education.

Nurs 439 Health-Care Ethics ........................................................................... 2
In this course, students will actively reflect on ethical issues which are present in health care for practitioners and consumers. The focus will be on the process of ethical inquiry rather than decision outcomes. In the process of analyzing bio-ethical issues, student will be introduced to ethical theory and modes of ethical analysis informed by the Christian faith.
Nurs 447 Issues Seminar
The focus of this course is on integration of current issues in the practice of professional nursing. Students articulate their own philosophy of health care and nursing including their faith beliefs, rights of clients and responsibility to deliver quality nursing care.

Nurs 449 Leadership in Nursing*
Leadership and management principles are applied to clinical practice. Clinical practice component of course will be arranged with each student.

* Denotes courses with clinical component or practice-based project

Peace, justice and conflict studies (PJCS)

Associate Professors J. C. Liechty (chair), C. Schrock-Shenk
Assistant Professor D. Johnson
Adjunct Professors K. Shelly, R. Shands Stoltzfus, P. Thomas, S. Thomas

Introduction
Goshen College offers four academic peace programs. Visit the peace, justice and conflict studies program Web site at www.goshen.edu/peace/Home.

- Major in peace, justice and conflict studies
- Minor in conflict transformation studies
- Minor in peace and justice studies
- Certificate in conflict transformation for teachers

The major introduces students to the array of topics and disciplines that make up peace, justice and conflict studies, while also allowing students to focus in areas of particular interest. The minor in conflict studies is oriented toward students hoping to use conflict transformation skills in a particular career or profession. The minor in peace and justice studies prepares students from a wide variety of academic majors for work in peace and justice organizations and other service agencies in the United States or abroad. The certificate program in conflict transformation, offered in conjunction with the teacher education program, trains education students in conflict transformation skills relevant for the classroom. The PJCS department and its programs are rooted in Anabaptist-Mennonite theology and history. Courses emphasize action-reflection learning in addition to more traditional classroom opportunities. Classes, internships and co-curricular activities equip students with a framework of personal values and skills that will help them make a positive impact wherever they live.

Special resources and activities
At the Indianapolis Peace Institute, students from three collaborating colleges (Goshen, Manchester and Earlham) and beyond join in an urban peacemaking experience, involving a substantial internship, several peace studies courses and independent study.

PJCS majors undertake a wide variety of paid and voluntary internships in Goshen, across the United States, and around the world. Examples of recent internships include Mennonite Disabilities, La Casa of Goshen, the Fourth
Freedom Forum, the Center for Community Justice in Elkhart, the Elkhart County Probation Department, Boys and Girls Clubs of Elkhart and Goshen, Jubilee Partners in Georgia and Corrymeela in Northern Ireland.

Campus co-curricular activities include the annual C. Henry Smith Peace lectureship, the annual student peace oratorical contest, the student PAX organization, the peace play competition, peace studies community forums, peace scholars-in-residence, the Intercollegiate Peace Fellowship and the peace library collection.

**Career and postgraduate opportunities**

Students are prepared to enter graduate programs in conflict transformation studies or in peace and justice studies – and any other field of scholarship in which critical and creative analysis of difficult issues is a priority. They are also prepared to work in a wide variety of organizations engaged in work around themes of mission, peace, restorative justice, conflict transformation, social justice, and other forms of service. Professional students electing the minor or professional endorsement in conflict transformation studies will be prepared to assist individuals, organizations and communities to deal constructively with conflict in the work environment.

**Major in peace, justice and conflict studies**

**41-44 credit hours**

- Bibl 321, Biblical Themes of Peace ..................................... 3
- PJCS 311, Junior Seminar ................................................ 3
- PJCS 313, Violence and Nonviolence ................................ 3
- PJCS 325, Mediation: Process, Skills and Theory ............. 4
- PJCS 409, Internship ...................................................... 1-4
- PJCS 411, Senior Seminar ................................................ 3
- PJCS 425, War and Peace in the Modern World ............. 3
- One of the following:..................................................... 3
  Econ 202, Principles of Economics
  Hist 255, History of Global Poverty
- One of the following:..................................................... 3
  PJCS 322, Religion, Conflict and Peace
  PJCS 426, Conflict in Groups
- One of the following: .................................................... 3
  PoSc 200, Introduction to Political Science
  PoSc 308, International Politics
- One of the following:..................................................... 3
  Phil 302, Ethics and Morality
  PJCS 312, War, Peace and Nonresistance
  Rel 316, Liberation Theologies
- One of the following:..................................................... 3
  PJCS 347, Justice/Restorative Justice
  PJCS 350, Dynamics and Theology of Reconciliation
- One of the following:..................................................... 3
  PoSc 210, Introduction to Public Policy
Soc 322, Social Policy and Programs
Soc 391, Methods of Social Research
• Any PJCS elective or other peace-related course approved by the adviser ................................................................. 3

Planning guide

SST
Recommended: sophomore year, any summer, spring term junior year or fall term senior year

First year
General education
SST language
Transforming Conflict and Violence (recommended but not required)
Principles of Economics II or History of Global Poverty

Second year
General education
Expository Writing (strongly recommended)
Violence and Nonviolence
War, Peace and Nonresistance
Mediation: Process, Skills and Theory
Political Science or International Politics

Third year
General education
Junior Seminar
Introduction to Public Policy, Social Policy and Programs or Methods of Social Research
Three additional courses required for PJCS major

Fourth year
Balance of general education
Remaining courses required for PJCS major
Senior Seminar

Minor in conflict transformation studies

20 credit hours
• PJCS 210, Transforming Conflict and Violence .................. 3
• PJCS 313, Violence and Nonviolence............................... 3
• PJCS 325, Mediation: Process, Skills and Theory .............. 4
• One of the following:......................................................... 3
  PJCS 347, Justice/Restorative Justice
  PJCS 350, Dynamics and Theology of Reconciliation
• PJCS 410, Senior Advanced Work ................................. 1
• PJCS 426, Conflict in Groups ......................................... 3
• Any PJCS course .......................................................... 3

Minor in peace and justice studies

20 credit hours
• One of the following:......................................................... 3
  Bibl 321, Biblical Themes of Peace
  PJCS 312, War, Peace and Nonresistance
  PJCS 332, Religion, Conflict and Peace
• PJCS 311, Junior Seminar .............................................. 3
Certificate in conflict transformation for teachers

9 credit hours
This certificate may be added to an elementary, middle school, or secondary education program. For further information, consult with a member of the teacher education faculty. Education students who wish to complete the conflict transformation studies minor at the conclusion of their certificate requirements should declare the minor and consult with a PJCS adviser for further details.

- PJCS 210, Transforming Conflict and Violence .................. 3
- PJCS 325, Mediation: Process, Skills and Theory .......... 3-4
- PJCS 426, Conflict in Groups............................................. 3

PJCS courses

PJCS 209 Field Experience ................................................................. 1 (1-4)
An approved, supervised internship related to peace, justice and conflict studies work.

PJCS 210 Transforming Conflict and Violence ........................................... 3
Explores the potentially constructive nature of conflict, the destructive nature of violence and the relationship between the two. Examines various patterns of communication, conflict and violence and what is needed for transformation. Students will reflect on their own conflict styles, build their skills for peacemaking and examine their personal temptations for violence. Because PJCS 210 introduces concepts developed in greater depth in PJCS 325, this course may not be taken concurrently with or following PJCS 325.

PJCS 255 History of Global Poverty ............................................................. 3
(Cross-listed from Hist 255) Examination of the phenomenon and roots of global poverty in the colonial expansion of Europe, the rise of nationalism in the colonies and post-colonial globalization and development. Emphasis will be placed on viewing this problem and its solution from the perspective of common people in the global south.

PJCS 305 Prosocial Behavior ................................................................. 3
(Cross-listed from Psyc 305) A study of theories and empirical research concerned with positive human interaction. Topics of special focus include altruism, empathy and service from the perspective of both the helper and the recipient. Some attention to applications in education, government and church agencies. Offered alternate years.

PJCS 307 Conflict & Conciliation Irish Lit .................................................. 3
(Cross-listed from Engl 207/307) Study of literature shaped distinctively by cultural and theoretical concerns related to ethnicity, gender and race. Field
studies in the cultural geography of 20th-century Irish authors, including Yeats, Joyce, Synge, Mary Lavin, Peter Fallon and Seamus Heaney. Conducted during May or summer term at urban and rural locations in the Republic of Ireland.

PJCS 310 Issues in PJCS ................................................................. 3
Contemporary issues, e.g., militarism, organizational power relationships and conflict transformation, nuclear weaponry, economic sanctions, domestic violence.

PJCS 311 Junior Seminar .............................................................. 3
Junior Seminar has three main purposes: to explore classic and contemporary issues in conflict and peace through faculty- and student-led seminars to develop research and writing skills appropriate for PJCS; and to begin work toward a major research project to be completed in Senior Seminar.

PJCS 312 War Peace & Nonresistance ........................................ 3
A survey course that examines the development of warfare ideologies and religious responses to warfare. Includes examination of just war theory and Anabaptist-Mennonite stances on nonresistance, pacifism and nonviolent action.

PJCS 313 Violence and Nonviolence ......................................... 3
An interdisciplinary study of the nature, causes and types of violence. Examines the juxtaposition of scientific theories and religious teachings about violence and nonviolence.

PJCS 316 Liberation Theologies ............................................... 3
(Cross-listed from Rel 316) Focuses on three contemporary theologies of liberation (Latin American Liberation Theology, North American Black Theology and North American Feminist Theology) as they are developing in the Americas. The course examines similarities and differences among these three theologies - in conversation with Womanist and Latina theologies - as each addresses specific theological questions raised by the people of God in actual contemporary situations of exploration and oppression. The course also has a praxis component in which students move outward into the community.

PJCS 319 Doing Theology Abroad ............................................... 4
(Cross-listed from Rel 319) An intensive seminar taught on location in a southern hemisphere country, focusing on socio-political relations, practical theology and the significance of global Christianity. Participants live and attend church-related activities with host-country families. Proficiency in language of host country desired, but not required.

PJCS 320 Borderlands ................................................................. 3
This course will take place along the U.S./Mexico border. It will examine border dynamics and their impact on politics, economics, migration, the environment, and more. Students will hear many voices, diverse and sometimes contradictory, of people involved in border communities.

PJCS 325 Mediation: Process, Skills, Theory ......................... 4 (3-4)
Focuses on the third party role of the mediator. Explores the theoretical basis for mediation, its various applications in North America, and critiques of the
appropriateness of mediation for certain types of conflicts. Emphasis will be on experiential learning to develop the skills needed for mediation in formal and informal settings. PJCS majors and minors, as well as Interdisciplinary majors with a PJCS component, will complete one hour of applied experience.

**PJCS 330 Gender in World History** ............................................................... 3
(Cross-listed from Hist 330) A comparative studies in world history course. Women have been left out of the world's history, particularly women in the nonwestern world who are stereotyped as oppressed and passive. Putting women back into the center of world history unsettles older historical paradigms and challenges our ethnocentric assumptions. Explores the diverse experiences of women as active agents in shaping their world through a comparative case-study approach.

**PJCS 332 Religion, Conflict and Peace** ......................................................... 3
Examines the role of religion in causing and nurturing violence and in promoting peace themes which have emerged as central to the pursuit of peace in the 21st century. The course will also consider implications of these themes for Christian mission.

**PJCS 335 History of Ethnic Conflict** ............................................................. 3
(Cross-listed from Hist 335) A comparative studies in world history course. The world seems plagued with increasing conflict between ethnic groups. Explores the historical roots of this problem through a comparative case-study approach and takes an interdisciplinary approach both to analysis of the problem and its solution. Students will present an in-depth research paper on the historical roots of one conflict.

**PJCS 344 Individual Readings** ............................................................. 1 (1-3)
Independent reading in peace, justice, and conflict transformation studies. Student takes initiative to develop plan with a department faculty member. By consent of the faculty member only

**PJCS 345 Group Readings** ................................................................... 1 (1-2)
Working with selected writings, student will examine the themes and issues raised by an important scholar's whole body of work.

**PJCS 347 Justice/Restorative Justice** ......................................................... 3
Begins with an account of some of the classic and mainstream understandings of justice and then moves on to an overview of the foundational principles of restorative justice and its various practical applications. The course will examine and address the needs of victims, offenders, communities and broader systems. It will specifically examine the Victim Offender Reconciliation (VORP) model and its role in the North American criminal justice system. It will also examine models from other contexts such as family group conferences and circles.

**PJCS 348 Sexual Violation and Violence** ..................................................... 3
Examines issues of sexual violation and violence within the lives of individuals and communities. It explores the question, "What is the nature of reconciliation, forgiveness and healing in the long-term aftermath of sexual violence?" and considers conflicts of opinion and belief about these issues.
PJCS 350 Dynamics/Theology of Reconciliation .............................................. 3
An interdisciplinary examination of the work of reconciliation in interpersonal and small group relationships, but especially in large-scale social and political contexts.

PJCS 355 Contemporary Women’s Issues ..................................................... 3
(Cross-listed from WoSt 355) An upper-level topics course that explores selected issues in the lives of contemporary women, such as women’s bodies, sexuality and health; mother-daughter relationships; women and war; women and sexual violence; women and economic status in globalizing economies. Professors bring an interdisciplinary perspective to the subject. This course is taught in a cooperative learning environment

PJCS 405 Personal Violence ........................................................................... 3
Considers the nature and impact of violence in the lives of individuals or small groups. Topics may include, for example, the death penalty, sexual violence, politically motivated torture or right-to-die issues.

PJCS 406 Spiritual Path of the Peacemaker .................................................. 3
Uses biographical and autobiographical narratives alongside formal and theoretical writings of peacemakers. Investigates the question, "How does a peacemaker's inner spiritual journey relate to her or his peace work?"

PJCS 409 Senior Internship ................................................................. 3 (1-4)
An approved internship or work experience related to peace, justice, and conflict studies. Examples include supervised activities in shelters for the homeless, work with local, regional, national or international peace, justice and conflict transformation agencies and organizations or work with congregational and denominational peace centers.

PJCS 410 Senior Advanced Work ................................................................. 1
A written project in which seniors with a Peace and Justice minor or a Conflict Transformation minor reflect on the relationship between their academic major and what they learned in their PJCS courses.

PJCS 411 Senior Seminar .............................................................................. 3
Students will complete a major research project on a topic of their choosing. Senior Seminar will also address life-after-college issues such as graduate school, resume preparation and job interviews.

PJCS 425 War and Peace in the Modern World ........................................... 3
Working primarily from an international relations perspective, this course will examine changing patterns of fighting wars and seeking peace.

PJCS 426 Conflict in Groups ......................................................................... 3
Using a systems approach, students will explore conflicts in organizations and communities, locating and examining models for assessment, diagnosis, intervention and evaluation. Working with case studies and real life situations of structural injustice and conflict, students will learn practical strategies for dialogue, problem-solving, healing, reconciliation and system change. Prerequisite: PJCS 325.

PJCS 430 Healing Wounds of Violence .......................................................... 3
Focuses on interdisciplinary examination and analysis of historical and
contemporary models for recognizing, assessing and healing the wounds of violence. Investigates the question, "What are the strategies or healing processes for individuals and communities who seek to heal themselves or others from the wounds of violence?"

**Physical education**

*Associate Professors V. Hershberger, J. Lehman (chair)  
Assistant Professors G. Chupp, S. Wiktorowski*

**Introduction**

The physical education department offers a major, two minors and a coaching endorsement. Four different options are available in the major: general studies, teacher education, sport communication and sport management. Successful completion of the coaching endorsement certifies the student for coaching through the American Sport Education Program. Visit the physical education department Web site at [www.goshen.edu/physed/Home](http://www.goshen.edu/physed/Home).

- Major in physical education
- Minor in physical education
- Minor in health
- Coaching endorsement

The physical education department is committed to fostering personal, intellectual, spiritual and social growth in all students within the context of human movement. The department accomplishes this mission through curricular and co-curricular programs. First, a wellness course serves the general education curriculum, offering both the acquisition of wellness knowledge and the development of a personalized wellness plan. Second, a major and a minor in physical education prepare graduates for a variety of careers. Third, elective courses in physical activity provide opportunities for students in any major to develop lifetime sport and exercise skills.

In addition, two co-curricular programs, intramurals and intercollegiate athletics, provide many meaningful and intense opportunities for student growth. These programs have a significant impact in the lives of many Goshen College students who participate as leaders, event staff, athletes and as spectators. Additionally, these programs provide numerous occasions each week for members of the campus and larger community to gather in a spirit of recreation.

**Career and postgraduate opportunities**

Physical education graduates are currently teaching and coaching in public and private elementary, middle and high schools. Successful completion of other programs in this department prepare graduates to work in sport management, retail sales, fitness facilities, athletic programs, municipal recreation, camp settings, Boys and Girls clubs, and community programs. Some alumni in physical education enter graduate school to obtain an advanced degree.
Major in physical education

44-74 credit hours (Core courses and one option below)

Core courses (17 credit hours):
- One of the following courses: ............................................... 4
  Biol 203, Human Anatomy and Physiology (Preq: Chem 101)
  Biol 154, Human Biology (with special 1 credit hour lab)
- PhEd 250, History and Philosophy of Physical Education .... 2
- PhEd 310, Administration of Physical Education ............. 2
- PhEd 315, Kinesiology ..................................................... 3
- PhEd 317, Exercise Physiology ........................................ 3
- PhEd 330, Psychology of Motor Learning ...................... 3

General studies option (27-28 credit hours)
- PhEd 200-270 Sports Skills Electives(total of 7)
  Area I: Aquatics - PhEd 226, 232, 234 or 240 ................. 1
  Area II: Dance - PhEd 200 or 224 ................................. 1
  Area III: Gymnastics - PhEd 222 ................................. 1
  Area IV: Individual Sports - PhEd 206, 218, 230 or 236 .. 1
  Area V: Outdoor Recreation - PhEd 210, 214, 228 or 255. 1
  Elective sports skills - any of above; also PhEd 223, 238, 242 or 270 .................................................. 2
- PhEd 102, First Aid and CPR ..................................... 1
- PhEd 103, Basic Athletic Training .................................. 2
- PhEd 308, Teaching Sport Skills and Strategies ............ 3
- PhEd 309, Physical Education for Children ................... 3
- PhEd 320, Adaptive Physical Activity and Sport .......... 3
- PhEd 345, Theory and Techniques of Coaching ............ 3
- PhEd 409, Physical Education Internship ....................... 2-3
- PhEd 410, Physical Education Senior Seminar ............ 3

Teacher education option (52-57 credit hours)

For grades K-12:
- All of the General studies requirements listed above except PhEd 409 and PhEd 410 .............................................. 22
- Professional secondary education requirements (see Education department catalog pages) .................. 30
- PhEd 311, Physical Education Teaching Internship ........ 4
- Educ 401, Child Development Practicum ....................... 1

For grades 5-12:
- All of the General studies requirements listed above except PhEd 409 and PhEd 410 22
- Professional secondary education requirements (see Education department catalog pages) .................. 30

Sport communication option (27 credit hours)
- PhEd 409, Physical Education Internship ..................... 3
- PhEd 410, Physical Education Senior Seminar ............ 3
• Six credit hours selected from the following: ...................... 6
  PhEd 200-242, PhEd 270, PhEd 308, PhEd 320, PhEd 345
• Comm 202, Oral Communication .................................... 3
  or Comm 204, Expository Writing (highly recommended)
• Comm 250, Writing for Media ....................................... 3
• Comm 240, Communication Research .............................. 3
  or Comm 383, Communication and Society
• Additional electives in Physical Education ...................... 1-3
• Remaining elective courses in Communication, selected
  from the following: ...................................................... 3-5
  Comm 212, Broadcast Media Production I
  Comm 255, Photocommunication
  Comm 260, Broadcast Writing
  Comm 308, Feature Writing
  Comm 350, Reporting for the Public Good

**Sport management option (27 credit hours)**

• PhEd 409, Physical Education Internship ......................... 3
• PhEd 410, Physical Education Senior Seminar .................. 3
• Six credit hours of any sports skills selected from: .......... 6
  PhEd 200-242, PhEd 270, PhEd 308, PhEd 320, PhEd 345
• Acc 201, Principles of Accounting: Financial ................. 3
• Bus 315, Principles of Management ................................ 3
• Bus 316, Principles of Marketing .................................. 3
• Six credit hours selected from the following: ................. 6
  Bus 328, Venture Planning
  Bus 336, Advertising
  Chem 220, Human Nutrition
  PhEd 101, First Aid and CPR
  PhEd 103, Basic Athletic Training
  Psyc 200, Social Psychology

**Planning and advising notes**

If Biol 154 is chosen, rather than Biol 203, the student must also register for a
special Human Biology lab that earns 1 credit hour. Biol 203 has a prerequisite
of Chem 101 taken in fall semester, or two semesters of high school chemistry
with a grade of B- or higher.

Sport communication elective credit hours must total 6, in a combination of
PhEd and Comm courses.

**Planning guide (Teacher education option)**

**First year**

  Wellness Colloquium
  *History and Philosophy of Physical Education and Sport
  (or second year)
  Sports Skill Electives
  Human Biology for 4 credit hours (fall)
  or Human Anatomy and Physiology (spring)
  Basic Athletic Training
  First Aid and CPR
General Education
Foundations of Education (May)

**Second year** Foundations of Education (or first year)
*Psychology of Motor Learning (May)
Physical Education for Children
Human Biology for four credit hours (if not already taken)
*Administration of Physical Education and Sport (or third year)
Theory and Techniques of Coaching
*Exercise Physiology
Exceptional Learners
Educational Psychology
General Education
SST (or junior or senior)

**Third year**
*Teaching Sports Skills and Strategies (May)
Sports Skill Elective
Adapated physical activity and Sport (or second year)
*Kinesiology
Secondary Curriculum Instruction
Middle School Curriculum and Instruction
General Education

**Fourth year**
Student Teaching (education majors)
Secondary Education Seminar
Balance of major courses
Physical Education Senior Seminar
Sports Skill Elective
General education

*Courses offered in alternate years

**Minor in physical education**

**24 credit hours**
- One of the following courses: ............................................... 4
  Biol 203, Human Anatomy and Physiology (prereq: Chem 101)
  Biol 154, Human Biology (with special 1 credit hour lab)
- PhEd 200-242, 270, Sports Skills Electives ....................... 2
- PhEd 308, Teaching Sport Skills and Strategies ............... 3
- PhEd 345, Theory and Techniques of Coaching .............. 3
- Eight credit hours selected from the following: ............ 8
  PhEd 102, Basic Athletic Training
  PhEd 315, Kinesiology
  PhEd 317, Exercise Physiology
  PhEd 320, Adapted Physical Activity and Sport
  PhEd 330, Psychology of Motor Learning
- Four credit hours selected from the following: ............. 4
  PhEd 250, History and Philosophy of Physical Education
and Sport
PhEd 309, Physical Education for Children
PhEd 310, Administration of Physical Education and Sport
PhEd 410, Senior Seminar

Minor in health

24-26 credit hours
- Biol 154, Human Biology .................................................... 3
- Biol 203, Human Anatomy and Physiology (prereq: Chem 101) ................................................................. 4
- Chem 220, Human Nutrition............................................... 3
- PhEd 102, First Aid and CPR ............................................. 1
- PhEd 103, Basic Athletic Training ...................................... 2
- Soc 260, Human Sexuality ................................................ 3
- Five-eight credit hours selected from the following: ....... 5-8
  Psyc 200, Social Psychology
  Psyc 210, Developmental Psychology
  Soc 210, Sociology of the Family
  Soc 220, Human Origins/Human Nature
  Soc 334, Race, Class and Ethnic Relations
- Three-four credit hours selected from the following: ....... 3-4
  Biol 111, Biological Principles
  Chem 101, Chemistry and Physics of Life

Coaching endorsement

6 credit hours
- PhEd 102, First Aid and CPR ............................................. 1
- PhEd 103, Basic Athletic Training ...................................... 2
- PhEd 345, Theory and Techniques of Coaching ............... 3

Physical education courses

PHED 100 Wellness ................................................................. 1
Designed to promote wellness in body, mind and spirit. Each participant will gain knowledge that informs decision-making related to mental and spiritual health. Students develop and begin implementing a personalized fitness program. Topics addressed include cardiovascular fitness, muscular endurance and strength, flexibility, body composition, nutrition, stress management, spiritual wellness and lifestyle choices.

PHED 102 First Aid & CPR ..................................................... 1
The course will provide an Introduction to first aid, practical experience in basic first aid skills, first aid for specific sport inquiries and a practical guide to sport related liability. Successful completion of the course results in certification for one year.

PHED 103 Basic Athletic Training ........................................ 2
This course is valuable to anyone who plans to coach or pursue future certification in athletic training. Topics covered include: emergency procedures,
evaluation and management of injuries to the foot, ankle, knee, shoulder, elbow and hand. Students learn taping techniques.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHED 200</td>
<td>Aerobic Dance</td>
<td>1</td>
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<tr>
<td>PHED 206</td>
<td>Badminton</td>
<td>1</td>
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<tr>
<td>PHED 210</td>
<td>Canoeing/Backpacking</td>
<td>1</td>
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<tr>
<td>PHED 214</td>
<td>Cross Country Skiing</td>
<td>1</td>
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<tr>
<td>PHED 216</td>
<td>Cycling</td>
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<tr>
<td>PHED 218</td>
<td>Golf</td>
<td>1</td>
</tr>
<tr>
<td>PHED 222</td>
<td>Gymnastics: Tumbling</td>
<td>1</td>
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<tr>
<td>PHED 224</td>
<td>International Folk Dance</td>
<td>1</td>
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<tr>
<td>PHED 226</td>
<td>Life Guard Training</td>
<td>2</td>
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<tr>
<td>PHED 230</td>
<td>Racquetball</td>
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<td>PHED 232</td>
<td>Beginning Swimming</td>
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<tr>
<td>PHED 234</td>
<td>Advanced Swimming</td>
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<tr>
<td>PHED 236</td>
<td>Tennis</td>
<td>1</td>
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<tr>
<td>PHED 240</td>
<td>Water Safety Instruction</td>
<td>2</td>
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<tr>
<td>PHED 250</td>
<td>History &amp; Philosophy of Physical Ed</td>
<td>2</td>
</tr>
<tr>
<td>PHED 255</td>
<td>Camping and Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

This course provides an introduction to the field of physical education and includes an overview of the history of physical education and sport. The timeline begins with early civilization and continues through modern events including the Olympics. Additionally, a variety of philosophical approaches and their implications are discussed.

Students will have hands-on experience in a wilderness setting. They will learn a variety of skills that may include: trip planning, map and compass reading, environmental care and study, spiritual growth and leadership skills. Other skills will be related specifically to either backpacking and/or canoeing.
PHED 308 Teaching Sport Skills & Strategies ................................................. 3
This is an applied course focusing on fundamental techniques in a variety of sports. Content includes theory, best practice in secondary level pedagogy and skill content. There is a special focus on organization and management for teaching, skill progressions, and common problems/corrections of basic and intermediate-level skills and tactics.

PHED 309 Physical Education for Children ............................................. 3 (2-3)
Philosophy, methods and materials for teaching physical education to children. Some practical experience with children included. While this course is open to any student, there is a clear focus on preparing students to teach elementary physical education.

PHED 310 Administration of Physical Educ ............................................... 2
A focus on administrative practices in the areas of legal responsibility, personnel, finance, public relations, equipment, facilities, intramurals and athletics. Sociological and psychological issues related to leadership roles in physical education and sport are included.

PHED 311 Physical Educ Teaching Internship ......................................... 4
This course is designed to make sure teacher licensure students have a significant field experience at the elementary and secondary levels by the completion of their programs. If a student plans to complete the education student teaching experience (Educ 405) at the secondary level, this internship should be completed with an elementary school teacher and vice versa. Prerequisite: PhEd 308 or 309.

PHED 315 Kinesiology ............................................................................. 3
A consideration of the anatomical and mechanical factors contributing to skilled performance in sport. Laws and principles from anatomy and physics that govern the use of the human body, objects and implements in a sport context are applied to the teaching and coaching of sport skills. Prerequisite or concurrent registration: Biol 154 with depth credit.

PHED 317 Exercise Physiology ................................................................. 3
A study of how the human body adjusts during various kinds of exercise. Laboratory equipment will be used when analyzing neuromuscular activity, circulation, respiration and metabolism as it applies to the trained and untrained. Prerequisite: Biol 154 with depth credit or Biol 203.

PHED 320 Adapted Physical Activity and Sport ..................................... 3
This course, required for all physical education teacher licensure and general physical education majors, will examine attitudes, methods, techniques, and special considerations important in addressing physical activity needs and interests of children and adolescents with disabilities. Critical aspects of motor development will be studied early in the semester, followed by adaptive programming and leadership of physical activity in inclusive settings. A concurrent field placement will be a required part of the class. This class is an elective for students in the sport management or sport communication concentrations.

PHED 330 Psychology of Motor Learning ............................................. 3
A study of the influence of psychological variables on learning motor skills.
Some topics included are: motor-learning theory, individual differences, perception, motivation and social factors.

**PHED 345 Theory & Techniques of Coaching ............................................. 3**
The course will present an overview of basic theories and coaching applications, including topics such as philosophy, psychology, ethics, practice and game preparation. This course includes preparation for and an opportunity to take the American Sport Education Program certification exam. ASEP certification is required for coaching in Indiana and other state public school systems.

**PHED 409 Internship ................................................................. 2 (2-3)**
A practical experience related to the student's interest and ability. Generally occurs in an off-campus setting. For non-teaching majors only.

**PHED 410 Senior Seminar ................................................................. 3**
An introduction to descriptive and inferential statistics and test analysis in physical education. Research methods in physical education; selection of a research problem, collection of data, basic analysis, written and oral presentation of findings. Course includes the consideration of professional and ethical issues in physical education. Students will finalize resumes and practice interviewing skills as well. Required for all senior physical education majors.

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**Physics and engineering**

*Professors J. R. Buschert (chair), C. Helrich
Adjunct Professor P. Meyer Reimer*

**Introduction**
The physics department prepares responsible physicists, engineers and teachers for academic, research and industrial positions. Student involvement in active research and in teaching within the department fosters an understanding of the philosophical and structural concepts of physics as well as an ability to apply the science itself. The department consciously promotes an active participation in the wider scientific and engineering communities. Visit the physics department Web site at [www.goshen.edu/physics/Home](http://www.goshen.edu/physics/Home).

A major in physics is offered, as well as a 3-2 pre-engineering program described below. Certification for secondary education in physics or physical sciences is also available.

- Major in physics
- Engineering 3-2 program
- Secondary education certification

**Career and postgraduate opportunities**
Upon graduation, the physics major is prepared for graduate study in physics or engineering. Other possibilities include science secondary education or the combination of a physics baccalaureate degree with a master’s degree in business administration, which affords the background for a management career in high technology and engineering industries. Biophysics and the neurosciences are growing fields requiring the background of an education in
physics. Study of physics also provides the training and experience prized in many modern careers beyond the standard boundaries of science and engineering.

All Goshen physics majors who have chosen to pursue a graduate degree have been admitted to graduate school. More than 70 percent of the physics majors elect this path. Individual professors at research universities have testified to the excellent preparation received at Goshen College. Recent Goshen graduates have chosen schools such as Purdue University, Princeton University, the University of Notre Dame, Carnegie-Mellon University, Case Western Reserve University, the Pennsylvania State University, the University of North Carolina, the University of Tennessee, Auburn University, Tulane University and Vanderbilt University.

**Engineering 3-2 program**

The combination of a liberal arts background and an engineering degree from one of the leading engineering schools in the nation is the optimal education for the modern engineer. In this program the student spends three years at Goshen College and two or two and a half years at the engineering school, receiving a bachelor of arts degree in physics (or chemistry) from Goshen and a bachelor of science degree from the engineering school.

Goshen College has program agreements with Case School of Engineering of the Case Western Reserve University (Cleveland, Ohio), Washington University (St. Louis, Mo.) and the University of Illinois (Urbana/Champaign). Admission to the engineering school is granted to a student with a 3.0 overall grade point average and at least a 3.0 in science and mathematics courses, upon recommendation of the engineering adviser.

Transfer to other schools is possible, but must be done on an individual basis. Goshen College will grant the B.A. degree when the student completes the engineering course and the Goshen College requirements.

While at Goshen College, the engineering student is enrolled as a physics or chemistry major. Studies of science and mathematics to fulfill the requirements of the first two years in the engineering school are undertaken. In addition the student completes the Goshen College general education requirements in communication, religion, humanities and other fields. The Study-Service Term (SST) or alternative is also required.

A large percentage of the Goshen students pursuing this program receive *cum laude* degrees from the engineering school and continue graduate study. Employment opportunities are excellent for graduates from this program.

**Teacher education certification**

Teacher certification is available for grades 5-12 in two related areas. Courses needed in addition to the standard track physics major are:

**Physics** – Phys 208, Phys 210  
**Physical Science** - Chem 200, Chem 303, Phys 210  

Also required are 30 credits of education courses, including a semester of student teaching. PJCS 210 is required for general education. The first
education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

**Major in physics, standard track**

50-52 credit hours

- Chem 111-112, General Chemistry ........................................ 8
- Math 211-213, Calculus I, II & III ..................................... 12
- Math 321, Differential Equations ...................................... 3
- Phys 101-102, Research Seminar ...................................... 1-2
- Phys 203-204, General Physics ........................................ 8
- Phys 302, Analytical Mechanics ....................................... 3
- Phys 303, Classical Field Theory ..................................... 3
- Phys 310, Thermodynamics ............................................. 4
- Phys 313, Quantum Mechanics II ..................................... 3
- Phys 410, Senior Seminar .............................................. 3
- Physics electives ......................................................... 2-3

**Planning guide for engineering 3-2 track**

**First year**
- General education
- Calculus I, II, III
- General Physics
- Research Seminar
- Computer Programming*

**Second year**
- General education
- General Chemistry
- Differential Equations
- Thermodynamics
- Quantum Mechanics II
- SST (summer)

**Third year**
- General education
- Methods of Mathematical Physics*
- Electronics*
- Analytical Mechanics
- Optics and Holography*
- Classical Field Theory

**Planning and advising notes**

*Note that the three-year engineering plan above includes some courses required for engineering, but not required for the standard physics major.

Physics department advisers will assist each student in creating a suitable four-year plan. Students should choose SST units freely, anticipating that course schedule adjustments can be made to accommodate the choice. Because of the extensive requirements in mathematics in the physics major, a double major in mathematics or applied mathematics may be undertaken. Many have also obtained double majors in physics and chemistry or physics and biology. Double majors in areas outside of the sciences such as history are encouraged. A number of physicists have pursued minors in music.
Special resources and opportunities
Goshen College offers multiple opportunities for undergraduate research in physics, both during the school year and also during the Maple Scholars program in summer. Working on a research project with a faculty member allows the student to encounter the real world beyond the classroom. Student authors present papers at the annual National Conference on Undergraduate Research and at professional conferences.

The physics department research center is the Turner Laboratory, which has facilities for optical holographic studies of musical instruments, phospholipid bilayer studies in biophysics and X-ray diffraction studies. Theoretical modeling studies are also conducted in the laboratory. Collaborative research is presently underway with the University of Notre Dame and Brigham Young University. These collaborations provide a steady flow of research problems as well as an invaluable contact for both students and faculty. The interaction allows the student to explore further possibilities for education or career, and the experience makes the Goshen student particularly attractive to graduate schools.

There is no explicit internship requirement in physics, but internships have been arranged for interested students. Most students are involved in some form of research. A thesis may be undertaken in consultation with the research faculty adviser. Thesis abstracts are integral parts of graduate and professional school applications.

Cooperative (Co-op) experiences are available for engineering students.

Physics courses

PHYS 100 The Physical World .................................................................................. 3
An introduction to physical science for nonmajors. The Manhattan Project is used as a vehicle for the study of physics, engineering, and scientific management. The course is experiential.

PHYS 101 Research Seminar .................................................................................. 1
An introduction to the department and to physics and engineering as careers. Presentations by faculty and students of research, introduction to the scientific literature and scientific writing, individual research on a chosen topic.

PHYS 102 Research Seminar .................................................................................. 1
An introduction to the department and to physics and engineering as careers. Presentations by faculty and students of research, introduction to the scientific literature and scientific writing, individual research on a chosen topic.

PHYS 154 Descriptive Astronomy ........................................................................ 3
An introduction to astronomy including the study of the solar system, stars and stellar development, galaxies and cosmology. Laboratory experience will include astronomical observation and measurement.

PHYS 203 General Physics .................................................................................... 4
A calculus and vector treatment of basic physics including mechanics, sound, electricity, magnetism and light. Required of physics majors and recommended
for majors in the physical sciences. Lectures and laboratory. Prerequisite or concurrent: Math 211-212. (offered annually)

**PHYS 204 General Physics** ................................................................. 4
A calculus and vector treatment of basic physics including mechanics, sound, electricity, magnetism and light. Required of physics majors and recommended for majors in the physical sciences. Lectures and laboratory. Prerequisite of concurrent: Math 211-212, Phys 203.

**PHYS 208 Introduction to Research** .................................................. 2
An introduction to the techniques and practice of experimental research. Students participate in laboratory work in the Turner Laboratory. Course is considered training for future research in the physics department. Prerequisites: Phys 203-204 or consent of instructor.

**PHYS 210 Modern Physics** ................................................................. 3
An introduction to the basis of modern physics. Special relativity, experimental origins of the quantum theory, elementary particle physics, and cosmology. Prerequisite: Phys 203-204 or consent of instructor.

**PHYS 240 Physics of Music** ................................................................. 3
A study of the physics of a variety of musical instruments including the voice, the physical origins of musical scales and temperaments, perception effects in the ear and brain and room acoustics. Many class sessions will be laboratory experiences and each student will do a major project. Prerequisite: Phys 203 or high school physics, Mus 102 or equivalent ability or consent of instructor.

**PHYS 301 Methods of Mathematical Physics** .................................... 3

**PHYS 302 Analytical Mechanics** ....................................................... 3
Newtonian Mechanics based on the formulation of Lagrange and Hamilton. Applications to oscillations, orbital motion, scattering, rigid body motion. Special topics include chaos theory and relativity. Prerequisites: Phys 203-204, Phys 301 or consent of instructor.

**PHYS 303 Classical Field Theory** ..................................................... 3
Study of electric and magnetic fields using the formulation of Maxwell. Maxwell's equations are developed with reference to experiments followed by selected applications including wave propagation in dispersive media, plasma phenomena, and magnetic and dielectric phenomena. Prerequisites: Phys 203-204, Phys 301 or consent of instructor.

**PHYS 304 Electronics** ................................................................. 4
Introduction to analog and digital electronics and robotics. The focus is on design and construction of practical circuitry which can be used to build useful devices. After the analog and digital groundwork is laid, students learn to program microcontrollers to interface with a variety of sensors and outputs on mobile robotic platforms. Weekly laboratories culminate in individual projects presented in the biannual electronics show. Lectures and laboratory. Prerequisite: Phys 203-204 or consent of instructor.
PHYS 305 Optics and Holography ................................................................. 4
Electromagnetic theory, geometrical optics, interference and diffraction, and
other principles provide the framework for understanding a variety of optical
instruments and experiments. Laboratories include various types of
interferometry, laser beam filtering and profiling, several types of holography
and culminate in individual projects. Lectures and laboratory. Prerequisites:
Phys 203-204.

PHYS 310 Thermodynamics ................................................................. 4
A study of classical thermodynamics in the formulation of Gibbs.
Thermodynamic potentials, characteristic variables, stability, homogeneous
and heterogeneous systems, chemical kinetics are treated. An introduction to
statistical mechanics is presented. Applications include studies of material
properties and engineering systems. Prerequisites: Phys 203-204; Chem
111-112; Math 212 or consent of instructor.

PHYS 312 Quantum Mechanics I .......................................................... 4
Principles of quantum mechanics are discussed beginning with a hydrogen
atom and concluding with many atom molecules. The material is examined
using the physical evidences that support the theory of quantum mechanics,
particularly spectroscopy. The course also discusses symmetry of molecules,
theory of NMR and X-ray diffraction. Lectures and laboratory. Prerequisites:
Phys 203-204; Chem 111-112; Math 212 or consent of instructor.

PHYS 313 Quantum Mechanics II ......................................................... 3
A study of the quantum theory in the vector formalism of Dirac. Schroedinger
and Heisenberg representations are considered. Applications to scattering,
atomic physics and magnetism. Prerequisites: Phys 203-204, Math 213 or
consent of instructor.

PHYS 314 Statistical Mechanics ................................................................. 3
A study of the statistical treatment of particles including molecules, atoms and
electrons. The ensemble theory of Gibbs is developed as the basis.
Applications include gases, crystalline solids, magnetic materials and phase
transitions. Prerequisite: Math 213 or consent of instructor.

PHYS 410 Senior Seminar ............................................................................. 3
An exploration of the relations between the natural sciences and other broad
areas with special emphasis on ethical and theological concerns. Discussion,
lectures, preparation and presentation of papers. Prerequisite: Senior standing.

PHYS 421 Advanced Topics in Physics ............................................. 2 (1-3)
Special topics selected by the student in consultation with professor. These
may include topics of special interest to the student or research. Academic
credit for research or thesis is covered by enrolling in this subject.
Psychology

Professor V. Koop
Associate Professor J. Reese (chair)
Assistant Professor L. Rohrer

Introduction
The psychology department offers a major, minor and secondary social studies teacher certification.

- Major in psychology
- Minor in psychology
- Secondary teacher-education certification

Visit the psychology department Web site at www.goshen.edu/psych/Home.

Career and postgraduate opportunities
Graduates of the psychology program are currently working in administration, counseling, public-welfare agencies, mental-health centers, institutions for delinquent and emotionally disturbed children, probation services and a variety of additional social and religious agencies. Many complete graduate degrees and engage in research or in professions such as teaching, law, or ministry.

Teacher education certification in social studies
Teacher certification in social studies education is available for grades 5-12. Required are 54 credits in social science, with at least 12 credits each in three areas chosen from economics, historical perspectives, geographical perspectives, government, psychology, or sociology. Other requirements of a Goshen College major in history, psychology or sociology must be met as well. In addition, 30 credits of education courses are required, including a fall semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.

Major in psychology

40 credit hours

- Psyc 402-403, Statistics and Methods ......................... 6
- Psyc 408, Contemporary Viewpoints in Psychology ........ 3
- Psyc 409, Senior Internship ....................................... 2
- Psyc 410, Senior Seminar in Psychology ....................... 2
- Other psychology courses ......................................... 18

- Related courses in sociology, social work, philosophy,
  peace studies, anatomy and physiology ..................... 9

Planning guide
First year
- General education
- General Psychology
- Principles of Sociology
Second year
General education
Social Psychology or Developmental Psychology
Related courses
SST

Third year
General education
Upper-level courses in major
Related courses

Fourth year
Balance of general education
Contemporary Viewpoints in Psychology
Statistics and Methods
Balance of major and related courses
Senior Seminar
Internship

Minor in psychology
18 credit hours
- Five or more credit hours selected from the following: ....... 5
  Psyc 308, Personality Theory
  Psyc 402, Statistics and Methods in Psychology
  Psyc 408, Contemporary Viewpoints in Psychology
  Psyc 410, Senior Seminar in Psychology
- 13 credit hours in any psychology courses, at least 3 credit
  hours upper-level (300-499) ............................................. 13

Psychology courses

PSYC 100 General Psychology ................................................................. 3
An introduction to the methods, concepts and principles used in the study of
behavior. Includes a survey of topics in psychological development, individual
differences, memory, personality structure, mental health, learning and social
psychology.

PSYC 200 Social Psychology ................................................................. 3
A study of the influence of society on the individual and of the individual on
society. Involves the study of person-to-person transactions, with emphasis on
attitudes and small group structure and process.

PSYC 210 Developmental Psychology ....................................................... 3
A study of developmental processes across the life span. Physical, social and
cognitive changes provide the basic organization for this course. A variety of
developmental theories will be examined including Piaget, Vygotsky, Erickson,
social learning and psychodynamic. Current research and an understanding of
how to think about developmental processes will be emphasized. Prerequisite:
Psyc 100 or consent of instructor.

PSYC 221 Human Behavior ....................................................................... 3
(Cross-listed from SoWk 221) A study of the individual through the life cycle
within the social environment. Focus on physical, psychological, social, cultural
and religious factors in the development of the self.
PSYC 302 Experimental Psychology ............................................................ 4
A study of the methods and techniques of experimental psychology. Course will include study of selected empirical findings from the areas of learning, memory, intelligence and physiological psychology. Experimental projects constitute a major emphasis of the course. Prerequisite: Psyc 100.

PSYC 303 Physiological Psychology ........................................................... 2
An introduction to the physiology of the brain and central nervous system and their effects on psychological processes. Prerequisite: Psyc 100.

PSYC 305 Prosocial Behavior ................................................................. 3
A study of theories and empirical research concerned with positive human interaction. Topics of special focus include altruism, empathy and service from the perspective of both the helper and the recipient. Some attention to applications in education, government and church agencies. (Alternate year offering)

PSYC 306 Abnormal Psychology .............................................................. 3
A study of the variety of psychological disorders as classified by the DSM system. Issues related to classification will be discussed. A biopsychosocial model will be assumed when discussing etiology and treatment. Since this is primarily a descriptive course, considerable emphasis will be placed on case studies. At the conclusion of the course, students will be well versed in understanding the major psychological disorders. Prerequisite: Psyc 100.

PSYC 307 Appl Industrial/Organizationl Psych ........................................... 3
A study of the application of psychological principles to industry and organizations. Topics include employee selection, motivation, job satisfaction, workplace violence, stress, organizational climate, organizational effectiveness and leadership. Emphasis will be on applied issues. Designed for both psychology majors and for nonmajors. Prerequisite: Psyc 100. (Alternate year offering)

PSYC 308 Personality Theory ................................................................. 3
A study of theory development with particular focus on major personality theories. The central concepts of each theory, the unique place in contemporary psychological thought and relationship of theory to psychological experimentation and research will be emphasized. Prerequisite: Psyc 100.

PSYC 309 Educational Psychology:Secondary ......................................... 3
(Cross-listed from Educ 309) A study of physical, cognitive, psychosocial, emotional, linguistic, moral and identity development birth through adolescence. Includes developmental theories, influence of cultural and social factors on development and school influences on children and adolescents.

PSYC 310 Educational Psychology:Elementary ....................................... 3
(Cross-listed from Educ 310) A study of physical, cognitive, psychosocial, emotional, linguistic, moral and identity development birth through adolescence. Includes developmental theories, influence of cultural and social factors on development and school influences on children and adolescents.

PSYC 313 Violence and Nonviolence .................................................... 3
(Cross-listed from PJCS 313) An interdisciplinary study of the nature, causes
and types of violence. Examines the juxtaposition of scientific theories and
religious teachings about violence and nonviolence.

PSYC 314 Psychology of Religion ............................................................... 3
An exploration of the interaction of psychological dynamics and religious
behavior. Includes study of belief systems, faith, behavior change, conversion,
life styles, personality and religious persuasion. (Alternate year offering)

PSYC 316 Introduction to Clinical Psychology ........................................... 3
A study of the major issues facing someone entering the professional world of
delivering psychological services to others. Critical thinking about the most
recent diagnosis and treatment modalities will be emphasized. Other topics
include ethics, psychopharmacology, counseling, health psychology,
psychobiology and community psychology. Prerequisite: Psyc 100. (Alternate
year offering)

PSYC 317 Leadership Education ................................................................. 1
A learning experience in leadership that integrates theory and practice.
Philosophy and theory of leadership will be integrated with each student's
specific campus leadership responsibility. The course is repeatable as the
student assumes additional campus leadership. Enrollment is by consent of the
instructor.

PSYC 320 Psychologic Assessment .............................................................. 3
A study of psychological testing theory, test administration and test
interpretation. The course will survey intellectual, aptitude, achievement,
interest, personality and neurological assessment. Students will be given direct
experience with tests from each of these categories. Prerequisite: Psyc 100.
(Alternate year offering)

PSYC 400 Advanced Projects in Psychology ............................................. 1 (1-3)
Independent reading or research for psychology majors. Requires extensive
reading or research on a topic of the student's choice. Consultation with
instructor required.

PSYC 402 Statistics & Research Methods I ................................................ 4
A study of research methods and data analysis in psychology. Involves
research on a specific problem. Prerequisite: senior standing and consent of
instructor.

PSYC 403 Statistics & Research Methods II .............................................. 2
Overview of multivariate statistics. Further analysis of the problem studied in
Psyc 402, culminating in a written thesis and oral presentation. Prerequisite:
Psyc 402.

PSYC 408 Contemporary Viewpoints in Psyc .......................................... 3
A study of the research and current status of contemporary psychological
issues in the areas of personality, measurement, intelligence, perception,
learning, developmental, mental health and psychology of religion.
Prerequisites: Psyc 100; minimum of nine additional hours in psychology.

PSYC 409 Senior Internship ................................................................. 2
Internship offers opportunity to observe and participate in a supervised field
learning experience in which psychological theories and concepts are
employed and issues pertaining to psychology as a career can be addressed. Prerequisites: senior standing; minimum of 12 hours of upper-level psychology or consent of instructor.

**PSYC 410 Senior Seminar in Psychology** .......................................................... 2  
A focus on integrative issues concerning psychology and Christian faith. Questions related to psychology as a profession will also be addressed. Prerequisites: senior standing; minimum of 12 hours of upper-level psychology or consent of instructor.

**Sociology, social work and anthropology**

*Professors R. Birkey, T. Meyers, R. Reyes*  
*Associate Professor J. M. Liechty (chair)*  
*Assistant Professor D. H. Lind*  
*Adjunct Professors C. Jarvis, R. Shands Stoltzfus*

**Introduction**
The sociology, social work and anthropology department offers two majors and two minors:

- Major in sociology
- Major in social work
- Minor in sociology/anthropology
- Minor in social policy

Visit the social work Web site at [www.goshen.edu/sowk/Home](http://www.goshen.edu/sowk/Home) and the sociology/anthropology Web site at [www.goshen.edu/soan/Home](http://www.goshen.edu/soan/Home).

**Career and postgraduate opportunities**
The sociology major and sociology/anthropology minor provide a knowledge base and skills in social analysis with a variety of practical applications. The social policy minor is a collaborative cross-disciplinary program for students who want to work for social change within the public sector or nonprofit organizations. In this minor, students will develop understanding of policy making processes, community organizing and social advocacy in relation to their specific area of academic interest as well as some of the specific skills necessary for this work.

Past graduates in sociology have entered positions in high-school teaching, foreign and domestic community development and professional and voluntary social services (not requiring professional social work training) with such agencies as Church World Service, Mennonite Central Committee and Peace Corps. The majority of graduates have gone on to attend graduate school or seminary and are presently employed in the Christian ministry, college teaching, community development, law and business, personnel management, public administration, public policy and program evaluation, research, social services, urban planning.

**Social work professional program**
The purpose of social work is the restoration and enhancement of social functioning through intervention with individuals, families, groups, larger social
systems and social welfare policies and programs. The social work program is a four-year generalist program leading to the bachelor of arts degree with a major in social work. Generalist social work practice requires a person-situation approach to problem solving, and the generalist perspective of the Goshen College social work education program provides a broad conceptual framework. The program is accredited by the Council on Social Work Education and has, as its primary objective, the preparation of students for professional social work practice. Students are also prepared for graduate social work education and receive advanced standing in many graduate social work programs.

The social work curriculum is built upon a liberal arts perspective. By its focus on the humanities, physical and social sciences and international experience, this foundation assists students in thinking broadly about individuals, families and groups and the social systems in which they function. Liberal arts education at Goshen College is seen as a moral activity that places a high value on persons and social justice.

**Admission to the social work professional program**
Social work is a professional program that requires an admission process separate from admission to the college. Students apply for admission to the social work education program following successful completion of Introduction to Social Work, SoWk 224, taken in the sophomore year. Written applications are accepted after Jan. 1 of each school year. Students transferring into the major in the junior year should apply immediately upon college admission. Admission criteria include academic and personal qualifications with a value orientation necessary for the professional practice of social work. The admission process is directed toward furthering students’ personal growth as they explore vocational interests and abilities. Specific information about criteria and process is found in the *Social Work Student Handbook*. This may be obtained from the director of social work education.

**Social studies education**
Teacher certification in social studies education is available for grades 5-12. Required are 54 credits in social science, with at least 12 credits each in three areas chosen from economics, historical perspectives, geographical perspectives, government, psychology, or sociology. Other requirements of a Goshen College major in history, psychology or sociology must be met as well. In addition, 30 credits of education courses are required, including a fall semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the *Teacher Education Handbook* for more details about requirements.

**Major in sociology**
40 credit hours

Core courses (19 credit hours):
- Soc 200, Principles of Sociology ........................................ 3
• At least one internship: ....................................................... 3
  Soc 209, Field Experience in Sociology/Anthropology
  Soc 409, Applications in Sociology/Anthropology: Internship
• Soc 310, Social Theory .................................................... 3
• Soc 334, Race, Class and Ethnic Relations ....................... 3
• Soc 391-392, Methods of Social Research ....................... 6
• Soc 410, Senior Seminar.................................................. 1

Elective and related courses (21 credit hours):
• Elective courses in sociology, at least 6 credit hours upper level (300-499) ................................................................. 12
• Econ 201 or Econ 202, Principles of Economics............ 3
• Any history course .............................................................. 3
• Any political science course .............................................. 3

Planning guide
First year
  General education
  Principles of Sociology
  Lower level sociology/anthropology electives

Second year
  Courses in disciplines related to SoAn
  Lower level sociology/anthropology electives
  Field experience (or internship during 4th year)
  General education courses
  SST

Third year
  Methods of Social Research sequence
  Race, Class & Ethnic Relations
  Social Theory
  General education courses
  Upper level sociology/anthropology electives

Fourth year
  Senior Seminar
  Upper level sociology/anthropology electives
  Internship (or field experience during second year)
  Balance of general education courses

Major in social work
56 credit hours
• Econ 201 or 202, Principles of Economics ....................... 3
• Psyc 306, Abnormal Psychology ....................................... 3
• Soc 200, Principles of Sociology ....................................... 3
• Soc 210, Sociology of the Family ..................................... 3
• Soc 334, Race, Class and Ethnic Relations ..................... 3
• Soc 391, Methods of Social Research ............................... 3
• SoWk 221, Human Behavior ............................................ 3
• SoWk 224, Introduction to Social Work ......................... 3
• SoWk 321, Social Service Field Experience ................... 3
• SoWk 322, Social Welfare Policy and Program I ............ 4
• SoWk 323, Social Welfare Policy and Program II ............ 3
• SoWk 325, Social Work Practice Theory I ..................... 4
• SoWk 326, Social Work Practice Theory II .......................... 3
• SoWk 409, Field Instruction .............................................. 10
• SoWk 423, Social Work Senior Seminar ......................... 2
• One of the following courses: ......................................... 3
  Soc 301, Community Development: Local and International
  Soc 392, Methods of Social Research II
  SoWk 350, Human Services: Services to Families
  SoWk 350, Human Services: Child Welfare
  SoWk 350, Human Services: Women's Concerns

Planning guide

First year
General education
  Human Biology
  Principles of Sociology
  General Psychology
  Sociology of the Family

Second year
General education
  Human Behavior
  Introduction to Social Work
  Social Service Field Experience
  Principles of Economics
  SST (spring or summer)
  Expository Writing (strongly recommended)

Third year
General education
  Social Welfare Policy and Program I, II
  Practice Theory I
  Methods of Social Research
  Race, Class and Ethnic Relations
  Abnormal Psychology
  Social Work Elective

Fourth year
Balance of general education
  Social Work Practice Theory II
  Field Instruction
  Senior Seminar

Planning and advising notes
Students declaring a social work major are assigned a social work faculty adviser. Students exploring their interest in social work are invited to talk with the program director. Academic advising, which takes place in the fall and spring semesters each year, aids students in selecting courses in the sequence required for successful completion of the program. All social work courses must be taken in numbered sequence. If possible, Methods of Social Research should precede Social Work Practice Theory I and Economics should precede Social Welfare Policy & Program I. Additional advising appointments are scheduled as part of admission to the program and to field instruction. Students are encouraged to initiate contact with faculty advisers as issues arise, at any time throughout the academic year.

Econ 202 is strongly recommended over Econ 201. Psyc 100, General Psychology is a pre-requisite for Psyc 306, Abnormal Psychology. Biol 154,
Human Biology is strongly recommended for general education science. Courses in human biology, statistics and expository writing are typically required for admission into Master of Social Work (MSW) programs.

**Academic requirements**
The professional practice of social work requires acquisition of knowledge, specific skills, a firm identification with specified values and ethics and a high degree of social and personal responsibility. Students whose academic work falls below a C in required social work and related courses, or whose personal or professional behavior is inconsistent with the above requirements, may be asked to leave the program. Students who are denied admission or dismissed from the program, and believe relevant policies were unfairly administered, have the right to initiate the Goshen College grievance procedure.

**Minor in sociology/anthropology**

20 credit hours

- Soc 200, Principles of Sociology ................................. 3
- One anthropology course selected from the following: ...... 3
  - Soc 220, Human Origins/Human Nature
  - Soc 230, Cultural Anthropology
- Soc 310, Social Theory .................................................. 3
- Soc 391, Methods of Social Research ............................... 3
- Any courses in sociology....................................................... 8

**Planning and advising notes**
The minor in sociology/anthropology is not available to students majoring in social work.

**Minor in social policy**

18-19 credit hours

**Core courses (9-10 credit hours):**

- One of the following courses: ............................................ 3-4
  - SoWk 322, Social Welfare Policy and Program I
  - PoSc 210, Introduction to Public Policy
- One of the following courses: ............................................ 3
  - Econ 201 or Econ 202, Principles of Economics
  - Hist 225, History of Global Poverty
  - Phil 302, Ethics and Morality
  - Psyc 200, Social Psychology
  - Soc 200, Principles of Sociology
  - Soc 230, Cultural Anthropology
- SoWk 320, Social Service Field Experience (or alternate internship)........................................................................... 3

**Skills and methodology courses (9 credit hours):**

- Three of the following, with no more than two courses from any one department: ......................................................... 9
  - Bus 121, Introduction to Entrepreneurship
  - Bus 215, Entrepreneurial Finance
  - Bus 319, Leading Nonprofit Organizations
Comm 212, Broadcast Media Production I
Comm 250, Writing for Media
Comm 324, Principles of Public Relations
PJCS 325, Mediation: Process, Skills and Theory
PJCS 426, Conflict in Groups
Soc 301, Community Development: Local and International
Soc 391, Methods of Social Research

Planning and advising notes
To obtain a minor in social policy, students must consult with their major adviser and submit a proposal of their goals and rationale for their course choices in the minor to the Social Policy Review Committee for approval. At least nine credit hours in this minor must be upper level (300-499 level) courses. After the plan of study is approved and submitted to the registrar, students will continue to be advised for the minor by their major advisers. Double counting will be limited to two courses, i.e., at least 12 hours of the minor must be met through discrete courses that do not count toward a student’s major requirements.

In the social policy internship, students will gain practical experience in their specific areas of interest. Most will complete an internship through the existing course, SoWk 321, which combines 40 hours in an agency and policy setting with weekly class sessions. Students may also meet this requirement through existing departmental internship courses, provided they meet the three credit hour requirement. The internship requirement may also be met through an off-campus program, approved by the social policy review committee, such as Indianapolis Peace Institute or the Chicago Center.

Sociology courses

SOC 200 Principles of Sociology ................................................................. 3
An introduction to the study of human society through basic sociological concepts and perspectives - culture and social order, social interaction, social stratification, power and organizations. Teaches fundamental skills of behavioral observation and social analysis and discusses topics of current concern.

SOC 205 Introduction to Women's Studies ............................................... 3
(Cross-listed from WoSt 200) This course will introduce students to major areas of feminist thought (historical and contemporary), focusing on the theories and concepts that have been instrumental in shaping women's studies. Readings, small group discussions, and service learning/activism projects enable students to experience theory concerning women and gender from an interdisciplinary perspective. This course serves as an introductory survey course for women's studies.

SOC 207 Introduction to Statistics ............................................................... 3
(Cross-listed from Econ 207) Collection, presentation and analysis of numerical data. Descriptive measures; index numbers; probability, sampling, estimation and hypothesis testing; linear regression and correlation. Prerequisite: a knowledge of algebra.
SOC 209 Field Experience in Soc/Anthro ........................................... 3 (1-3)
Offers first and second-year students opportunity to gain first-hand experience in settings where sociological or anthropological perspectives and skills are put to work. Arrangements for field experience are made at initiative of the student in consultation with a faculty adviser and a supervisor at the field-experience location. Forty hours of field experience will be expected for each hour of credit earned. Prerequisite: Soc 200.

SOC 210 Sociology of the Family ................................................................. 3
Course combines institutional and functional approaches in the study of courtship, mate selection, marriage, family roles and relationships, family disorganization and social trends affecting the family in contemporary society and culture.

SOC 220 Human Origins/Human Nature ...................................................... 3
An introductory anthropology class, this course surveys broad sweep of human experience from earliest times, attending especially to the latest archaeological, bio-behavioral, ethnographic, fossil-skeletal, genetic and primate field studies as these help us better to comprehend the nature of being human. Student chooses any topic/issue of interest, e.g., socialization of children for cooperation/aggression, selfishness/self-renunciation (kenosis), status and role of women/men, amount and use of leisure time, abortion or other techniques of birth control, nutrition and health, freedom of mate selection/divorce/homeo/heterosexuality, dancing, music-making, drug use/abuse, healers and healing, conscription of warriors, prevalence of violence and warfare, role of artists and artistic expression, beliefs about the nature of God, patterns of worship, leadership and authority, with the goal of learning how societies both ancient and modern, both near and far handle this topic/issue.

SOC 230 Cultural Anthropology ................................................................. 3
Course teaches an anthropological approach to cultural studies at a time when global cultural homogenization is producing increasing conflict around cultural differences. Students gain knowledge and skills for making sense of all culturally conditioned experience - both "ours" and "theirs." Lab component teaches ethnographic skills needed by anyone wishing to relate competently to persons whose linguistic, social and cultural backgrounds differ from one's own.

SOC 260 Human Sexuality ................................................................. 3
Biographical, psychological and sociological factors determining sex-role identification and role performance; human reproduction, fertility control and sexual disorders; social and spiritual values in human sexuality; sex discrimination and movements toward sex equality.

SOC 301 Community Development ................................................................. 3
Anthropological and sociological perspectives on rural communities, small towns, urban neighborhoods and globally networked associations involved in processes of both intentional and unintended change. Course focuses on community life and development both locally and internationally with special attention to global linkages between the two. Especially designed for anthropology, environmental studies, PJCS, policy studies, sociology, social
work and other majors who expect to work actively with communities and social change organizations toward empowerment of people to find collective and effective solutions to problems of development.

**SOC 302 Urban Diversity** ................................................................. 3
Student is exposed to issues affecting the lives of an ethnically and religiously diverse urban populace - racism, sexism, classism - and helped to develop new ways of conceptualizing and interpreting the contemporary urban scene. Reading, research and writing are integrated with the student's first-hand involvement in issues under study. Available through the Chicago Center, Peace House in Indianapolis or WCSC in Washington, D.C.

**SOC 310 Social Theory** .................................................................. 3
A seminar for sociology majors and minors, open to other students with the permission of the instructor. Students will examine the assumptions, purposes, and orientations of sociology by critically engaging selected works by the classical figures of social theory (e.g. Durkheim, Marx, Simmel, Tocqueville, and Weber) as well as writing by contemporary representatives of the classical perspectives. Typically taken junior year. Prerequisites: Soc 200, Soc 220 or Soc 230.

**SOC 315 Religion in Culture and Society** .......................................... 3
An analysis of social, cultural and political contexts that affect religious institutions and expressions, and upon which religious beliefs and practice have an influence. This course is taught in alternate years by the Bible, religion and philosophy and Sociology-Anthropology departments. When taught by Sociology/Anthropology, the course has a cross-cultural, comparative focus on ritual and belief. Students complete an ethnographic study of a local religious group or phenomenon.

**SOC 322 Social Policy and Programs** .............................................. 4
Economic and social justice is used as an organizing framework to study the relationship between major social problems and social welfare policy, programs and services. Included are poverty, health and mental-health care, family problems, racism, sexism and other forms of institutionalized oppression. The political aspects of social welfare policy and the legislative process itself are examined in depth. Prerequisites: Econ 201/202, SoWk 221, SoWk 224 and SoWk 321 or consent of instructor.

**SOC 330 Family & Kinship Across Cultures** ..................................... 3
Comparative study of marriage and family life in traditional, modern and post-modern settings. Course includes case studies of family systems with particular attention to the historical and cultural contexts in which these systems are situated. Prerequisite: Soc 200, Soc 210 or Soc 230.

**SOC 334 Race, Class & Ethnic Relations** ....................................... 3
A study of the dynamics of race and ethnic group interaction focusing on minority groups in the U.S. as defined by race, language, culture, religion or national origin. Attention is given to social class, power and majority-group dominance as factors in assimilation and culture-loss or collective self-determination and maintenance of cultural pluralism. Prerequisite: Soc 200 or Soc 230.
SOC 336 Latin American Societies & Cultures ............................................ 3
Current developments are examined within the context of a general survey of Latin-American societies and cultures. The course aims to provide: 1) a basic knowledge of Central and South-American geography and social structure, 2) an acquaintance with alternative ways of interpreting information about and experiential knowledge of Latin-American life, and 3) an opportunity to explore themes of oppression and liberation as these pertain to Latin-American thought and experience.

SOC 340 African Societies and Cultures ..................................................... 3
A study of the current development and modernization of the nations and peoples of Sub-Sahara Africa. After brief attention to the geographic, historical and anthropological factors underlying Africa's development, the major focus will be on the current social and political forces that are shaping the developing nations.

SOC 342 Native American Societies & Culture ........................................... 3
A survey of the diversity and shared patterns of Native American societies and their development from the first settlements of North America until the present day. The course aims to foster a broad and sensitive understanding of the history, lifeways and spirituality of Native Americans and to develop an appreciation for Native American values and contributions to world history.

SOC 345 Women's Concerns ........................................................................ 3
(Cross-listed with SoWk 345) This course covers a wide range of issues that are part of contemporary North American women's lives. The place of women in society is approached from the position of social and economic justice. The course: (a) examines and critiques the U.S. American women's movement as an interpersonal and psychological phenomenon; (b) identifies cultural, religious, racial, social, economic and political processes as they affect women's lives; (c) considers women to be persons of worth and value with the right of self-determination; and (d) assists in understanding, contextually, women's requests for help and appropriate intervention strategies. Class participation and small group discussions are important components of course learning.

SOC 351 Contemporary Issues: ................................................................. 3
A seminar providing for in-depth investigation of a current social problem or issue, such as the plight of the cities, male identity, communal societies, social inequality, food and the environment, and Latino families in the U.S. The seminar topic varies from year to year.

SOC 391 Methods of Social Research .......................................................... 3
Introduces the principles and methods of quantitative and qualitative research in sociology and social work, including descriptive and inferential statistics. Prerequisites: Junior standing or consent of instructor.

SOC 392 Methods of Social Research .......................................................... 3
A research internship, consisting of original research on a specific problem, data analysis and presentation of findings in oral and written-thesis formats. Prerequisites: Soc 391 or consent of instructor.
SOC 400 Advanced Readings .............................................................. 1
Independent reading in anthropology or sociology. Student takes initiative to
work out reading plan with a department faculty member.

SOC 409 Applications in Soc/Anth:Internship ................................. 3 (3-6)
An internship that puts sociological-anthropological perspectives and methods
into practice in an organizational setting. The internship is designed by the
student in consultation with their faculty advisor and supervised by a preceptor
in the contracting host organization. Forty hours of internship experience will be
expected for each hour of credit earned.

SOC 410 Senior Seminar ................................................................. 1
Weekly meetings of sociology majors and faculty for topical discussions such
as vocation, career planning, and graduate study; additional emphases to vary
by instructor and class members' interests.

Social work courses

SOWK 221 Human Behavior ............................................................ 3
A study of the individual through the life cycle within the social environment.
Focus on physical, psychological, social, cultural and religious factors in the
development of the self.

SOWK 224 Introduction to Social Work ........................................... 3
Analysis of the knowledge base, value structure, purpose, nature, history and
function of social work practice in various social welfare activities and social
workers through observation and guided participation in programs for meeting
human need. Students engage in a specific field experience as part of course
requirements and must furnish their own transportation. Prerequisites: Soc 200
and Soc 210 or consent of instructor.

SOWK 321 Social Service Field Experience ................................. 3
Offers sophomore or junior students an initial exposure to social work practice
in a social agency. The course focuses on an integrated understanding of the
organizational and community context for social work practice and offers the
students an opportunity for observing social work practitioners and offering
specific services to clients. Classroom activities include discussion of social
work related issues and concerns. Prerequisites: SoWk 221 and SoWk 224 or
consent of instructor. Students furnish their own transportation for field
placement.

SOWK 322 Social Welfare Policy & Program I .............................. 4
Economic and social justice is used as an organizing framework to study the
relationship between major social problems and social welfare policy, programs
and services. Included are poverty, health and mental-health care, family
problems, racism, sexism and other forms of institutionalized oppression. The
political aspects of social welfare policy and the legislative process itself are
examined in depth. Prerequisites: Econ 201/202, SoWk 221, SoWk 224 and
SoWk 321 or consent of instructor.

SOWK 323 Social Welfare Policy & Program II .............................. 3
A critical analysis of social welfare programs and issues of social welfare
policy, including philosophical perspectives, the broad issues of organization,
cost delivery, impact, effectiveness and alternate strategies. Students develop skills in identifying, evaluating and formulating macro-level approaches to social problems. Prerequisite: SoWk 322 or consent of instructor.

**SOWK 325 Social Work Practice Theory I** ............................................................... 4
Systems approach to the practice of social work beginning with a model for solving human problems. Emphasizes development of a theoretical base for social work practice and includes a laboratory in which specific behavioral skills are developed through simulation experiences. Prerequisites: SoWk 221, SoWk 224, SoWk 321 and admission to program.

**SOWK 345 Women's Concerns** ........................................................................ 3
This course covers a wide range of issues that are part of contemporary North American women's lives. The place of women in society is approached from the position of social and economic justice. The course: (a) examines and critiques the U.S. American women's movement as an interpersonal and psychological phenomenon; (b) identifies cultural, religious, racial, social, economic and political processes as they affect women's lives; (c) considers women to be persons of worth and value with the right of self-determination; and (d) assists in understanding, contextually, women's requests for help and appropriate intervention strategies. Class participation and small group discussions are important components of course learning.

**SOWK 350 Human Services: Special Studies** ...................................................... 3
An in-depth seminar on a selected field of service program or policy issue. Several elective topics are offered annually. Present courses are: Child Welfare, Services to Families and Women's Concerns. These courses examine selected cultural, social, psychological and political issues relevant to the involvement and treatment of children, families and women in the social welfare system. Particular emphasis is given to concepts of exploitation and social/economic justice. Other courses may be added.

**SOWK 391 Methods of Social Research** ......................................................... 3
(Cross-listed from Soc 391) The principles and methods of quantitative and qualitative research in sociology and social work, including descriptive and inferential statistics. Prerequisites: Soc 200, Soc 210, Soc 221, SoWk 224.

**SOWK 409 Field Instruction** ............................................................................. 10
Integration of knowledge base and the acquisition of social work practice skills through direct practice under a qualified field instructor in a social service agency. Prerequisites: SoWk 323, SoWk 325 and consent of program director. Field Instruction must be applied for during the spring of the year preceding enrollment. A driver's license and transportation are required. Usually taken over two semesters; may be taken for 10 credits during the spring semester by approval of program director.

**SOWK 410 Social Work Senior Seminar** ........................................................... 2
Taken during the second semester of Field Instruction or concurrent with one semester block field placement. A weekly seminar that offers the integration of learnings from all social work and required related courses. The final exam takes the form of a written paper and oral examination through which students demonstrate their integration of learning and skill competencies.
SOWK 425 Social Work Practice Theory II ................................................... 3
Expansion of learnings from Social Work Practice Theory I and Social Welfare Policy and Program II and application to social work practice with individuals, families and social systems of varying size. This course is taught concurrently with the first semester of field instruction, which provides the opportunity to integrate theory with skill development. Prerequisites: SoWk 323, SoWk 325, Psyc 306.

Theater

Professor D. L. Caskey
Assistant Professor M. Milne
Performance Venue Technical Director J. Peters

Introduction
The theater department offers a major with four concentration options, a minor and a secondary education program in theater arts.

- Major in theater
- Minor in theater
- Theater arts education

The theater program at Goshen College has a strong liberal arts emphasis grounded in aesthetic communication and performance theory. Students explore historical, philosophical and artistic movements and the specialized areas of theater design, acting, literature, playwriting, voice and artistic movements. Courses in other academic areas such as art, music, communication, English and foreign languages can augment theater knowledge and skills.

The John S. Umble Center is the home for most theater productions. Two major productions and numerous one-acts are offered during the academic year. Musical theater performances are produced during May term in alternate years. The department also holds a biennial peace playwriting contest and produces the winning play. Visit the theater department Web site at www.goshen.edu/theater/Home.

Career and postgraduate opportunities
Theater graduates have completed internships with major theater companies, and a significant number have attended graduate schools. Graduates are working coast to coast in repertory theaters, touring companies, video production, education, business and Christian ministry.

Theater arts education
A secondary teacher education program is available in theater arts for grades 5-12. Students should elect the theater education concentration described below. The program requires 30 credits of education courses, including a semester of student teaching. PJCS 210 is required for general education. The first education class, Educ 201, should be taken in May term of the first year or fall of the sophomore year. See the education department pages and the Teacher Education Handbook for more details about requirements.
Major in theater

41-72 credit hours (core and one concentration area)

Core courses (23 credit hours)

- Comm 204, Expository Writing ........................................... 3
- Comm 240, Communication Research .............................. 3
- Thea 200, Theater Practice ................................................ 2
- Thea 225, Introduction to Theater ..................................... 3
- Thea 235, The Power of Story ........................................... 3
- Thea 237, History of Theater ........................................... 3
- Thea 409, Internship .......................................................... 3
- Thea 410, Senior Seminar .................................................. 3

Acting/Performance concentration (18 credit hours)

- Thea 245, Aesthetics.......................................................... 3
- Thea 334, Acting ................................................................ 3
- Thea 338, Directing ............................................................ 3
- Courses selected from the following, at least 3 credit hours upper level (300-499) ......................................................... 9
  Engl 306, Major Author: Shakespeare
  Mus 240, Class Voice
  Mus 262, 362, Opera Workshop
  Thea 275, Acting Lessons
  Thea 320, The Expressive Voice
  Thea 350, Playwriting
  Thea 355, Arts in London
  Thea 388, Themes in Drama
  Thea 412, Special Project
- At least four semesters participation in theater productions...

Design/Technical concentration (18 credit hours)

- Thea 245, Aesthetics.......................................................... 3
- Thea 332, Design for Theater ........................................... 3
- Thea 338, Directing ............................................................ 3
- Courses selected from the following, at least 3 credit hours upper level (300-499) ......................................................... 9
  Art 107, Design
  Art 342, History of Art II
  Comm 212, Broadcast Media Production I
  Comm 375, Multimedia Concepts
  Thea 355, Arts in London
  Thea 388, Themes in Drama
  Thea 412, Special Project
- At least four semesters participation in theater productions...

Theater arts education concentration (49 credit hours)

- Thea 245, Aesthetics.......................................................... 3
- Thea 332, Design for Theater ........................................... 3
• Thea 334, Acting .............................................................. 3
• Thea 338, Directing ......................................................... 3
• Thea 350, Playwriting 3
• One of the following: ...................................................... 3
  Thea 388, Themes in Drama
  Educ 340, Learning Disorders
• Thea 412, Special Project ................................................. 1
• Secondary education courses ....................................... 30

Film studies concentration (19 credit hours)
Same as communication major concentration in film studies, described in the communication section of the catalog.

Generalist concentration (18 credit hours)
• Nine credit hours of any theater courses, with adviser's approval................................................................. 9
• Nine credit hours of upper level (300-499) theater or related courses, with adviser's approval............................ 9
• At least four semesters participation in theater productions..
  NC

Planning guide
First year General education
  Literature and Writing
  Oral Communication (must be 3-4 credit hours)
  Introduction to Theater
  Communication Research
  The Power of Story

Second year General education
  Humanities
  Expository Writing
  History of Theater
  Theater Practice
  Courses in major
  SST

Third year General education
  Theater Practice
  Upper-level courses in major

Fourth year Balance of general education
  Balance of major
  Senior Seminar
  Internship

Planning and advising notes
All students majoring in theater are required to take the general education course Comm 202, Oral Communication for 3-4 credit hours. Transfer students must have a minimum of nine hours of theater courses at Goshen College. The Thea 409/Internship should be in the student’s area of concentration. A senior recital and a portfolio or its equivalent are required for graduation.
Minor in theater

18 credit hours

- Thea 225, Introduction to Theater ........................................ 3
- One of the following: .......................................................... 3
  Thea 387, History of Theater
  Thea 388, Themes in Drama
- One of the following: .......................................................... 3
  Thea 235, The Power of Story
  Thea 334, Acting
- Concentration in theater and related courses ..................... 9

Planning and advising notes

Concentration courses are selected in consultation with theater minor adviser. At least eight credit hours in the minor should be upper-level credit (300-499). At least six credit hours must be taken at Goshen College. Theater minors must take Comm 202 for three credit hours as a general education requirement (not included in the 18 hours for the minor). A faculty-approved and supervised theater recital (or its equivalent) is encouraged, but not required for theater minors.

Theater courses

THEA 200 Theater Practice ......................................................... 1 (1-2)
Applied on-campus work in a theater production or other theater activity. A maximum of two hours applicable toward a theater major or minor. Prerequisite: consent of instructor.

THEA 209 Field Experience ....................................................... 3 (1-3)
Experiential learning in an off-campus professional setting, for theater majors and minors. The student contracts with a faculty member in regard to goals, performance expectations, supervision, evaluation and course subtitle. The 209 level is intended for first year and sophomore students. Upper level students should enroll in 409. Prerequisite: consent of instructor.

THEA 225 Introduction to Theater ............................................. 3
This course examines the elements of theater. It will include script analysis of selected plays, acting exercises, scene performance studies, design and production work. A theater lab will be required.

THEA 235 The Power of Story .................................................... 3
An introduction to performance studies as a mode of inquiry. Concentration on the methods of communicating narrative texts for various audiences. Course activities/assignments will explore the power and role of story in contemporary culture by analyzing and participating in various storytelling methods. Attention will be paid to the elements of vocal expression. Prerequisite: Comm 202 or Thea 225.

THEA 245 Aesthetics ................................................................. 3
The study of aesthetics focuses on the philosophy of art, the nature of creativity, the work created, the problem of form and style, expression in art,
society and ethics and arts and religion. The course includes lectures, primary reading materials and papers.

**THEA 275 Acting Lessons I** ................................................................. 1
Students may register for private instruction in acting and will develop individualized goals and address personal challenges. The focus is often on audition and scene work. Enrollment is limited with preference given to theater majors and minors. Consent of the department chair and extra fee required.

**THEA 320 The Expressive Voice** .......................................................... 3
Various spoken materials such as scripts, poetic verse, and narratives are used to explore and develop effective vocal skills to communicate expressive meaning. Breath, resonance, articulation, diction and expressive vocal range are explored over the course of the semester. Prerequisite: Comm 202 or Comm 290 or Thea 225.

**THEA 332 Design for the Theater** ......................................................... 3
Principles, methods and aesthetics of theater production: design, stagecraft, lighting, costume, sound and make-up. Lab work on current productions. Prerequisite: Thea 225 or Art 107 or consent of instructor.

**THEA 334 Acting** .................................................................................. 3
Fundamental acting skills: movement, voice and character development. An emphasis on Stanislavski's theory of acting and realistic scene work. Scene studies from selected scripts. Prerequisite: Comm 202 or Thea 225 or consent of instructor.

**THEA 338 Directing** .............................................................................. 3
Principles of interpretation, analysis, design, composition and stage movement. The director's craft: play selection, auditions, rehearsals, and production. Lab session under faculty supervision. Prerequisite: Thea 334 or consent of instructor.

**THEA 350 Playwriting** ................................................................. 3 (1-3)
Students will examine the theory and practice of playwriting. Typically, students write a one-act play as the course requirement. Class will meet regularly as a seminar. Prerequisite: Engl 110 or Engl 210 or consent of instructor.

**THEA 355 Arts in London** ................................................................. 4
A May term class that encompasses theater, art and music study and experiences in London, England. Class activities include morning lectures, visits to art galleries, attending music and theater performances, and day trips to Coventry, Stratford-upon-Avon, and other locations. Daily writing assignments and a major project required. Offered in alternate years. Extra cost.

**THEA 387 History of Theater** ................................................................. 3
A study of the forms and conventions of all phases of theater (writing, performance, design, analysis) from classical Greece to the contemporary age. Emphasis on trends in performance. Includes the reading of selected plays.

**THEA 388 Themes in Drama** ................................................................. 3 (3-4)
A concentrated study of selected themes in drama. Themes might include a major playwright, advanced acting, musical theater, creative drama,
improvisational or ensemble acting, religious drama or theater and multiculturalism. Prerequisite: Thea 225 or Thea 235 or Engl 110 or Engl 210 or consent of instructor.

**THEA 409 Internship** .................................................................................. 3 (1-3)
An off-campus internship in a professional or non-profit setting for theater majors and minors. The student contracts with a faculty member in regard to goals, performance expectations, supervision, evaluation and course subtitle. Prerequisite: consent of instructor.

**THEA 410 Senior Seminar** ............................................................................. 3
A consideration of ethical and professional issues in contemporary communication and theater. Information interviews with practitioners in communication and theater. Writing of risumis. Creation of a portfolio. Required of all theater majors.

**THEA 412 Special Project** ..................................................................... 1 (1-3)
Students may conduct research of particular interest or pursue specialized applied projects in theater under faculty supervision. Can be used as credit for senior theater recital. Prerequisite: consent of instructor.

**Women's studies**

*Director, Professor B. Martin Birky*

*Professors R. Birkey, J. Brant, A. Hostetler, J. B. Shetler*

*Associate Professor J. M. Liechty*

*Adjunct Professors C. Jarvis, R. Shands Stoltzfus*

*Visiting Professor M. Berry*

**Introduction**
The women's studies program offers one flexible, interdisciplinary minor:

- Minor in women's studies

The women's studies minor can be combined with any major or incorporated into an interdisciplinary studies major. Visit the women's studies program Web site at www.goshen.edu/wost/Home.

Within the community of faith and learning at Goshen College, the women's studies program examines women's experience in a gendered and global society. Courses foster the study and cultivation of feminist scholarship and practice in students' personal and professional preparation. This interdisciplinary program draws on courses from a variety of disciplines and women's resources in the campus community in addition to a core of courses offered by the women's studies program. Courses listed or cross-listed in this program meet the following criteria:

- Critically examine cultural assumptions about gender as well as race and class.
- Explore the production of knowledge in disciplines that reflect on women's lived experiences.
- Identify and analyze the many systems that shape women's lives and choices.
• Examine feminist genres, research methods, structures, analytical tools, aesthetics, criticism, contemporary issues and pedagogy.

Minor in women’s studies

18 credit hours
• Any WoSt or cross-listed courses, selected in consultation with adviser ................................................................. 18

Planning and advising notes
WoSt 200, Introduction to Women's Studies is strongly recommended for all students selecting this minor.

Women's studies courses

WOST 200 Introduction to Women's Studies ................................................................. 3
This course will introduce students to major areas of feminist thought (historical and contemporary), focusing on the theories and concepts that have been instrumental in shaping women's studies. Readings, small group discussions, and service learning/activism projects enable students to experience theory concerning women and gender from an interdisciplinary perspective. This course serves as an introductory survey course for women's studies.

WOST 207 Women in Literature ................................................................. 3
(Cross-listed from Engl 207/307) Study of literature shaped distinctively by cultural and theoretical concerns related to ethnicity, gender and race. The study of literature written by women (mainly fiction and poetry) and of related issues such as the literary canon, gender representation and feminist literary theory. The syllabus will often include literature by Austen, Bronte, Woolf and Hurston and criticism by Gilbert, Gubar, Showalter and Fetterly.

WOST 210 Sociology of the Family ................................................................. 3
(Cross-listed from Soc 210) The course combines institutional and functional approaches in the study of courtship, mate selection, marriage, family roles and relationships, family disorganization and social trends affecting the family in contemporary society and culture.

WOST 221 Human Behavior ................................................................. 3
(Cross-listed from SoWk 221) A study of the individual through the life cycle within the social environment. Focus on physical, psychological, social, cultural and religious factors in the development of the self.

WOST 275 Women in Text and Image ................................................................. 3
(Cross-listed from Wost 375) Presents a critical analysis of women's representation in social institutions, popular culture, literature, and film. Readings and projects will address definitions of feminism, femininity, woman, as well as gender, power and sexuality, with the objective of helping students critique cultural representations and examine how textual narratives shape their own perceptions of gender, sex, and identity. Individual or collaborative projects take the form of art work, videos, texts (stories, poems, critiques, research) or performances, presented in a seminar format. Recent offerings have focused on gender, race and class in popular media.
WOST 307 Women in Literature ................................................................. 3
(Cross-listed from Engl 207/307) Study of literature shaped distinctively by cultural and theoretical concerns related to ethnicity, gender and race. The study of literature written by women (mainly fiction and poetry) and of related issues such as the literary canon, gender representation and feminist literary theory. The syllabus will often include literature by Austen, Bronte, Woolf and Hurston and criticism by Gilbert, Gubar, Showalter and Fetterly.

WOST 316 Liberation Theologies ............................................................... 3
(Cross-listed from Rel 316) Liberation Theologies focuses on three contemporary theologies of liberation (Latin Merican Liberation Theology, North American Black Theology and North American Feminist Theology) as they are developing in the Americas. The course examines similarities and differences among these three theologies - in conversation with Womanist and Latina theologies - as each addresses specific theological questions raised by the people of God in actual contemporary situations of exploration and oppression. The course also has a praxis component in which students move outward into the community.

WOST 322 Social Problems ................................................................. 4
(Cross-listed from SoWk 322) Economic and social justice is used as an organizing framework to study the relationship between major social problems and social welfare policy, programs and services. Included are poverty, health and mental-health care, family problems, racism, sexism and other forms of institutionalized oppression. The political aspects of social welfare policy and the legislative process itself are examined in depth. Prerequisites: Econ 201/202, SoWk 221, SoWk 224, SoWk 321 or consent of instructor.

WOST 324 Women in the Bible ................................................................. 3
(Cross-listed from Bibl 324) An examination of the characterization of women in Old and New Testament narratives, their role in biblical societies and the early church and their representation in Judeo-Christian culture, particularly our contemporary culture. The course draws upon current research and exegetical strategies in biblical studies. Prerequisite: Bibl 100 or 200.

WOST 325 Topics ........................................................................................ 3
Offered as topics courses in different departments in different years.

WOST 328 Spiritual Writings of Women .................................................. 3
(Cross-listed from Rel 328) A survey of women's writings about the spiritual journey. Includes a range of medieval through 20th-century women. Examines women's use of their experiences as one source of theologizing.

WOST 330 International Women's History ............................................ 3
(Cross-listed from Hist 330) A comparative studies in world history course. Women have been left out of the world's history, particularly women in the non-Western world who are stereotyped as oppressed and passive. Putting women back into the center of world history unsettles older historical paradigms and challenges our ethnocentric assumptions. Explores the diverse experiences of women as active agents in shaping their world through a comparative case-study approach.
WOST 345 Women's Concerns .......................................................................................... 3
(Cross-listed with SoWk 345) This course covers a wide range of issues that are part of contemporary North American women's lives. The place of women in society is approached from the position of social and economic justice. The course: (a) examines and critiques the U.S. American women's movement as an interpersonal and psychological phenomenon; (b) identifies cultural, religious, racial, social, economic and political processes as they affect women's lives; (c) considers women to be persons of worth and value with the right of self-determination ; and (d) assists in understanding, contextually, women's requests for help and appropriate intervention strategies. Class participation and small group discussions are important components of course learning.

WOST 348 Sexual Violation and Violence ................................................................. 3
(Cross-listed from PJCS 348) This survey course examines issues of sexual violation and violence within the life of individuals and communities. It explores the question, "What is the nature of reconciliation, forgiveness and healing?" in the experiences of individuals or communities where rape, incest, sexual harassment, sexual torture, professional sexual misconduct or domestic violence has been present. Examines conflicts of opinion and belief about these issues as individuals and communities seek to resolve the long-term aftermath of sexual violation and violence.

WOST 355 Contemporary Women's Issues ......................................................... 3
An upper-level topics course that explores selected issues in the lives of contemporary women, such as women's bodies, sexuality and health; mother-daughter relationships; women and war; women and sexual violence; women and economic status in globalizing economies. Professors bring an interdisciplinary perspective to the subject. This course is taught in a cooperative learning environment.

WOST 375 Women in Text and Image ................................................................... 3
Presents a critical analysis of women's representation in social institutions, popular culture, literature, and film. Readings and projects will address definitions of feminism, femininity, woman, as well as gender, power and sexuality, with the objective of helping students critique cultural representations and examine how textual narratives shape their own perceptions of gender, sex, and identity. Individual or collaborative projects take the form of art work, videos, texts (stories, poems, critiques, research) or performances, presented in a seminar format. Recent offerings have focused on gender, race and class in popular media.

WOST 400 Advanced Readings ............................................................................ 3 (1-4)
This independent study provides opportunity for women's studies minors to 1) pursue more individualized, self-guided study and research in a topic of interest, 2) enhance student curriculum in areas where courses are not or cannot be offered due to curriculum limits and 3) strengthen student skills and knowledge in an area of feminist scholarship and/or practice in an area where they have not been able to do course work. A student may take a maximum of three hours credit. Prerequisite: two women's studies classes and program director approval.
Graduate programs

Master of arts in environmental education

L. Gascho, Executive Director of Merry Lea Environmental Learning Center

Introduction
The master of arts in environmental education program is based at Merry Lea Environmental Learning Center of Goshen College. A distinctive aspect of this 12 month program is an immersion in natural history, conducting ecological field research using scientific methods and various media to record observations. Students also engage with environmental education programs at Merry Lea for grades K-12. The degree has four major components: core courses, a project, a portfolio, and an extensive practicum. Students integrate ecological learning with developing pedagogical skills. Additional practical concepts include land management and administration. See http://www.goshen.edu/merrylea/graduate/ for more details.

Admission information
Requirements for admission include GRE scores, an essay, a resume, three letters of recommendation and official transcripts for all undergraduate and graduate coursework. One full scholarship is available to an Indiana student. A limited number of additional scholarships are also available.

Career opportunities
Graduates work as environmental educators in diverse settings such as nature centers, outdoor education programs, camps, parks and recreation programs, public and private schools, and independent environmental organizations.

Master of arts in environmental education

30 credit hours

Term I: July-October
• EnEd 510, Natural History of the Southern Great Lakes.... 3
• EnEd 515, Research Methods and Measurements.......... 3
• EnEd 520, Principles of Environmental Education ............. 3
• EnEd 570, Portfolio ............................................................ 1

Term II: November-February
• EnEd525, Environmental Issues and History of EE .......... 3
• EnEd 530, Leadership for EE Programs and Centers....... 3
• EnEd 580, Practicum in Environmental Education .......... 3
• EnEd 570, Portfolio ............................................................ 1

Term III: March-June
• EnEd 535, Land Management for EE................................. 3
• EnEd 570, Portfolio ............................................................ 2
• EnEd 560, Project .............................................................. 3
Environmental education courses

ENED 510 Natural History of So Great Lakes .............................................. 3
A study of the plants and animals of this region - and the ecosystems in which they are found. Emphasis is on the 1) the interrelationships which exist in ecosystems 2) the function of ecosystems, both how they operate and how they impact surrounding systems and humans, 3) identity of the organisms that comprise the ecological community. Students are expected to investigate the ecological relationships of the organisms identified as well as behaviors and life cycles.

ENED 515 Research Methods and Measurements ...................................... 3
A laboratory class designed to give students an overview of designing, implementing, and reporting a scientific study including the use of environmental monitoring equipment to collect data and the basic statistics needed to analyze them. The class will address both ecological research as well as methods that could be used to analyze the success of educational strategies. Students will investigate the different ecosystems around the area using standard ecological data collection methods. Students will learn standard methods for evaluating learning in environmental educational programs.

ENED 520 Principles of Environmental Educ ........................................... 3
A study of distinctive concepts and skills needed for delivering quality environmental education programs. The following themes-within the context of natural history-will be part of the course: field-based and experiential education, inquiry, questioning, interpretation, settings, responsive instruction, program design, assessment and evaluation, and learner outcomes.

ENED 525 Environmental Iss & Hist Env Educ ........................................... 3
A study of current environmental issues facing society. Topics include ethics, citizenry, environmental justice, theological implications, and organizations addressing issues. The various facets of the history of environmental education and outdoor education will be reviewed. A study of important literature relevant to all topics will be included.

ENED 530 Leadership for Env Educ Programs ........................................... 3
A study of essential skills and practices in the administration of an environmental education center. Topics include personnel management, strategic planning, personality styles, financial and resource management, budget preparation, board utilization, fundraising and capital campaign, day-to-day functioning of a nature center, and team development.

ENED 535 Land Management for Env Education ...................................... 3
A study of both the theory and practice of the management of "place" for various ecological functions and human values that can contribute to the enhancement of an environmental education experience. Includes how land management practices need to reflect the economic/social/spiritual values of humans, and the biological functions of the ecosystems it encompasses.

ENED 560 Project ................................................................. 3
The project paper will be based on one of the following themes: a)
environmental issue investigation b) ecological data based investigation, or c) pedagogical data based investigation. Project statement, literature review, critical investigation, application, conclusion, and professional formatting will all be expectations. Students will develop age-appropriate instructional materials based on the project themes.

ENED 570 Portfolio ................................................................. 1 (1-2)
Portfolio expectations will be assigned to students during each of the first three semesters. These will include ecological observations, photography, and nature writing. Students will participate in six topical seminars, which will be offered throughout the year, and write a response paper to each seminar. (Nature Photography, Writing in Nature, Exploration of Faith and Spirituality, Sustainability, Wilderness First Responder, and Public Presentation Skills)

ENED 580 Practicum in Environmental Educ .............................. 3 (1-3)
Being part of the delivery of Merry Lea's K-12 onsite and outreach programs in environmental education will fulfill the practicum in three major programming time blocks giving students experience in multiple programs. Student will also have opportunities in specialty programs, such as summer camps and public programs. Assessment of student performance will occur after each of the three programming time blocks and as part of the final evaluation.

Master of science in nursing

Director, Professor B. Srof
Curriculum Director, Assistant Professor K. Rheinheimer

Introduction
The master of science in nursing program is designed for the registered nurse who is a graduate of a baccalaureate program in nursing. Courses meet once per week during late afternoon and evening hours. The program is accredited by the Higher Learning Commission of the North Central Association. It is built on a venerable tradition of excellence in nursing education at the undergraduate level. A distinctive feature of the program is an emphasis on nursing care in a culturally diverse society. We give heed to providing care that values understanding the stories of patients, including those who are marginalized in our society.

Two tracks of study are offered: Family Nurse Practitioner and Clinical Nurse Leader. Both programs prepare students for the certification exam in the selected track of study. See http://www.goshen.edu/nursing/masters/ for more information.

Admission information
Admission requirements include the following: GPA of at least 3.0 on a 4.0 scale for the last degree earned (or equivalent), curriculum vitae, bachelor's degree in nursing from a school accredited by the Commission on Collegiate Nursing Education or by the National League for Nursing Accrediting Commission, an active RN license, three letters of reference that attest to academic and professional achievements, an essay, GRE scores, at least one year of clinical experience, TOEFL minimum of 650 (if applicant’s first language
is not English), and a statistics class (either undergraduate or graduate level). The nursing department reserves the right to adjust the current admission criteria when outcome assessment data demonstrate the need for such changes.

A maximum of 12 credit hours of comparable graduate level coursework from an accredited college or university may be transferred, with the consent of the academic adviser. Comparable is defined as courses that fulfill the requirements for the program to which the student will be enrolled. Courses considered for transfer must have a grade of B (not B-) or higher.

**Career opportunities**

A family nurse practitioner provides health assessments, direct care, and teaching or counseling focused on family self-care. The FNP typically works collaboratively with family primary care physicians and other professionals within the health care system.

A clinical nurse leader designs, implements, and evaluates client care by coordinating, delegating and supervising the care provided by the health care team, including licensed nurses, technicians, and other health professionals.

**Master of science in nursing**

40-48 credit hours (core curriculum and one track)

**Core curriculum (27 credit hours)**

- Nurs 500, Role Foundations in FNP and CNL leadership... 3
- Nurs 504, Healthcare Policy, Organization and Finance.... 2
- Nurs 510, Healthcare Ethics and Concepts of Social Justice in Nursing ................................................................. 2
- Nurs 520, Advanced Pathophysiology .......................... 3
- Nurs 522, Pharmacology for Advanced Nursing Practice .. 3
- Nurs 524, Advanced Health Assessment....................... 3
- Nurs 502, Theoretical and Conceptual Foundations in Nursing ................................................................. 3
- Nurs 604, Topics in Community Health Nursing in a Diverse Society .............................................................. 3
- Nurs 606-607, Research for Evidence-based Practice I & II. 5

**Family nurse practitioner track (21 credit hours)**

- Nurs 540, Family Care: Management of Health and Illness in Children .............................................................. 3
- Nurs 541, Clinical and Seminar: Children ....................... 3
- Nurs 542, Family Care: Management of Health and Illness in Women .............................................................. 3
- Nurs 543, Clinical and Seminar: Women ......................... 3
- Nurs 544, Family Care: Management of Health and Illness in Adults ................................................................. 3
- Nurs 545-547, Clinical and Seminar: Adults I & II .......... 6

**Clinical nurse leader track (13 credit hours)**

- Nurs 530, Clinical Outcomes Management.................... 3
- Nurs 531, Clinical Outcomes Management: Clinical and Seminar ................................................................. 4
- Nurs 532, Care Environment Management ......................... 3
- Nurs 533, Care Environment Management: Clinical and Seminar ................................................................. 3

Planning and advising notes
Programs follow a cohort model, with students in both tracks taking core courses together. The FNP track requires six semesters and three summers of study. The CNL track requires six semesters and one summer course.

Graduate nursing courses

NURS 500 Role Found for CNL & FNP Leadership ................................. 3
The role foundations course examines the theoretical principles and norms for practice as a nurse practitioner or clinical nurse leader. Content inherent in this course includes definition of the scope of practice of the graduate nurse, taking on the role of leader within the identified role, business and legal aspects and therapeutic use of self.

NURS 504 Health Care Policy, Organ & Finance ................................. 2
This course focuses on design and implementation of quality, cost-effective care in a variety of health care systems (AACN, 1996, p.7). This course includes three units. Unit one, health care organization, analyzes health care systems and management principles. Unit two, health care finance, provides information and key concepts on health care economics, fiscal management and budgeting. Unit three, health care policy, examines key concepts in understanding legislative processes related to nursing health care. Nurses develop beginning skills in affecting health policy change. Primary health care within a context of social justice is a key underpinning of this course.

NURS 510 Health Care Ethics ................................................................. 2
In this course the student is provided with frameworks for ethical decision-making based in philosophical, theological and professional theory. The course provides opportunity for the development of reflective moral thinking. The student learns to utilize critical thinking as a basis for ethical reasoning. The dynamics of the healthcare professionals' roles are studied in view of the crucial importance assigned to matters of disclosure, confidentiality, and informed consent. The student is challenged to examine personal and professional values in the context of growing health care disparities impacting the local and world community.

NURS 520 Advanced Pathophysiology ................................................. 3
An understanding of normal system-focused physiology is applied to pathologic disease processes to form a firm foundation for clinical assessment, decision making and clinical management (AACN, 1996, p. 13). This foundation will enable the student to apply knowledge of pathophysiology to a variety of settings and age groups.

NURS 522 Pharmacology for Adv Nurs Practice ................................. 3
Advanced pharmacology for nurses is the focus of this course. Therapeutic agents are compared and contrasted for therapeutic affects, adverse affects,
indications for use, and drug interactions. This course provides students with a pharmacological basis for advanced practice as a nurse practitioner working with clients across the life span. This course is also required for CNL students as a basis for greater depth of knowledge in pharmacotherapeutics. This course meets Indiana State Board of Nursing's requirements for application for prescriptive authority.

**NURS 524 Advanced Health Assessment** ................................................................. 3
This course builds on basic client assessment skills. Attention is placed on the development of assessment skills for the advanced practice nurse and the collection of the data base.

**NURS 530 Clinical Outcomes Management** .......................................................... 3
"The clinical nurse leader oversees the care coordination of a distinct group of patients and actively provides direct patient care in complex situations. This clinician puts evidence-based practice into action to ensure that patients benefit from the latest innovations in care delivery. The CNL collects and evaluates patient outcomes, assesses cohort risk, and has the decision-making authority to change care plans when necessary. This clinician functions as part of an interdisciplinary team by communicating, planning, and implementing care directly with other health care professionals, including physicians, pharmacists, social workers, clinical nurse specialists and nurse practitioners" (AACN January 2004). This course emphasizes the role of the CNL as clinician, outcomes manager, and educator. Knowing the patient story is foundational to affecting positive clinical care outcomes. Prerequisites: Nurs 500, 520, 522, 524.

**NURS 531 Clinical Outcomes Management Clinic** ............................................. 4
Pre or corequisite: Nurs 530.

**NURS 532 Care Environment Management** ....................................................... 3
Explores the roles and functions of the clinical nurse leader in a micro-system of the healthcare arena. The student is prepared to assess, analyze, and evaluate the care environment and implement changes toward coordinated, effective care outcomes. The focus of this course is client-entered care management within a framework of best possible care standards. Organizational management, quality management, communication process and evidence-based practice initiatives within the microsystem of care are stressed. Prerequisites: Nurs 500, 520, 522, 524.

**NURS 533 Care Environment Mgmt Clinical** ....................................................... 3
Pre or corequisite: Nurs 532.

**NURS 540 Family Care: Children** ................................................................. 3
The focus of this course is on the primary care of infants, children and adolescents for the advanced practice nurse. For each developmental stage, the course examines health promotion, disease prevention, psychosocial issues, sexuality and treatment of select common diseases and problems. Prerequisites: Nurs 500, 520, 522, 524.

**NURS 541 Health & Illness of Children Clinic** ...................................................... 3
Pre or corequisite: Nurs 540.
NURS 542 Family Care: Women ................................................................. 3
The focus of this course is primary care of women throughout the lifespan. Women's health will be examined in light of available evidence-based research. The organizing framework of the course is the developmental stages of women from adolescence to older adulthood. For each developmental stage, the course examines health promotion and disease prevention, psychosocial issues, sexuality, and treatment of select diseases. Prerequisites: Nurs 500, 520, 522, 524.

NURS 543 Health & Illness in Women Clinical ........................................... 3
Pre or corequisites: Nurs 542.

NURS 544 Family Care: Adults ................................................................. 3
The focus of this course is primary care for adults from early adulthood to aging adult. Students build on their existing skills in interviewing and assessment while developing medical decision making in the diagnosis of common adult health problems. The course focuses on the normal components of the well adult and preventative care, as well as nursing and medical diagnosis for common health problems, including discussion about the management of adults with chronic health problems. Prerequisites: Nurs 500, 520, 522, 524.

NURS 545 Health & Illness in Adults I ...................................................... 2
Pre or corequisite: Nurs 544.

NURS 547 Health & Illness in Adults II ..................................................... 4
Prerequisite: NURS 545

NURS 602 Theoretical & Concept Foundations ......................................... 3
Nursing and related theories are critiqued, evaluated and applied to practice. The focus is on exploration of concepts and concept development as a basis for developing frameworks for practice and research. Attention will be given to the transformational potential of theoretical frameworks within the context of a comprehensive, holistic practice.

NURS 604 Community Health Nursing ................................................... 3
The focus of this course is health in the community. Content germane to this course includes a process of community assessment, program planning, implementation and evaluation. Knowledge of basic epidemiology, communicable disease surveillance, survey data and cultural assessment contribute to a thorough knowledge of the community. Attention will be given to issues of social justice for vulnerable populations.

NURS 606 Research Practice I ................................................................. 3
The purpose of this course at the master's level is to prepare a practitioner for the utilization of new knowledge to provide high quality health care, initiate change, and improve nursing practice (AACN, 1996). The focus of this course is the understanding of scientific inquiry, knowledge generation, utilization and dissemination in nursing and healthcare. Scholarly literature review, ethical considerations and research critique are emphasized. The research practicum provides opportunity for application of research knowledge to the development of an evidence-based practice project.
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Elkhart, Ind.

Administrative faculty

President's Council
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President
B.A., Goshen College, 1977; M.Div.,
Fuller Theological Seminary, 1982; M.A.,
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University. GC, 2006-.
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Lynn Jackson, M.E.
Vice President for Enrollment Management
B.S., Kansas State University, 1980; M.E., Wichita State University, 1986; Ph.D. candidate, Kansas State University. GC, 2006-.

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Vice President for Institutional Advancement

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B.S., Eastern Mennonite College, 1979; M.Ed., James Madison University, 1982; Ph.D., Michigan State University, 1996. GC, 1987-.

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Director of Public Relations
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Peace Resources Librarian

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Men’s and Women’s Track and Field Coach
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Resident Director, Director of Small Group Housing
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Enrollment Counselor for CITL
B.S. 2005, M.S. 2007, Indiana University. GC, 2007-.

Executive Director of Merry Lea Environmental Learning Center
B.S., Eastern Mennonite University, 1974; M.A., Grace Theological Seminary, 1983; Ed.D., Nova Southeastern University, 1998. GC, 1997-.

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Director of Alumni, Parent and Church Relations

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Men’s Soccer Coach

Thavisith Mounsithiraj, M.Ed.
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B.A., Indiana University, 1993; M.S., Purdue University, 1995; Ph.D., University of Illinois Chicago, 2005. GC, 2004-.

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Major Gift Officer

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B.A., Oral Roberts University, 1989; MDiv. 1992, Ph.D. 1995, Fuller Seminary, School of Psychology. GC, 2007-.

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B.S., Case Institute of Technology, 1963; Ph.D., Northwestern University, 1969. GC, 1985-.

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B.M., Southwest Missouri State University, 1987; M.M., University of Kansas, 1989; D.M.A., University of Wisconsin-Madison, 1995. GC, 2000-.

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B.S., Manchester College, 1996; M.A. Bethany Theological Seminary, 2000; Ph.D. candidate, Iliff School of Theology and University of Denver. GC, 2002-.

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R.N., Mennonite Hospital School of Nursing, 1970; B.S.N., Goshen College, 1973; M.A., Ball State University, 1983. GC, 1998-.

Victor R. Koop, Ph.D.
Professor of Psychology
B.A., Tabor College, 1966; M.A.Sc., University of Waterloo, Ontario, 1969; Ph.D., University of Toronto, 1975. GC, 1982-.

Merrill O. Krabill, M.F.A.
Professor of Art
B.A., Goshen College, 1979; M.F.A., Claremont Graduate School, 1986. GC, 2001-.

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Associate Professor of Music

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Associate Professor of Physical
Education

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Associate Professor of Social Work
B.A., Goshen College, 1992; M.S.W., Smith College, 1994; Ph.D., Simmons College, 2005. GC, 1998-.

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B.A., Goshen College, 1978; Ph.D., National University of Ireland, 1987. GC, 2003-.

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B.A., Goshen College, 1967; M.A., Michigan State University, 1972; Ph.D., Indiana University, 1985. GC, 1976-.

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SST leader in Peru 2008-09

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Professor Emeritus of English

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