

2006-2007 Catalog

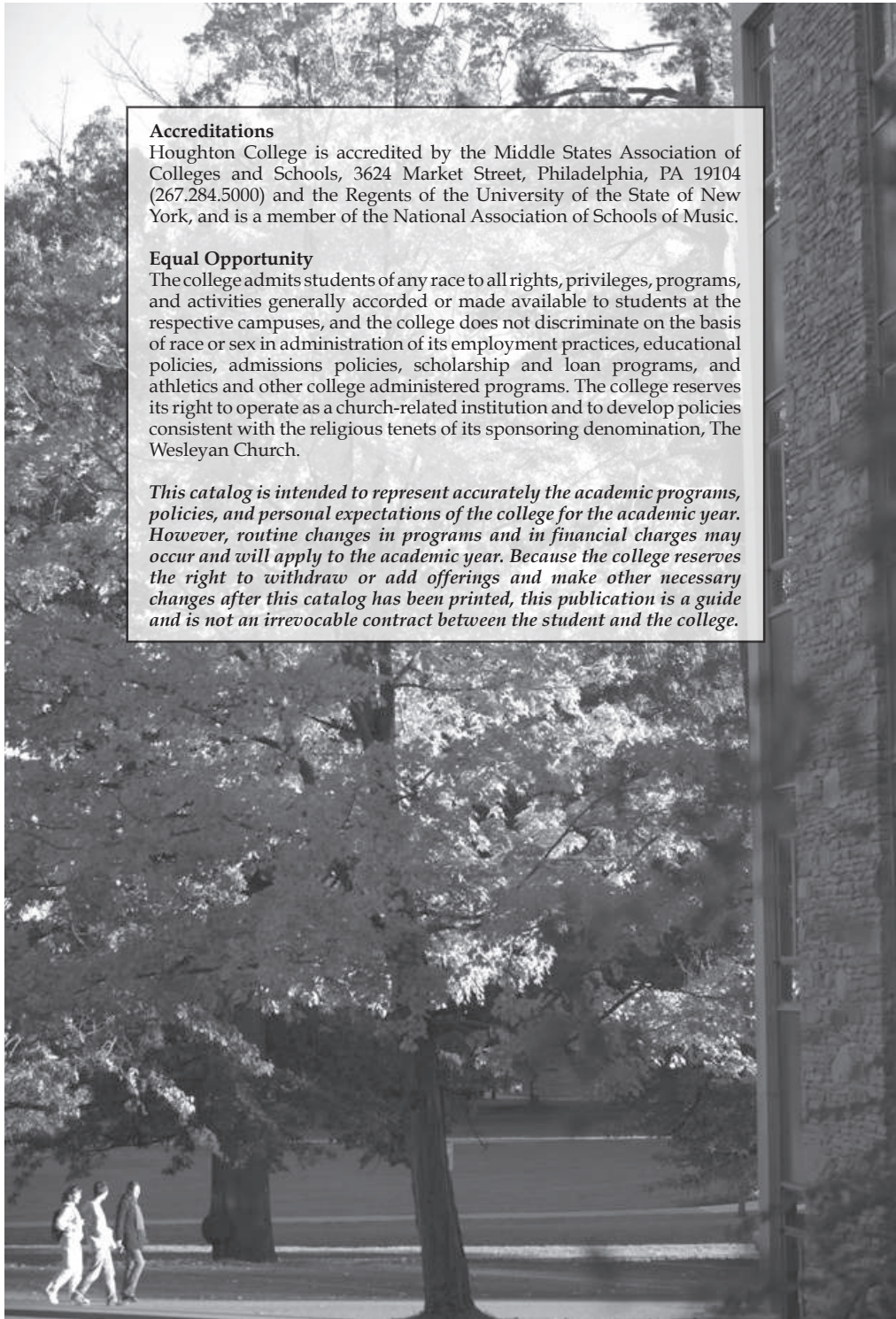


Houghton College provides an
academically challenging, Christ-centered
education in the liberal arts and sciences
to students from diverse traditions
and economic backgrounds
and equips them to lead and labor
as scholar-servants in a changing world.

**Houghton
College** *a higher purpose
in mind*

One Willard Avenue, Houghton, NY 14744
www.houghton.edu
585.567.9200 or 800.777.2556

Any links in this catalog have been disabled due to website changes that have rendered the links unusable.



Accreditations

Houghton College is accredited by the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104 (267.284.5000) and the Regents of the University of the State of New York, and is a member of the National Association of Schools of Music.

Equal Opportunity

The college admits students of any race to all rights, privileges, programs, and activities generally accorded or made available to students at the respective campuses, and the college does not discriminate on the basis of race or sex in administration of its employment practices, educational policies, admissions policies, scholarship and loan programs, and athletics and other college administered programs. The college reserves its right to operate as a church-related institution and to develop policies consistent with the religious tenets of its sponsoring denomination, The Wesleyan Church.

This catalog is intended to represent accurately the academic programs, policies, and personal expectations of the college for the academic year. However, routine changes in programs and in financial charges may occur and will apply to the academic year. Because the college reserves the right to withdraw or add offerings and make other necessary changes after this catalog has been printed, this publication is a guide and is not an irrevocable contract between the student and the college.

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2006-2007 College Calendar

FALL SEMESTER	<p>Aug 25, Friday Aug 26, Saturday Aug 28, Monday TBD Sep 3-7, Sun.-Fri. Sep 11, Monday Sep 13, Wednesday Oct 6-7, Fri.-Sat. Oct 18, Wednesday Oct 19-22, Thur.-Sun. Oct 23, Monday, 7:45 a.m. Oct 24, Tues., 4 p.m. Oct 24-Nov 3, Thur.-Fri. Nov 13, Monday</p> <p>Nov 22-26, Wed.-Sun. Nov 27, Mon., 7:45 a.m. Dec 8, Fri. Dec 11-15, Mon.-Fri. Dec 15, Fri., 12:30 p.m. Dec 27, Wednesday, 4 p.m.</p>	<p>New students arrive New student orientation Classes begin Student teacher orientation and validation Christian Life Emphasis Week (tentative) Last day to add full semester courses* Library Research sessions begin Founders' Day/Homecoming Second half semester courses begin* October break Classes resume Midsemester grades due Course selection Last day to withdraw from a full semester course without an F* Thanksgiving recess Classes resume Last day of classes Reading day/Final exams (see exam schedule) Semester ends Final grades due</p>
SPRING SEMESTER	<p>Jan 9, Tuesday, 7:45 a.m. Jan 14-18, Sun.-Thur. Jan 23, Tuesday Jan 24, Wednesday Feb 24-Mar 4, Sat.-Sun. Mar 5, Monday, 7:45 a.m. Mar 7, Wednesday Mar 13, Tuesday, 4 p.m. Mar 13, Tuesday Mar 20-29, Tues.-Thur. Mar 27, Tuesday</p> <p>Mar 31-April 9, Sat.-Mon. Apr 10, Tuesday, 7:45 a.m. May 1, Tuesday May 2, Wednesday May 2-5; 7-8, Wed.-Tues. May 8, Tuesday May 8, Tuesday, 4 p.m. May 11, Fri., (tbd) May 12, Sat., 10:00 a.m. May 21, Monday, 4 p.m.</p>	<p>Classes begin Christian Life Emphasis Week (tentative) Last day to add full semester courses* Library Research sessions begin February break Classes resume Second half semester courses begin* Mid-semester grades due Mayterm course selection Course selection Last day to withdraw from a full semester course without an F* Easter vacation Classes resume Last day of classes Reading Day 'til 7 p.m./first exam Final exams (see exam schedule) Semester ends, 3:30 p.m. Selected senior grades due Baccalaureate Commencement All final spring grades due</p>
MAYTERM	<p>May 15, Tuesday, 8:00 a.m. June 1, Friday Jun 8, Friday Jun 12, Tuesday, 4 p.m.</p>	<p>Classes begin Three-week courses end Four-week courses end Mayterm final grades due</p>

***Due to the shorter time frame, those courses which are only one-half of a semester have different last days to add and withdraw. Check Master Schedule or Scoop sheet.**

2007-2008 College Calendar

FALL SEMESTER	<p>Aug 24, Friday Aug 25, Saturday Aug 27, Monday TBD Sep 3-6, Sun.-Thur. Sep 10, Monday Sep 12, Wednesday Oct 5-6, Fri.-Sat. Oct 17, Wednesday Oct 18-21, Thur.-Sun. Oct 22, Monday, 7:45 a.m. Oct 23, Tues., 4 p.m. Oct 25-Nov 2, Thur.-Fri. Nov 5, Monday</p> <p>Nov 21-25, Wed.-Sun. Nov 26, Mon., 7:45 a.m. Dec 7, Fri. Dec 8, 10-14, Sat.-Fri. Dec 14 Fri., 12:30 p.m. Dec 27, Thursday, 4 p.m.</p>	<p>New students arrive New student orientation Classes begin Student teacher orientation and validation Christian Life Emphasis Week (tentative) Last day to add full semester courses* Library Research sessions begin Founders' Day/Homecoming Second half semester courses begin* October break Classes resume Midsemester grades due Course selection Last day to withdraw from a full semester course without an F* Thanksgiving recess Classes resume Last day of classes Reading day/Final exams (see exam schedule) Semester ends Final grades due</p>
SPRING SEMESTER	<p>Jan 8, Tuesday, 7:45 a.m. Jan 13-17, Sun.-Thur. Jan 22, Tuesday Jan 23, Wednesday Feb 23-Mar 2, Sat.-Sun. Mar 3, Monday, 7:45 a.m. Mar 6, Thursday Mar 11, Tuesday, 4 p.m. Mar 11, Tuesday Mar 18-Apr 3, Tues.-Thur. Mar 21-Mar 30, Sat.-Sun. Mar 31, Monday, 7:45 a.m. Apr 1, Tuesday</p> <p>Apr 29, Tuesday Apr 30, Wednesday May 1-3, 5-6, Thur.-Tues. May 6, Tuesday May 6, Tuesday, 4 p.m. May 9, Fri., (tbd) May 10, Sat., 10:00 a.m. May 19, Monday, 4 p.m.</p>	<p>Classes begin Christian Life Emphasis Week (tentative) Last day to add full semester courses* Library Research sessions begin February break Classes resume Second half semester courses begin* Mid-semester grades due Mayterm course selection Course selection Easter vacation Classes resume Last day to withdraw from a full semester course without an F* Reading Day Last day of classes/first exam Reading day/final exams (see exam schedule) Semester ends, 3:30 p.m. Selected senior grades due Baccalaureate Commencement All final spring grades due</p>
MAYTERM	<p>May 13, Tuesday, 8:00 a.m. May 30, Friday Jun 6, Friday Jun 10, Tuesday, 4 p.m.</p>	<p>Classes begin Three-week courses end Four-week courses end Mayterm final grades due</p>

***Due to the shorter time frame, those courses which are only one-half of a semester have different last days to add and withdraw. Check Master Schedule or Scoop sheet.**

General Information



Mission

Houghton College provides an academically challenging, Christ-centered education in the liberal arts and sciences to students from diverse traditions and economic backgrounds and equips them to lead and labor as scholar-servants in a changing world.

Philosophy

The philosophy of Houghton College, an educational institution of The Wesleyan Church, builds on the concept of preparing individuals to become Christian scholar-servants who exhibit the scholar's passionate yet humble commitment to the Christian faith and to their chosen academic discipline, and the servant's qualities of serving enthusiastically and unselfishly wherever called. The indispensable characteristics of the scholar-servant are the *competence to serve* and the *willingness to serve*.

To acquire the *competence to serve*, the scholar-servant must develop effective skills in listening, reading, written and spoken communication, computation, problem solving, logical reasoning and value discrimination. In addition, the graduate's cumulative knowledge must provide a solid foundation for lifelong learning by a thorough grounding in one or more academic disciplines plus familiarity with fundamental concepts, principles and methods of the basic fields of knowledge. Learning must also relate disciplines to each other and to life in ways that assist in making wise decisions and appreciating one's individual heritage while respecting cultural diversity and the integrity of creation.

To develop the *willingness to serve*, the scholar-servant must encounter positive models through life examples from Houghton's faculty and staff. Their reasoned faith must rest on sufficient knowledge of the Bible and its central doctrines to communicate Christianity effectively to others, and produce a world view that infuses Christian truth into knowledge and experience.

To achieve its ideals, Houghton College will sustain a scholarly community of believers who confess the Lordship of Jesus and who actively seek truth and recognize its foundation in Christ. Because of the risks involved in educating the intellect and the character, the faculty and staff will strive to provide a challenging and stimulating environment which is also nurturing and supportive. The community will also be characterized by the historic distinctives of The Wesleyan Church, including purity of heart and life, concern for justice in social issues and unselfish stewardship of time and the material provisions of creation.

Doctrinal Statement

This statement of doctrinal views has been adopted by the board of trustees of Houghton College:

We believe that the Scriptures of the Old and New Testaments are fully inspired of God and inerrant in the original writings, and that they are of supreme and final authority for faith and practice.

We believe that there is one God, eternally existing in three persons: Father, Son, and Holy Spirit.

We believe that God created the entire universe including human beings by special operation of divine power.

We believe in the fall of Adam and Eve and the consequent sinful nature of all humanity which necessitates a divine atonement.

We believe in Jesus Christ as truly God and truly man, and in His virgin birth, His matchless teachings, His vicarious death, His bodily resurrection, and His promised second coming.

We believe in justification by grace through faith and in regeneration by the Holy Spirit, who makes the penitent believer a new creature in Christ and commences His lifelong sanctifying work.

We believe that the Christian may be filled with the Holy Spirit, or sanctified wholly, as a definite act of divine grace wrought in the heart of the believer to take full possession, cleanse, and equip for service on condition of total

surrender and obedient faith.

We believe in the personal existence of Satan.

We believe in the bodily resurrection of the dead--of the saved to everlasting blessedness and of the lost to everlasting punishment.

Community Expectation

The college opposes practices and appearances which detract from one's Christian testimony. It forbids the use of tobacco, illegal drugs and alcoholic beverages. Students are required to sign a statement of community expectations, committing themselves to abide by these and other standards of Christian conduct. The Student Guide gives a more complete statement of our policies and regulations.

Chapel attendance three times a week (Monday, Wednesday and Friday) is required of all students. Church attendance, either at the Houghton Wesleyan or another local church, is strongly encouraged.

History

In 1883, the Lockport Conference of The Wesleyan Methodist Church of America founded Houghton Wesleyan Methodist Seminary. The school, established largely through the efforts of Willard J. Houghton, began with elementary and academic departments in 1884 and added a department for training of ministers in 1888.

In 1896, the school was placed under the management of the Wesleyan Educational Society. The first college-level courses were offered in 1889, and by 1909, advanced standing was allowed to college students transferring to degree-granting institutions. From 1909 to 1923, three years of college work were given.

A provisional charter as a four-year liberal arts college was granted to Houghton in 1923 by the Regents of the University of the State of New York, and the first four-year baccalaureate degrees were awarded in 1925. Houghton College received its permanent charter in 1927. In November 1935, the college was given full accreditation through admission to membership in the Middle States Association of Colleges and Secondary Schools, 3624 Market Street, Philadelphia, PA 19104 (267-284-5000).

James Seymour Luckey, college president from 1908 to 1937, provided the leadership and constructive planning that brought Houghton's emergence as a strong, properly equipped and completely accredited liberal arts college. Dr. Stephen W. Paine was president from 1937 until 1972. During these years student enrollment grew to approximately 1,200.

The leadership of Houghton College continued under the guidance of Wilber T. Dayton from 1972 until 1976. Dr. Daniel R. Chamberlain assumed the presidency of Houghton College in September 1976 and served until his retirement in the spring of 2006. Current enrollment is approximately 1,200.

College development has added several major buildings within the past few years, most recently the Center for the Arts. There have been significant improvements and changes to outdoor athletic facilities as well. Substantial increases in endowment have also been realized.

Founded and maintained by The Wesleyan Church, Houghton College recognizes its obligation to make a distinct contribution in the training of leaders and laity for service to that denomination.

Locations

Houghton College's main campus is in the hamlet of Houghton, Allegany County, in western New York, about 65 miles southeast of Buffalo and 70 miles southwest of Rochester. It is in the heart of the Genesee country, rich in historic Archaic, Lamoka, and Woodland Native American cultures. The campus sits on the Allegheny Plateau at roughly the 1,300-foot level, on the site of the former Caneadea Indian Reservation of the early 1800s. Fifteen miles to the north are the Genesee's magnificent Portage Falls and Letchworth State Park. On all sides is the scenic beauty of the rolling hills and northern hardwood forests of western New York State. Allegany County, with extensive state forest land, abundant wildlife, and cross-country and downhill ski trails, is rapidly developing into a leading recreation area of western New York.

When the former Buffalo Bible Institute in West Seneca merged with Houghton College in 1969, the West Seneca campus was created. The programs on this campus have evolved from lower-divisional status to specialized courses and internships designed to complement majors offered on the main campus, particularly those requiring an urban setting. The West Seneca Campus is also the primary setting for Houghton's adult degree completion program in management, P.A.C.E.

Academic Standing and Regulations

Houghton College is fully accredited by the Regents of the University of the State of New York and by the Middle States Commission on Higher Education. The Middle States Commission on Higher Education, 3624 Market St, Philadelphia, PA 19104 (267.284.5000) is an institutional accrediting agency recognized by the U. S. Secretary of Education and the Council for Higher Education Accreditation. The most recent renewal of this status was awarded in 2005.

The Greatbatch School of Music is a member of the National Association of Schools of Music, and the requirements for entrance and for graduation as set forth in this catalog are in accordance with the published regulations of the National Association of Schools of Music.

Houghton Graduates

Each year an average of 65% of Houghton's graduates go on to full-time employment. The remaining 35% enter graduate school within a year of leaving Houghton. Approximately 16% of our graduates go into full-time Christian service. The remainder tend to enter professional fields such as education, business, medicine, law and social services. Post-graduation statistics are available from the career services office.

Christian College Consortium

Houghton College is a member of the Christian College Consortium, based in Concord, NH, which provides valuable cooperative programs. Consortium programs reinforce the unique purposes of Houghton College, and consortium members are committed to the tenets and spirit of evangelical Christian commitments in all areas of educational, faculty, administrative and student activity.

Consortium activities increase learning opportunities for students by bringing special programs to campus and by creating the opportunity for selected sophomores or juniors to enroll with ease in special programs at other consortium colleges.

The other members of the consortium are: Asbury College, Wilmore, KY; Bethel University, St. Paul, MN; George Fox College, Newberg, OR; Gordon College, Wenham, MA; Greenville College, Greenville, IL; Malone College, Canton, OH; Messiah College, Grantham, PA; Seattle Pacific University, Seattle, WA; Taylor University, Upland, IN; Trinity International University, Deerfield, IL; Westmont College, Santa Barbara, CA; and Wheaton College, Wheaton, IL. All are four-year liberal arts colleges with full regional accreditation.

Further information can be obtained by writing to the President, Christian College Consortium, 50 Stark Highway South, Dunbarton, NH 03045.

Council for Christian Colleges & Universities

Houghton College is also a member of the Council for Christian Colleges & Universities (CCCCU), an organization of 105 Christian colleges and universities. The Council's American Studies Program in Washington, D.C. offers students a wide range of study and internship opportunities, usually occupying one semester of the senior year. The Latin American Studies Program in Costa Rica provides an opportunity for cross-cultural study and an exposure to the problems of developing countries. The Los Angeles Film Studies Program engages students in the professional activities, cultural impact, and ethical issues of the contemporary film and television industry. Some details about these programs may be found in the Off-Campus Programs section of this catalog. Further information may be obtained by writing to the President, Council for Christian Colleges & Universities, 329 Eighth Street, N.W., Washington, D.C. 20002.

Western New York Consortium

The Educational Law and Trustees of New York State Resolution 73-58, dated February 28, 1973, enables state-operated campuses and community colleges to enter into a cross-registration procedure with other public and private colleges in the Western New York Consortium. The process permits full-time students to take and receive credits for courses at another participating college, without payments of tuition beyond the tuition already paid to the home institution (one three-hour course per semester).

Participating institutions are: Canisius College, Daemen College, D'Youville College, Erie Community College, Genesee Community College, Hilbert College, Houghton College, Jamestown Community College, Medaille College, Niagara County Community College, Niagara University, SUNY at Buffalo, SUNY College of Technology at Alfred, SUC at Buffalo, SUC at Fredonia, St. Bonaventure University, Trocaire College, and Villa Maria College. For further information, contact the academic records office.

Five-College Committee

Houghton has established an ongoing consortium relationship with four other colleges serving the northern tip of Appalachia: St. Bonaventure University, Alfred University, Jamestown Community College (Olean) and the SUNY College of Technology at Alfred. Details of cross-enrollment opportunities may be found through the academic records office.

Army ROTC

Army Reserve officer training is available through cross-registration for course work at St. Bonaventure University near Olean. The academic courses are complemented with practical field experiences designed to enhance self-confidence, discipline, initiative and responsibility. Houghton students in the program have done well in competition for scholarships, which cover full tuition and books, plus a modest living allowance. Up to eight hours of graduation credit may be earned through cross-registration in this program. The academic records office has further information.

Educational Rights and Privacy Act

This notice is to inform students of the Family Educational Rights and Privacy Act of 1974, as amended in 1988 and 1996. This Act, with which Houghton College intends to comply fully, was designed to protect the

privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. In light of this federal regulation, Houghton College does not issue grades to parents. However, at the student's request (form available in the Academic Records Office) the grades can be released to parents.

Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by Houghton College to comply with the Act. In accordance with the provisions of the Act, students may request that Houghton College not disclose or print directory information and not disclose other information such as major(s), minor(s), Dean's list, other academic honors, and sports information such as height, weight, etc. Students wishing to prevent disclosure of directory information should complete the form available at the Academic Records Office by the end of the second week of classes. Local Houghton College policies concerning compliance with the provisions of the Act can be found in Houghton's Academic Records Office.

Crime Statistics Reporting

The Houghton College Committee on Harassment Policy and Prevention (CHPP) serves in an advisory role for campus safety and will provide upon request all campus crime statistics as reported to the United States Department of Education. This list is also available through the Safety and Security office and can be requested by contacting the Director of Safety and Security at 585.567.9543.

For a list of crime rates at Houghton College, as well as comparative rates with other colleges nationwide, visit the federal college crime registry at: <http://ope.ed.gov/security/index.asp>.

Religious Observances

In compliance with New York's Hevesi-Levy Act, Houghton College will accommodate any of its matriculated students who are unable to register for classes, take an exam, or attend a class because of religious beliefs (taken to mean the doctrinal beliefs of religious organizations which qualify as tax-exempt corporations under federal law).



Admission



Houghton seeks to admit students who appear capable of success. The Office of Admission carefully reviews each application, including transcripts, standardized test scores, Christian character recommendation and other supporting documents.

Non-discrimination

Houghton College admits students of any race, color, or national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national or ethnic origin, or handicap in administration of its educational policies, admission policies, scholarship and loan programs, and athletic or other school-administered programs. The college reserves the right to operate as a church-related institution and to develop policies consistent with the religious tenets of its sponsoring denomination, The Wesleyan Church (www.wesleyan.org).

Application Forms

A student will be considered for admission after all parts of the application are received, including the signed completed application form, a Christian character recommendation, high school transcripts, SAT or ACT scores and the application fee. While Canadian applicants are not required to submit SAT or ACT scores, doing so is recommended for those seeking admission to the First-Year Honors Program.

Application forms are available from the Office of Admission, Houghton College, Houghton, NY 14744. E-mail: admission@houghton.edu; web: www.houghton.edu/admission/apply.htm; phone: 800.777.2556;

Application Deadlines

The Office of Admission responds to applications for admission on or about January 1 (for application files completed by November 15), and on a rolling basis thereafter. Notification for the rolling admission period begins on or about February 1 and continues into the summer as classroom and residence hall space allows.

An accepted applicant is asked to confirm his or her intention to enroll by paying a nonrefundable \$300 enrollment deposit by May 1, thereby reserving a place in the entering class.

Applications for spring semester admission must be received by December 1.

Application Fee

A \$40 nonrefundable application fee is normally charged on all applications. The application fee will be waived for students who regularly attend a Wesleyan Church.

Music Majors

Music majors must apply separately to, and audition for, the School of Music. Music applications can be obtained from the School of Music. E-mail: music@houghton.edu; phone: 800.777.2556, ext. 4000; web: campus.houghton.edu/orgs/music/.

First-Year Honors Program Admission

Upon admission to Houghton, selected students will be invited to apply for admission to the First-Year Honors Program on the basis of their academic profile. The Admission Office will begin the formal

invitation process to apply for the program in early November, continuing through early January. Finalists and their parents will be invited to campus for an interview weekend.

Decisions regarding admission to the program will be made by late March. Approximately 50 students will be admitted to the program annually. A student's intended major is not a factor in the selection.

For further information please contact the Admission Office or visit the following Website: www.houghton.edu/admission/fyhp.

Recommended High School Courses

Houghton regards quality high school achievement as more important than the specific alignment of courses; however, the following are beneficial in academic preparation for college:

English	4 years
Foreign Language	at least 2 years
Mathematics	3 years
History or Social Science	at least 3 years
Science	at least 2 years

Entrance Examinations

Applicants must take the Scholastic Assessment Test (SAT I) of the College Entrance Examination Board or the Test Battery of the American College Testing Program (ACT) in their junior or senior year of high school. SAT subject tests are not required.

Spring 2005 revisions of the SAT added a required writing section in addition to the traditional critical reading and mathematics sections. Houghton College will primarily focus attention on the traditional sections of the exam. Writing section scores will be considered, both for admission and scholarship purposes, but will not carry the same weight as critical reading and mathematics. The same is true for the optional ACT Writing Test.

Information regarding the SAT may be obtained from www.collegeboard.com. ACT information may be found at www.act.org.

Houghton's institution code numbers are: **2299 for SAT; 2766 for ACT.**

International Students

Application requirements for International Students may be found on our website: www.houghton.edu/admission or by contacting the Director of Intercultural Affairs.

Students from non-English speaking countries must take the Test of English as a Foreign Language (TOEFL), administered by the Educational Testing Service, Princeton, NJ 08540 (www.ets.org), and see that these scores are forwarded to the college. Students with a paper-based TOEFL score of 550 or higher, an Internet-based score of 80 or higher, or a computer-based score of 213 or higher, may be offered admission providing all other factors are acceptable.

High School Equivalency

Under some circumstances, an applicant may be considered for admission on the basis of adequate scores on the New York State High School Equivalency examination or on the USAF high school equivalency test of General Education Development, High School Level. In order to qualify for such consideration, he or she must earn an average standard score of at least 500 on all five tests, with no individual test score below 450. A student who has completed three years of high school may be accepted and then be eligible for a high school diploma from New York State upon the successful completion of 24 semester hours at Houghton. Students who are considering leaving high school early should consult with the Houghton College admission and student financial services offices. In some situations, students who attend college full-time before completing high school are not eligible for financial aid.

Advanced Placement Tests

Advanced course standing and/or college credit may be granted to students who take the College Entrance Examination Board Advanced Placement (AP) Tests. These are given in May to students who have taken high school courses equivalent to first-year college courses. For the current list of approved tests and applications of credit, please see campus.houghton.edu/orgs/records/AP_Guidelines.pdf. A score of 4 or 5 is generally required and will earn a student 3-4 hours of credit.

Inquiry concerning these tests should be made to the high school guidance office or to Advanced Placement Program, College Entrance Examination Board, www.collegeboard.com.

CLEP

College-Level Examination Program (CLEP) tests for advanced placement and/or credit may be taken at Houghton College. Only subject examinations will be accepted from CLEP. Students may test for credit by CLEP at the beginning level of a foreign language provided the testing is done prior to the completion of

the level 103 foreign language course, and at the intermediate level provided the testing is done prior to the completion of the first advanced course. There is a \$55 fee for each CLEP test, plus a charge of 10 percent of the tuition for total semester hours in excess of 18. More information on CLEP exams may be obtained from the Academic Records Office, the Student Academic Services Office, or www.collegeboard.com.

Transfer Student Admission

Transfer students are welcome at Houghton with preference given to individuals who present a grade-point average of 2.75 or higher. Transfer students are expected to reside initially in college housing, except students commuting from home.

Transfer students must submit an official transcript from all colleges attended in addition to a high school transcript and Christian character recommendation. SAT or ACT scores are generally not required for transfers.

Transfer Credit Guidelines

- Transfers must complete at least 30 hours at Houghton and earn at least 50 percent of their major hours here
- Transfer credits are accepted from institutions that are regionally accredited and listed by the U.S. Office of Education in its current Education Directory, Colleges and Universities.
- A maximum of 32 hours of advanced placement (AP), CLEP, correspondence, distance education, or other non-classroom credit will transfer to Houghton.
- Up to 67 credit hours may be transferred for appropriate courses completed with a grade of C- or above from a regionally-accredited community college or a Bible college accredited by the Association for Biblical Higher Education (ABHE).
- The Academic Records Office, in consultation with relevant department chairs, will assess all transfer credits. Except as noted below, credit to meet Houghton requirements is granted on a course-by-course basis when it is reasonably clear that the course being transferred would, if taken at Houghton College, fulfill Houghton College requirements.
- Only grades received at Houghton are used to figure the Houghton College grade point average; accepted hours earned elsewhere, however, will be posted to the Houghton transcript.
- At least 62 credit hours must be taken at Houghton to be eligible for graduation honors (*cum laude*, *magna*, or *summa cum laude*).

Transfer Students with a Full Year of College Credit

For students who have at least a full year of successful college experience as demonstrated by at least 25 transferable semester credit hours earned *following high school graduation*, a course-by-course assessment will still be done. However, if the year was spent in normal pursuit of a baccalaureate degree in an accredited baccalaureate program, courses of a general education nature taken in a discipline will count for a Houghton Integrative Studies requirement in that discipline even if the equivalent course taken at Houghton College would not so count. (E.g., courses in World Literature or World Civilization would meet Houghton's requirements for Literature of the Western World, or Western Civilization.)

Junior Transfers from Four-Year Baccalaureate Institutions

For students who have been enrolled in a baccalaureate program and have successfully completed 60 or more semester hours of transferable credits, special considerations apply in meeting Houghton's Integrative Studies requirements.

1. Students who have earned at least 40 transferable hours from a single baccalaureate institution may complete either Houghton's foreign language requirement or the foreign language requirement of the institution where the majority of transferable hours have been earned.

2. Students who have earned at least 45 transferable hours in at least seven of the following 10 areas - writing, literature, communication, foreign language, social science, philosophy, fine arts, history, math, and science - need only take Biblical Literature and another Bible course or Introduction to Christianity to complete Houghton Integrative Studies requirements.

Students with an Associate Degree

Transfer students who have earned an associate in arts (A.A.) or associate in science (A.S.) degree from an accredited college may enter as juniors. Such students must take Biblical Literature and another Bible course or Introduction to Christianity to complete their Integrative Studies requirements. This policy does not apply to students who have attended Houghton previously; nor does it apply to students who have earned an associate in applied science degree. *Note: students entering with the A.A. or A.S. may, in some cases, need more than four semesters to complete the bachelor's degree.*

Houghton College has established formal articulation agreements with most New York State community colleges. These agreements allow graduates who meet certain criteria to transfer directly to Houghton with

junior class standing. Two-year college transfers who are members of Phi Theta Kappa will receive additional scholarship support from Houghton College.

The college also has a formal articulation agreement with The Salvation Army School for Officers' Training in Suffern, NY. The Salvation Army agreement allows a student who intends to be commissioned as a Salvation Army officer to attend Houghton for three years and the School for Officers' Training for two years. Successful completion of coursework results in a degree from Houghton at the time of commissioning and ordination from The Salvation Army.

Re-admission

Students who have attended Houghton, left for any reason and wish to return must re-apply for admission and ensure that the college receives transcripts for any college work taken in the interim. Re-admission is not automatic, but is based on the student's entire academic record, previous Houghton involvement, and other life circumstances since leaving Houghton.

Homeschoolers

Houghton College welcomes applications from homeschooled students. Approximately 90 current Houghton students came to the college from a homeschool background.

Houghton does not recommend any particular curricular program. Homeschoolers who submit work to a distance learning program (i.e. Christian Liberty Satellite Academy) should have that organization send a transcript. Otherwise, families should provide information regarding academic work and related activities for the ninth-12th grade years. A reading list may also be submitted. The admission page of the Houghton College Web site (www.houghton.edu/admission) features a sample curricular template, and other useful information for homeschool families.

New York residents wishing to receive state need-based financial aid (NY State TAP) must demonstrate the "Ability to Benefit" (ATB) from higher education. Presently, the SAT and ACT are not acceptable ATB tests. A GED or high school diploma (from a school registered with the state of New York) are accepted, as are passing scores on one of several basic skills tests. A letter attesting to educational equivalency from a local public high school official will also meet the ATB requirement. See this link for test details: www.ifap.ed.gov/fregisters/FR09042002.html. The state of New York uses the United States Department of Education's (USDE) approved list of ATB tests.

Homeschoolers who have taken college courses should send official transcripts of that work to Houghton.



Financial Information



This section contains the specific prices for the current academic year. Note: Modest changes may be expected for the next academic year.

Current Year

General

The average annual college charges are summarized below. Tuition is a flat rate for 12-18 credits per semester, the number of hours necessary to be considered a full-time student and to be eligible for most aid programs. If you are considering part-time attendance, please contact the Student Financial Services Office (SFSO) for more information. Travel, personal expenses, textbooks and supplies are costs that vary and are not included in the fixed costs below. However, the SFSO will provide an estimate of these expenses as part of the financial aid package. The estimate for travel ranges from \$250-\$1,500 depending on the distance traveled.

Tuition.....	\$ 20,400
Room rent.....	\$ 3,500
Board.....	\$ 3,180
Total.....	\$ 27,080

The room **rent** used above is based on a double room in a traditional residence hall. The board rate is based on the 21-meals-per-week plan. Additional fees are charged in specific circumstances. See the following page.

Tuition rates

Tuition (flat rate: 12-18 hours per semester).....	\$10,200
Tuition (per hour, 1-11 hours).....	\$850
Tuition (per hour, for hours over 18).....	\$475
Fee for auditing class (if not covered under flat rate).....	\$50
Tutorial fee (per hour; add to tuition fee).....	\$268
Tuition (per hour Mayterm overload and summer sessions).....	\$475

Houghton Off-Campus Program rates (these fees are in addition to tuition)

Tanzania Program (includes room, board, fees and airfare).....	\$3,950
Houghton in London (includes room, board, and fees).....	\$4,100
Honors Program (Meaning of the West) (includes room, board, fees and airfare).....	\$3,800
Honors Program (East Meets West) (includes room, board, fees and airfare).....	\$4,008
Australia (includes room, board, fees and airfare).....	\$4,700
Star Lake (includes room, board, and fees).....	\$3,700
GO-Ed (includes room, board, fees and airfare from a gateway airport).....	\$3,800

Applied Music

In addition to the flat rate fee for tuition, students taking applied music are charged a special fee according to the following schedule:

Half-hour lesson (for 1-2 hours credit).....	\$330
Hour lesson (for 3-4 hours credit).....	\$660
Hour-and-a-half lesson (for 5-6 hours credit).....	\$990

Housing: Room rates per semester are as follows:

College Farm.....	\$1,190
Brown House.....	\$1,650
Dorm triple and West Seneca doubles.....	\$1,515
Dorm doubles, "suite" triples, West Seneca townhouse doubles, and West Seneca singles.....	\$1,750
Townhouse doubles, flat double.....	\$1,875
Dorm singles (except Gillette), double held as single, triple held as double, flat single, townhouse single, and West Seneca townhouse single.....	\$2,525
Gillette dorm single.....	\$2,120
Gillette quad.....	\$1,250

[Damage deposit (per year, refundable) for townhouses and Rothenbuhler Hall: \$150.]

Rooms through Community Living Option vary in cost depending on location and quality.

Board rate: Following are the rates for the various meal plans:

21 meals (per week) plan/210 block (per semester).....	\$1,590
(21-meal plan is required for first-year students; sophomores, juniors and seniors in traditional residence halls must be on 14- or 21-meal plan)	
14 meals (per week) plan/165 block (per semester).....	\$1,400
7 meals (per week) plan/85 block (per semester).....	\$750

There are no board plans available at the West Seneca campus.

College fees

Application.....	\$40
Art studio lab fee.....	\$115
Enrollment deposit (annual; credited toward tuition/room)	
First-year students.....	\$300
Returning students.....	\$100
Highlander.....	\$475
HorsemanSHIP I course fee.....	\$85
HorsemanSHIP (all other courses with labs).....	\$160
Independent study extra-late fee.....	TBD
Science laboratory fee (per lab).....	\$115
Student teaching fee.....	\$175
Late registration fee.....	\$100
Sickness and accident coverage (12 months).....	TBD
Transcript fee (each copy) while a student.....	\$5
Transcript fee (each copy) after leaving school.....	\$5
Vehicle registration/year, depending on parking location.....	\$25 - \$150

P.A.C.E., Program for Accelerating College Education (Adult Degree Completion)

All information regarding P.A.C.E. may be found in the Adult Learning Opportunities section of the catalog.

GENERAL

This section provides **general** information and explanation about the expenses (previously listed) which students will encounter during each academic year.

Housing

All students who do not commute from home are required to live in college-owned housing. Students who transfer to Houghton as juniors or seniors are required to live at least one semester in college-owned housing.

Junior and senior students have the opportunity to apply to live in a college-owned townhouse or outside college housing (and within the hamlet of Houghton) under the "community living option" (CLO). A limited number of townhouse and community living options are granted each year. The housing type the student selects for the school year will continue for Mayterm, at additional charge, should the student attend Mayterm.

The college reserves the right, in case of institutional necessity, to reassign college-owned rooms, and it will in such instances reimburse the students involved for any financial loss sustained in such a move.

Students who live in residence halls or community houses are financially liable for any damage to rooms or to furnishings. Some housing has a refundable damage deposit requirement.

Most campus and private rooms are planned for double occupancy and may not be rented for single occupancy unless it is clear that the space will not be needed.

Campus rooms are supplied with single beds and other basic furniture. Students must provide bed linen, pillows, blankets, bedspreads, and decorative articles.

Board

All students who do not commute from home are required to board in the college dining hall. All board is arranged on a contract basis with various plans available. All first-year students are required to be on the 21-meals-per-week or 210 block plan. All sophomores, juniors and seniors may elect either the 14-meal/165 block or 21-meal/85 block plan regardless of where they live. Juniors or seniors living in housing with full cooking facilities and who have written verification from their landlords may elect a 7-, 14-, or 21-meal plan. The contract period begins on the day preceding student registration and does not include meals during vacation periods.

The board plan the student selects for the school year will continue for Mayterm at additional charge should the student attend Mayterm.

Mayterm

There is no additional tuition charge for up to four credit hours of Mayterm courses under the following conditions:

1. A full-time student at Houghton for the fall and spring semesters preceding Mayterm whose total registered (*or attempted**) hours for Mayterm or summer internship/practicum and the preceding two semesters do not exceed 36 credit hours.
2. A full-time student at Houghton for one of the two semesters preceding Mayterm whose total registered (*or attempted**) hours for Mayterm or summer internship/practicum and the preceding two semesters do not exceed 18 hours.

***Attempted hours include any hours from which a student withdraws and receives a grade of W for the course.** Courses from which a student withdraws after the add period remain on the transcript as attempted hours and a grade of W is recorded. Therefore, these “withdrawn” hours continue to be counted as attempted hours and should be included in any calculations toward the 36 or 18 total when endeavoring to determine whether a student has exceeded the limit. These are not considered “dropped” hours—they are “withdrawn” hours.

Courses which are **dropped during the add period** (first two weeks for a full-semester course, or first week of a half-semester course) do not appear on the transcript. They are not counted as attempted hours. A full copy of this policy may be obtained from Student Financial Services.

Students **whose** Mayterm or summer internship/practicum course causes them to exceed the maximum hours allowed will be charged the regular Mayterm rate per hour for each hour beyond the limit.

Student Fees (General information of student fees appears below.)

Application fee is **nonrefundable** and is payable at the time of applying for admission to the college.

Enrollment deposit, required annually of all students, reserves the student’s position in the fall registration list. Due by May 1 for all new students and by the room drawing date for all returning students, the deposit is **not refundable** but is credited toward tuition.

Health and Accident insurance coverage is mandatory. Students without health insurance coverage will be enrolled in and billed for the illness/accident college plan. The college accident insurance is mandatory for all intercollegiate athletes and is an option for all other students. The student’s personal or family insurance is primary; college plans are always secondary. Claim forms and assistance in filing claims are provided by health service personnel.

Laboratory—charged for certain courses which involve additional expenditures for equipment, supplies, and supervision.

Late registration—assessed to each student who fails to complete the full registration process, including payment in full for the account balance (less financial aid and amounts budgeted through AMS/Tuition Pay) according to the billing statement and prior to the start of the semester.

Special test—charged any student who receives such a service.

Transcript—charged for each copy of a transcript of record and must be paid before a transcript can be issued.

Vehicle registration and parking - all student vehicles must display a current registration sticker. Costs vary depending on desired parking location.

Laptop Computer

A laptop computer is issued to all newly entering full-time students. The student will be allowed to use the computer while enrolled full time and ownership of the computer will be transferred to the student upon graduation from Houghton with a four-year degree and full payment of all outstanding balances. Before the student is issued the computer, the student will be required to sign a usage agreement which gives further details of the program.

Payments

Semester charges are due according to the billing statement and prior to the start of the semester. Timely payments will reduce time spent being deregistered from classes and incurring a late registration fee. Checks should be made payable to Houghton College and should be sent to the Student Financial Services Office.

A **monthly payment plan** is available through AMS/Tuition Pay that allows fixed payments of annual college expenses over a ten, nine, or eight-month period, with the initial payment due June 15. The plan also guarantees payment of the current year’s account in the event of the death of the enrolling parent. Complete information about the plan is available from the Student Financial Services Office upon request.

Off-campus Study

Houghton College students who are enrolled in an approved off-campus study program which is administered by a non-Houghton organization, must pay to Houghton the tuition charged by the off-campus program plus any applicable general or special fees instead of the Houghton College tuition rate. (Examples: American Studies Program, Robert Packer Hospital medical technology program, Christian College Consortium visitor program, or language studies abroad.) Financial aid awarded from Houghton cannot be applied against the cost of such a program.

Financial Delinquency

Any student failing to pay his or her college account when it is due may be excluded from all classes, lectures, laboratories, examinations, dormitories, meals in the dining hall, co-curricular activities, and graduation until such payment or satisfactory arrangement is made. The student may also be denied grades, transcripts, diplomas, and the opportunity to enroll for subsequent semesters if payment is not made when due. A 1.5 percent per month finance charge is applied to all account balances remaining after the student’s enrollment ends. If it becomes necessary to engage the services of a collection agency or attorney to effect collection or settle any dispute in connection with the terms, the student is subject to pay any and all costs as are thereby incurred.

Title IV Refunds

Houghton College’s refund policy is in accordance with the U.S. Department of Education’s regulations. The policy applies to all students who do not complete the enrollment period for which they have been charged.

The term “Title IV Funds” refers to the Federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: Federal Family Education Loan Programs (Stafford and PLUS), Federal Perkins loans, Federal Pell Grants, and Federal SEOG.

A student’s withdrawal date is the date the student began the institution’s withdrawal process or officially notified the institution of intent to withdraw; or the student’s last date of attendance at a documented academically-related activity; or the midpoint of the period for a student who leaves without notifying the institution.

Refunds on all charges, including tuition, room and board, and special fees, will be prorated on a per diem basis based on the academic calendar up to the 60 percent point in the semester. There are no refunds after that time. Students withdrawing before the classes begin for a given term will receive a 100 percent refund of charges. A copy of the worksheet used for the refund calculation can be requested from the Student Financial Services Office.

Title IV aid and all other aid is earned in a prorated manner on a per diem basis based on the academic calendar up to the 60 percent point in the semester. Title IV aid and all other aid is viewed as 100 percent earned after that point in time. A copy of the worksheet used for the Title IV refund calculation can be requested from the Student Financial Services Office.

Students who are granted a medical withdrawal receive a refund of charges prorated on a per diem basis up to the 100 percent point in the semester. The Office of Student Life must approve a medical withdrawal. Students who are granted a leave of absence are treated in the same manner as students who withdraw from the college.

In accordance with federal regulations, when financial aid is involved, refunds are allocated in the

following order: unsubsidized Stafford loans, subsidized Stafford loans, Federal Perkins loans, Federal PLUS loans, Federal Pell Grants, Federal SEOG, other Title IV assistance, other Federal sources of aid, other state, private and institutional aid, and finally, the student.

The fees, procedures, and policies listed above supersede those published previously and are subject to change at any time.

Scholarships, Grants and Loans

Financial Aid (Student Financial Services)

Our goal is to assist families through the financial aid process and to help them identify sources of aid so that a Houghton education is affordable. We try to be fair and equitable in our awarding of aid. We distribute aid in compliance with all federal, state, and institutional policies and procedures. All students are urged to consult with the aid counselors about particular situations regarding funding. This is especially true for students considering participation in consortium or study-abroad programs.

Free Application for Federal Student Aid (FAFSA)

Any student who wishes to be considered for aid funds administered by Houghton College must submit annually a copy of the FAFSA listing Houghton College (code number: 002734) as a recipient. The FAFSA may be submitted online after January 1st at www.fafsa.ed.gov. Priority consideration is given to students whose applications are received by March 1. **Houghton College aid may not be renewed to those applying for it after July 1.**

Houghton College uses the federal methodology formula to determine financial need. The expected family contribution, which is the result of the federal methodology formula from the FAFSA data, is subtracted from the cost of attendance to calculate need. The SFSO attempts to meet the financial need of each student through the various financial aid programs.

All grants, scholarships, and Federal Perkins loans are credited to the student's account by the Bursar's Office each semester. Federal college work-study earnings are paid by check or direct deposit if requested, to the student on a bi-weekly basis. FFELP loan proceeds may be received by check or by electronic funds transfer (EFT). Checks are made co-payable to Houghton College and the student or parent. Once endorsed, the FFELP checks are credited to the student's account. Any credit created by the loan proceeds will be disbursed to the student or parent by request.

Requirements for Financial Aid Consideration

A student must be a matriculated student making **satisfactory** progress to receive financial aid. A **matriculated student** is one who has met the entrance requirements and is pursuing a program of study toward a degree. A student is considered to **be making satisfactory academic progress if he or she is meeting the requirements listed in the Academic Information section**, although s/he may be on "academic guidance" or "academic probation" as described in the section on academic information.

TITLE IV STUDENT ASSISTANCE PROGRAMS

Federal College Work-Study

The Federal College Work-Study Program is designed to make work opportunities available to college students. It is a federally-funded aid program, available to matriculated students. Priority will be given to students in full-time attendance. A portion of the **federal** work-study funds will be used to employ students in community service jobs. A work-study student may qualify to work up to 12 hours a week during the academic year, although academic considerations may limit work to six hours per week.

Approval of all job assignments is made by the SFSO, but hiring is done by the agency or department which will employ the students.

Federal Pell Grant

The Federal Pell Grant is an entitlement to students who qualify under a federal formula which determines eligibility. To be eligible, a student must be a U.S. citizen or permanent resident and have not earned a bachelor's degree. This award is a grant, not a loan. For the 2006-07 academic year the maximum Pell Grant is \$4,050.

Federal SEOG

The Federal Supplemental Educational Opportunity Grant is a federally-funded grant program administered by Houghton. FSEOG grants are awarded first to Pell Grant recipients with low estimated family contributions. FSEOG recipients must have demonstrated financial need. FSEOG is available to full-time or half-time students. This award is a grant, not a loan. The average FSEOG award is \$750.

Federal Perkins Loan

The Federal Perkins Loan is a federally-funded program which provides loan funds for students to help meet their educational expenses. The program is administered by Houghton College, and recipients are selected on the basis of financial need. Recipients must be at least half-time students. The loans are interest- and payment-free until nine months after a student graduates or ceases attendance at the college. The annual average Perkins Loan borrowing limit for the '06-'07 academic year is \$1,500.

Federal Stafford Loan and PLUS

There are two loan programs administered on campus which are of significant value to students and their families. The first is the Federal Stafford Loan. Annual borrowing limit is \$2,625 for freshmen, \$3,500 for sophomores, and \$5,500 for juniors and seniors (based on conditional classification). Repayment is delayed until six months after cessation of enrollment as a half-time student. Interest rate for new borrowers is determined by the 91-day Treasury Bill, plus 1.7 percent with a cap of 8.25 percent. (Latest rate is 4.7 percent.)

The other loan is the Federal Parental Loan for Undergraduate Students (FPLUS), at a variable interest rate based on the 91-day Treasury Bill rate plus 3.1 percent with a cap of 9 percent. (Latest rate is 6.1 percent.) Parents may borrow up to the cost of attendance minus any other financial aid. For more information please consult your lender.

Federal Unsubsidized Stafford Loan

Students not eligible for the maximum annual Stafford Loan limit may borrow an unsubsidized Stafford Loan at the same interest rate. However, the student is responsible for interest payments while in school. Principal repayment still begins six months after cessation of enrollment as at least a half-time student.

An additional unsubsidized Stafford Loan is available to students who qualify for aid as an independent student. Freshmen and sophomores may borrow \$4,000 per year and juniors and seniors may borrow \$5,000 per year.

Rights and responsibilities of recipients of any of the Title IV federally-funded programs (FCWSP, FSEOG, PELL, Stafford loans, Federal Perkins loan):

- *The student must report all funds received from outside agencies.
- *The student must continue to make satisfactory academic progress.
- *The student must not owe any refunds on Pell Grants or other awards paid, or be in default on repayment of any student loan.
- *The student must also sign an affidavit that all moneys received will be used only for the cost of attendance.
- *The student must be in compliance with Selective Service regulations.

Alternative Student Loans

Alternative Student loans are private educational loans through a lender such as T.H.E., CitiBank or Sallie Mae. The loan is in the student's name but a co-signer is required. Students are eligible to apply for a maximum loan of the cost of attendance minus financial aid. The current interest rate varies for Houghton student borrowers. Applications and information may be obtained from the Student Financial Services Office. Loan approval is based on certification by the SFSO and a worthy credit history for the student and co-signer.

New York State Tuition Assistance Program

New York State's Tuition Assistance Program (TAP) is a state-funded program for New York state residents. A recipient of this award must be a full-time matriculated student in an approved program at an approved New York state post-secondary institution, and must maintain satisfactory academic progress, as defined in the first eight academic semesters, as shown in the chart for satisfactory academic progress (below). Grants are based on the New York net taxable income of the preceding year. This program is an entitlement program. There is neither a qualifying examination nor a limited number of awards. To apply, students must complete a FAFSA and a separate TAP application. For the 2006-07 academic year, the maximum TAP award for first-year students is \$5,000. Educational Ministries students are ineligible for TAP unless they have declared a double major.

Veteran's Benefits

Houghton College is approved by the New York State division of Veterans Affairs for the training of veterans. Application forms and information are available in the Student Financial Services office.

Satisfactory Academic Progress

According to financial aid regulations, students must make satisfactory progress toward a degree in order to remain eligible to receive financial aid. Satisfactory academic progress includes both a qualitative (grade point average) and quantitative (number of credit hours completed) measure of the student's progress.

The Student Financial Services Office will assess the student's progress at the end of every semester for the New York State Tuition Assistance Program (TAP) and once a year (after Mayterm) for all federal and institutional aid programs. However, while these are the guidelines for "satisfactory academic progress" for financial aid purposes, meeting this guideline *only* will not ensure a student's graduation from Houghton in four, or even five, years. See "Classification" in Academic Information section for further information.

Semesters	Min. credit hrs. enrolled	Credit hrs. that must be completed	Min. accrued credit hrs.	Cum. grade point average
1	12	6	6	1.0
2	12	6	15	1.5
3	12	9	27	1.75
4	12	9	39	2.0
5	12	12	51	2.0
6	12	12	63	2.0
7	12	12	78	2.0
8	12	12	93	2.0
9	12	12	108	2.0
10	12	12	125	2.0

When a student transfers to Houghton from another institution, the director of assessment will determine the number of credit hours acceptable toward a degree at Houghton College. The SFSO will place the student at the appropriate point on the satisfactory academic progress chart according to the number of credit hours transferred or the number of semesters completed, whichever is most beneficial to the student.

Students who fail to meet the satisfactory academic progress requirements will lose eligibility for financial aid. Students may petition the Committee on Satisfactory Academic Progress to request a one-time waiver of the necessary academic requirements. Petitions will be considered based on physical injury or illness, extraordinary personal difficulty, or other special circumstances. If a student applies but is denied a waiver, they may reestablish eligibility for aid by successfully completing a semester with no financial aid.

HOUGHTON COLLEGE SCHOLARSHIPS

Houghton Excellence Scholarships

Excellence Scholarships are awarded to outstanding high school graduates who are accepted for admission to Houghton College and who exhibit one or more of these characteristics: scholastic achievement, academic potential, co-curricular involvement, or other leadership qualities.

To be considered for a Houghton College Excellence Scholarship, a student must have combined SAT scores of 1200 or more (or ACT of 26) OR have graduated in the top 15 percent of his or her high school class. These scholarships are renewed annually providing the student maintains at least a 3.0 GPA at the end of each year. Recipients receive awards ranging from \$1,250 to \$7,500 for four years. Full-time attendance is required.

One of the Excellence Scholarships is given in memory of the six students - Beth Andes, Joy Ellis, Cynthia Rudes, Mark B. Anderson, Alan Bushart, and Albert Rapp - who died in an automobile crash on October 2, 1981. These members of the Class of 1982 were highly respected campus leaders who embodied the personal qualities which recipients of Excellence Scholarships should possess.

Houghton Heritage and Presidential Scholarships

The Scholarship Committee selects the three top incoming students each year for Houghton Heritage Scholarships. To be considered, a student must have a strong pastor's recommendation, combined SAT scores of 1300 or higher (or an ACT of 29 or higher) and rank in the top 10 percent of their high school class (or equivalent). Those eligible are invited to apply for the scholarships after acceptance, and must complete an essay, submit a sample of their best academic writing from a high school class, and complete a scholarship application. The Scholarship Committee then selects students from the applicant pool to invite to campus for competitive interviews. Three \$12,500 Houghton Heritage and six \$10,000 Presidential awards are given each year, renewable annually with a GPA of at least 3.25.

Houghton Neighbor Scholarship

New students who are graduates of a high school in Allegany County (NY), Cattaraugus County (NY), Livingston County (NY), McKean County (PA), Potter County (PA), Steuben County (NY), or Wyoming County (NY), and have attended that high school for at least two years, are eligible for the Neighbor Scholarship. Students who are members of the National Honor Society receive a \$5,000 per year renewable scholarship (for up to four years) dependent on maintaining a minimum 3.0 grade-point average. Students who are not members of the National Honor Society are eligible to receive \$3,000 per year renewable by satisfactory academic progress. Students who transfer into Houghton, but who graduated from one of the eligible schools, are eligible for the scholarship that would have applied upon graduation from high school.

Houghton Merit Scholarship

Students who receive distinction as a *finalist* in either the National Merit Scholarship Program, the National Achievement Scholarship Program, or the National Hispanic Recognition Program will receive a Houghton College Merit Scholarship in the amount of \$2,000 per year. This scholarship can be held in addition to an Excellence Scholarship, and is renewable provided a student maintains a 3.25 GPA.

Phi Theta Kappa Scholarship

Transfer students who are members of Phi Theta Kappa will receive a Phi Theta Kappa Scholarship in the amount of \$2,000 per year. This award may be held in conjunction with an Excellence Scholarship and is renewable provided a 3.0 GPA is maintained.

Canadian at Par Grant

Starting with the fall 2005 semester, all new Canadian students may pay the balance for tuition, room and board in Canadian funds, provided the balance is paid in full by the payment deadline. The student must be a matriculated, full-time student who is a Canadian citizen and whose residence is in Canada.

Houghton College Matching Scholarship

The Houghton College Matching Scholarship program creates the possibility of an exciting partnership between the local church and Houghton College. Participating churches will continue an active ministry in the lives of their young people. Further, they will be encouraging these students to attend a Christian college with a national reputation for academic excellence. This program also provides an opportunity for members to support the ongoing spiritual growth of worthy students.

Houghton College matches (up to \$750 per student, per year) a scholarship awarded by the student's church or Dollars for Scholars Scholarships. Thus, a \$750 gift from a church can become \$1,500 towards the student's cost at Houghton. A student may receive a scholarship from his/her church that is larger than \$750, although Houghton College will only match up to \$750.

The church must submit an award form stating the amount of the scholarship. This form must be submitted by July 1 to ensure a matching scholarship for the following academic year. Church funds must be received in the Student Financial Services Office by November 1. Money used for the scholarship must be from sources which are "detached and of disinterested generosity" (i.e., not family). Please contact the Student Financial Services office for further information.

Performance Scholarships

Performance Scholarships are awarded to students for displaying exceptional talent in fine arts or athletics. Art and music faculty and athletic coaches may nominate candidates to the Student Financial Services Office. The awards range from \$500 to \$10,200 per year. Scholarships are offered in the following programs: music, art, men's and women's basketball, men's and women's soccer, men's and women's track and cross country, women's volleyball and field hockey. Awards are renewed annually if satisfactory participation in the area of performance and a minimum 2.0 GPA is maintained.

International Student Scholarship

International students may apply for assistance from the International Student Scholarship program.

Awards range from \$1,000 to \$5,000 per year.

Eligibility for this program will be determined by the Scholarship Committee through:

1. The international student's application for assistance.
2. The student's admission data.
3. A statement on how college bills will be paid.

Renewal of the award beyond the freshman year will require:

1. Adequate academic achievement.
2. Recommendation by dean of student life.
3. Recommendation of director of academic records.

For this program, an international student is defined as a student who is a citizen of a country other than the USA or Canada, and who has not established permanent residence within the United States.

Houghton College Grants

Houghton College provides limited financial assistance to certain students with demonstrated financial need. Application for these programs must be made in advance of registration, through the FAFSA. *The first four are grants and scholarships specifically awarded to full or associate Wesleyan church members who regularly attend a Wesleyan church. Wesleyan students will also be considered for all other types of financial aid.*

Wesleyan Grants

New students will receive a grant of \$1,500 awarded annually to full or associate members of a Wesleyan church. This award may not be held concurrently with the Parental Christian Service Grant, Wesleyan MK Grant or Willard J. Houghton Scholarship.

Wesleyan TNT/WBB Scholarships

Houghton College will honor any scholarships to winners of the Wesleyan Teens n' Talent and Wesleyan Bible Bowl competitions. Recipients may redeem one quarter of their total scholarship awards per year.

Wesleyan MK Grant

A grant of \$5,000 per year is awarded to students who have parents serving with Wesleyan World Missions.

Willard J. Houghton Ministerial Scholarships

A grant of \$5,000 per year is awarded to students who are preparing for the Wesleyan pastorate. To be eligible, the student must enroll with their local District Board of Ministerial Development.

Parental Christian Service Grant

Students whose parents are ordained or licensed ministers or missionaries and are employed full-time in Christian service under the direction of a conference or a mission board may, upon application be assisted by a grant of \$1,500. Awards are based on the family's demonstrated financial need as determined from a completed FAFSA. Dependents of Wesleyans will receive \$2,500 per year. (Married students are **not** considered dependents and are ineligible for this grant.) This grant **may not** be held concurrently with the Wesleyan Grant.

Three-in-Family Grant

Where three or more members of a single family unit (to include father, mother, brothers, or sisters) attend Houghton full time during the same year, each will be eligible for a \$2,000 grant. This grant may be held concurrently with all other Houghton study grants.

Alumni Association Scholarship

Houghton College alumni children and/or grandchildren entering Houghton may receive a renewable \$1,000 scholarship. The Alumni Association board of directors will select 20 recipients annually. Selection will be based on both merit and demonstrated financial need.

Houghton College Endowed Scholarships

Generous friends of Houghton have funded a number of scholarships, which are awarded according to the wishes of the donors. These scholarships are primarily for returning, full-time students. Recipients are selected on the bases of academic achievement at Houghton and financial need. Specific information about the endowed scholarships may be obtained from the Student Financial Services Office. Applicants for any of these scholarships must submit a FAFSA and a Houghton College Financial Aid Application by March 1 for priority consideration.

Area-of-Residence Scholarships

Arlin Scholarship (Central New York)
Howard and Helen Barney (Whitesville)
Bliss Scholarship (Bolivar, then Wellsville)
Byrd and Eva K. Bohannon (Ontario, Canada)
Canadian Foundation
Crowder Capital District Scholarship
Dayton Champlain District Scholarship
Chester and Marjean Dayton Scholarship (Champlain District)
Finger Lakes Alumni Chapter Scholarship

Rose and Genevieve Galuteria Scholarship (Hawaiian or international)
Gibby Scholarship (Arcade)
Frieda and Mildred Gillette Scholarship (international student)
Haskinsville Scholarship
Clarence W. Hillman Memorial Scholarship (Pioneer High School)
Ingham Scholarship (Hume and Allegany County)
Joseph A. Kemp Scholarship (Pioneer High School)
Gladys Moll (Wayne County)
Orlando Alumni Chapter Scholarship
William and Hildred Presley Scholarship (North Country of NYS)
Robinson Scholarship (West Chazy)
Royce Scholarship (Richburg and Bolivar)
RVG Scholarship (Mineral County, W. Va., and surrounding counties)
Schiele Scholarship (Cuba)
Simons Memorial Scholarship (Nunda)
Steuben County Endowed Scholarship
Walchi Family Scholarship (Bolivar, then Wellsville)
Walchi Scholarship (Bolivar, then Wellsville)
Wetherbee International Scholarship

Christian Service Scholarships

Anderson Memorial Scholarship
McCamman-Nussey Scholarship
Messersmith Christian Service Scholarship
Moses Memorial Scholarship
William O'Byrne Scholarship
Strock Scholarship
United Wesleyan College Christian Service

Ministry or Missions Scholarships

William and Marjorie Calkins Scholarship
Ray and Marianne Chamberlain Scholarship
Fish Scholarship
Gunsalus-UWC Ministerial Scholarship
Bert Hall Ministerial Scholarship
Daniel Heinz Ministerial Scholarship
James H. and Elizabeth Hogg Scholarship
Howard and Iva Jacox Scholarship
Lee Christian Service Loan/Grant
Lockwood Memorial Scholarship
Palmer Scholarship
Joy Palmer Missionary Scholarship
Norman and Grace Pusey Scholarship
Paul Reeves Scholarship
Claude Ries Scholarship
Carlyle and Scott Smith Scholarship
Cora Esther Sparks Memorial Scholarship
James E. Spear Memorial Scholarship
Wesleyan Missionary Kid Scholarship
Earle L. Wilson Scholarship
Ziegler-Bronner Scholarship

Music Scholarships

Wilfred Bain Scholarship
Joanne L. Bingham Senior Music Scholarship
Carolyn Keil Campbell Scholarship (Music)
Clint A. Clifford Scholarship
Frederick C. Denham Organ Scholarship
F.B. Dodds Scholarship
Charles Finney Scholarship (Organ or Church Music)
Ethel Boyce Johnson Music Scholarship
Robert R. Mackenzie Scholarship

S. Hugh and Wilfreda Paine Scholarship
Presser Foundation Music Scholarship
Jacob and Marie Smith Church Music Scholarship
Paul and Mildred Temple Scholarship
Dorothy Yahn Walrath Organ Scholarship
Linford C. Wilcox Memorial Scholarship
Robert W. Woods Memorial Scholarship
Marilyn York Scholarship

Scholarships for Demonstrated Financial Need

Emily Markham Adelman
George I. Alden Trust
Laurel Davies Alexander Scholarship
Barnes-Eldrod Scholarship
Benson Scholarship
Kenneth Boon Scholarship
The Rev. P. Arthur Brindisi Scholarship
Fred J. Brotherton Charitable Foundation Scholarship
Buffalo Endowed Scholarship
Calvary Church Scholarship
Carnahan-Jackson Foundation Merit Scholarship
Conway Scholarship
Howard A. and Helen C. Crosby Scholarship
Thomas Danks Scholarship
Davis Scholarship
Deerfoot Lodge Scholarship
Dominguez Scholarship
Education Assistance Limited
Emerson Scholarship
Rachel Davison Fee Scholarship
Folger Family Scholarship
Gardner Scholarship
Gibbins Scholarship
Everett Graffam Scholarship
Alice Houghton Scholarship
Howes Trust Scholarship
James Harrington Hurd Scholarship
Samuel Howes Scholarship
Kalla Memorial Scholarship
Kalle-Herbst Scholarship
Koonce Scholarship
Carl Lambein Scholarship
Luke and Pearl Lindley Scholarship
Paul Maxwell Scholarship
Richard W. McCann Scholarship
McKee Scholarship
Paul V. Miller Scholarship
E.A. Moos Foundation
Richard and Evelyn Naughton Scholarship
Parker Scholarship
Dr. and Mrs. Gustave Prinsell Scholarship
Jeffrey Prinsell Scholarship
Rapp Scholarship
Rev. Bertrand E. Rudd Scholarship
Shisler Scholarship
Howard F. and Guendolen S. Smith Scholarship
Snowberger Scholarship
Ethlyn Stebbins Foundation
Janet Decker Steiner Memorial Scholarship
Layton and Olive Vogel Scholarship
Wight Memorial Scholarship

Special Category Scholarships

John M. Andrews III Scholarship: physics
Benninger Scholarship: pre-med
Dorah Burnell Scholarship: chemistry
Calhoon Speech Scholarship
Chastain Scholarship: minority or disabled
James A. Comstock Memorial Scholarship: pre-engineering
Arnold Cook Business Scholarship
Hazel I. Crocker Scholarship: mathematics
Daniel Cutter Literature Scholarship
Gordon Ferm Presbyterian Scholarship
Gallagher Family: Salvation Army Scholarship
Dr. & Mrs. DeVere Gallup Scholarship: music and science
Ruth Ortlip Gibson Memorial Foundation
Hazlett Scholarship
William and Diane Hein Foundation: political science
Joan C.V.G. Holman Scholarship: education
Jensen Scholarship: business administration
Winston Johnson Scholarship: sociology
Lake and Amanda Harner Scholarship: pre-law
Lazares Lazarides Business Scholarship
Edna Lennox: communication
Liberal Arts Scholarship
Kenneth L. May Memorial Scholarship: soccer
Raymond and Ethel Meahl Scholarship: education
Mephibosheth Scholarship: physically challenged
Merritt Memorial Scholarship: pre-law
Jeffrey Osgood Memorial Scholarship
Osgood Science and Academic Scholarship: physics
S.W. Paine Wycliffe Scholarship: linguistics
Preachers and Missionary Kids Scholarship
Jennifer A. Roorda Scholarship: psychology
Rork Scholarship: biology
Rothenbuhler Scholarship: business administration
Rosa Mae Smith Modern Language Scholarship: foreign language
Paul Robert Steese Memorial Scholarship: Christian testimony
Swift Memorial Scholarship: daughter of missionaries
Stanley P. Szymanski Scholarship: Polish descendant
Jeff Telego Memorial Scholarship: pre-med
Clifford W. and Katherine T. Thomas Scholarship: education
Dean & Doris Bain Thompson, Class of 1938 Scholarship: secondary educ.
Arvis & Mavis Tucker Scholarship: pre-med
United Methodist Scholarship
Gerald & Mildred Vander Veen Scholarship Fund: business administration
Valk Presbyterian Scholarship
Weir Student Personnel Scholarship
Artist A. Wilcox Scholarship: art
Willett Alumni scholarship
Daniel S. Willett Scholarship: communication or writing
Lucele Hatch Wilson Scholarship: teaching
Fred and Floy Willmott Scholarship: United Methodist

High School Grant

High school students may take up to six hours per semester and receive a study grant equal to 90 percent of the tuition. This applies only to standard courses and excludes independent studies, tutorials and internships. The student will be responsible for any associated course or lab fees. This grant may not be held concurrently with any other Houghton study grant.

Houghton Loan Funds

Students may borrow modest amounts for academic needs from one of the college-controlled loan funds. Upperclassmen are given preference.

Unless otherwise stated, the interest rate on the loan issued to a student is the prime lending rate plus two percent per year. A regular payment schedule is set up by mutual consent of the borrower and the Scholarship Committee.

Students applying for Houghton loans may be requested to have the co-signature of a parent or guardian.

General Student Loan

Alumni and friends of the college contribute to the General Student Loan Fund to provide loans for general student use. Among several substantial gifts are those of Lawrence Harris Salle of the class of '37, Miss Matie Keegans, and Mrs. Grace Goldsberry.

Name Loan Fund

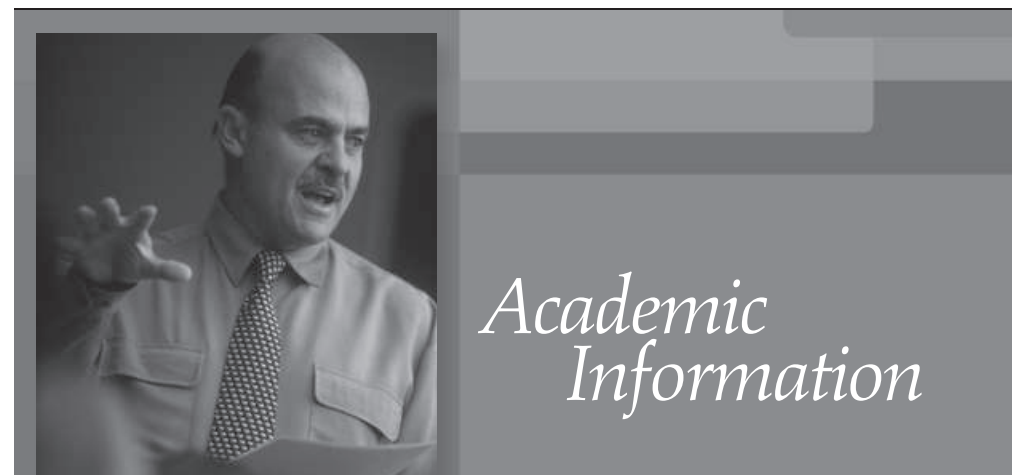
Living memorials may be established by creating a name loan fund of \$1,000 or over.

Presently of use to students are the following:

<u>Name Loan Funds</u>	<u>Established by</u>
Jennie E. Alexander Fund	Bequest
*Darrow Basney Fund	Professor & Mrs. Eldon Basney
*Lucius H. & Mary E. Fancher Fund	Children and Grandchildren
Kenneth Hill Glasier Fund	The Rev. Walter C. Glasier
Lee Christian Service Loan Fund	Bequest
Henry F. Meeker Jr. Fund	Miss Harriet Meeker
George M. Press Fund	Bequest
Clarence Watson Fund	Bequest

**Interest-free while borrower is in school; six percent thereafter.*

All inquiries concerning scholarships, grants, or loans should be directed to: Student Financial Services Office, Houghton College, One Willard Avenue, Houghton, NY 14744 (585.567.9328).



Academic Vice President and Dean of the College

The dean is the chief academic officer at Houghton. Questions concerning academic policy should be directed to the dean of the college. The office is located on the second floor of the Chamberlain Center.

Associate Academic Dean

The associate academic dean is the main point of contact in the dean's office for students with questions related to the academic program.

Academic Records

The director of academic records answers questions concerning records, schedules, transfers, transcripts, etc. The Academic Records Office is on the second floor of Luckey Building.

Department Chairs

The college academic structure is organized into 15 departments: Art, Biology, Business and Economics, Chemistry, Education, English and Communication, Foreign Languages and Literatures, History and Political Science, Intercultural Studies, Integrative Studies, Mathematics and Computer Science, the Greatbatch School of Music, Physical Education/Exercise Studies and Recreation/ Leisure, Physics and Earth Science, Psychology and Sociology, and Religion and Philosophy. The chair of each department is available to students for counseling and advising.

Faculty

The faculty of the institution includes all full-time teaching faculty, all those individuals classified as non-teaching faculty by the administration (for example, the professional library personnel, the associate deans for student development, and the administrators who report directly to the president). Other categories of faculty include: part-time, lecturers, adjunct and interim.

Degrees Offered

Houghton College offers courses of study leading to the degrees of master of music (MMus), master of arts in music (MA), bachelor of arts (BA), bachelor of science (BS), bachelor of music (BMus), and an associate of arts degree (AA). A two-year Christian ministries course in Bible and related studies leads to an associate in applied science degree (AAS).

Requirements

Graduation

A student must complete at least one major and at least one minor. If a student completes two majors, a minor is not required unless it is a specific requirement of one of the majors. Candidates for BA and BS degrees must complete 124 semester hours plus one hour of First-Year Introduction (FYI) required of all first-year students. Candidates for the BMus must complete 128 semester hours, plus one hour of FYI required of all first-year students. No more than 8 hours of ROTC or Theater Workshop may count toward graduation. No more than 8 hours of Horsemanship unless student is in the Recreation major with the Equestrian track. Also, no more than 8 hours of applied music may count toward graduation for students who are not majoring or minoring in music. The minimum quality point average for graduation is 2.0. Grades in major, minor and concentration courses must be "C-" level or higher.

Residency Requirements

A student must complete at least 30 hours, one-half of the major and 18 of the last 24 hours at Houghton (except those under the senior-in-absentia privilege or those with special permission whose major or minor require them to be off campus). Other cases require a petition.

Second Degree

A student completing two majors, one leading to the BS degree and the other leading to the BA degree, is asked to choose which of the degrees to receive, and then graduates with one degree and two majors. The only situation in which a student may be awarded two *different* baccalaureate degrees simultaneously is by completing all requirements for both a BMus and either a BA or a BS, including the relevant integrative studies hours for each. Students who have already earned a baccalaureate degree, either at Houghton College or elsewhere, may earn a second baccalaureate degree by completing all Houghton College requirements for the degree and earning at least 30 credit hours in residence at Houghton College subsequent to the awarding of the first degree. If the first degree was granted by Houghton College, the second degree *must* be a different degree, e.g., a BS earned subsequently to a BA. The cumulative grade point average of work subsequent to the first degree must be 2.0 or higher. As with all Houghton degrees at least half of the hours for the major must be earned from Houghton; however, they do not all need to be earned subsequent to the first degree.

Changes in Requirements

Changes in graduation requirements may occur during a student's career. On such occasions, students generally complete requirements as specified in the catalog for the year of their matriculation. However, the student may select a subsequent catalog in effect during his or her college career. Occasionally changes are made which include more precise implementation guidelines. If the student believes the program is unfairly or unreasonably modified, the student should consult the Academic Records Office.

Liberal Arts Requirements

Most of the courses at Houghton College are liberal arts courses, designed either for contributing to a general education or for enhancing understanding of a particular subject area or discipline of inquiry. Other courses are professional in nature, designed to prepare a student for a specific occupation, e.g., education, business, ministry.

The State of New York and Houghton College require a minimum of 93 hours of liberal arts courses for the BA degree and 62 hours for the BS degree (in addition to specialized areas of professional work), and a minimum of 32 hours for the BMus degree. These various curricula are designed to ensure that these minimums are achieved.

Master of Arts in Music; Master of Music

A candidate for a master's degree chooses a curriculum from the listings to be found in The Greatbatch School of Music Graduate Bulletin.

Bachelor of Arts

A candidate for the Bachelor of Arts degree selects a major and that choice must be approved by the chair of that department.

The BA degree requires a minimum of 93 hours of liberal arts and a total of 124 hours (plus one hour of FYI for Houghton first-year students). An academic minor is also required unless otherwise specified.

Bachelor of Science

A candidate for the Bachelor of Science degree may select a major from business administration, communication, computer science, Bible, educational ministries, childhood education, physical education, recreation, science, or writing. The BS degree candidate must also complete a minor or minors, plus sufficient elective hours to complete 124 hours. The minor(s) may be either in an area of liberal arts or in a professional field. The BS degree requires a minimum of 62 liberal arts hours and a total of 124 hours (plus one hour of FYI for Houghton first-year students).

Bachelor of Music

A candidate for the bachelor of music degree chooses a curriculum from the listings to be found under music in the Academic Programs section.

Associate of Arts

The AA degree is designed to prepare students for continued studies in the liberal arts. However, the program also provides a general education for those wishing a two-year course for their own cultural enrichment.

A student may earn the associate in arts degree by completing a total of 62 semester hours (plus one credit for FYI as required for entering first year students) as follows

- 40 hours of integrative studies (as described below)
 - 12 hours in a liberal arts concentration (exclusions are education, business and ministry). A student must receive grades of C- or higher in all courses in the concentration. Normally courses which count for the concentration will be numbered 200 or above (except for the calculus sequence and introductory science courses).
- OR an optional non-concentration alternative may be selected where the student completes Houghton College's entire Integrative Studies package (currently 52 hours: 40 in the foundational area and 12 in the explorational area).
- Cumulative grade point average must be 2.0 or higher.
 - At least 30 hours, including at least 18 of the last 24, must be from Houghton College, as well as at least half of any concentration.

The Integrative Studies requirements for the AA:

Required courses - 10

3 hours of Principles of Writing or Advanced Composition

4 hours of Western Civilization

3 hours of Biblical Literature

Additional hours - 30

From any other courses which meet either foundational or explorational level integrative studies requirements, counting no more than one course per requirement. However, introductory foreign language courses may be used for this degree and multiple language courses in a sequence may be used to reach thirty (30).

Associate in Applied Science

A student earns the associate in applied science degree by completing the two-year Christian ministries course of 62 semester hours (plus one credit for FYI, if required), of which at least 22 are in liberal arts.

Majors/Minors

Each student normally selects, during the first semester of the sophomore year, one major and at least one minor area for specialized study. (Note: students who select two majors do not need a minor.) Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards. Houghton College grants degrees in the following areas:

<i>Department of Art</i>	<i>Degree</i> BA	<i>HEGIS Code*</i> 1002
<i>Department of Biology</i>		
Biology	BA, BS	0401
General Science	BA, BS	4902
<i>Department of Business and Economics</i>		
Accounting	BS	0502
Business Administration	BS	0506
Information Technology		
Management	BS	0507
<i>Department of Chemistry</i>		
Chemistry	BA, BS	1905
General Science	BA, BS	4902
<i>Department of Education</i>		
Adolescence Educ:		
Biology	BA	0401.01
Chemistry	BA	1905.01
English	BA	1501.01
French	BA	1102.01
Mathematics	BA	1701.01
Physics	BA	1902.01
Social Studies	BA	2201.01

Spanish	BA	1105.01
Inclusive Childhood Education	BS	0802
<i>Department of English and Communication</i>		
Communication	BA, BS	0601
English	BA	1501
Writing	BA, BS	1507
<i>Department of Foreign Languages and Literatures</i>		
French	BA	1102
Spanish	BA	1105
<i>Department of History and Political Science</i>		
History	BA	2205
International Relations	BA	2210
Political Science	BA	2207
<i>Department of Integrative Studies</i>		
Liberal Arts	AA	5649
<i>Department of Intercultural Studies</i>		
Intercultural Studies	BA	2210
<i>Department of Mathematics and Computer Science</i>		
Computer Science	BS	0701
Mathematics	BA	1701
General Science	BA, BS	4902
<i>Greatbatch School of Music**</i>		
Music	BA, MA	1004, 1005
Composition	MusB/MM	1004.10
Music Education	MusB	0832
Perf: Piano	MusB/MM	1004
Perf: Voice	MusB/MM	1004
Perf: Stringed Instruments	MusB/MM	1004
Perf: Organ	MusB/MM	1004
Perf: Brass Instruments	MusB/MM	1004
Perf: Woodwinds	MusB/MM	1004
Collaborative Performance	MM	1004
Conducting	MM	1004
<i>**See Graduate Bulletin for information regarding master's degree programs in music.</i>		
<i>Department of Physical Education/Recreation</i>		
Physical Education	BS	0835
Recreation	BS	0835
<i>Department of Physics and Earth Science</i>		
Applied Physics	BS	1999.20
Computational Physics	BS	1999.20
Physics	BA, BS	1902
General science	BA, BS	4902
<i>Department of Psychology and Sociology</i>		
Psychology	BA	2001
Sociology	BA	2208
<i>Department of Religion and Philosophy</i>		
Bible	BA, BS	1510
Christian Ministries	AAS	5502
Educational Ministries	BS	1510
Humanities	BA	4903
Philosophy	BA	1509

Religion	BA	1510
<i>Interdisciplinary/Special Studies</i>		
Management	BS	0515
Liberal Arts	AA	5649

*HEGIS - Higher Education General Information Survey

Integrative Studies (General Education)

Academic work at Houghton is organized under four heads: integrative studies, major work, minor work, and elective work. The system of majors and minors provides for general coordination and some intensive training that is often introductory to later professional preparation. Each student should select a major and at least one minor.

Majors/Minors

In the major the student must complete a minimum of 24 semester hours of major credit (any course numbered 200 or above unless otherwise specified). At least one-half of a student's major must be completed at Houghton. The minor consists of 12 or more hours of work acceptable for major credit unless otherwise stated. No grades below C- count toward the major or minor. Students majoring in a Bachelor of Music curriculum may, with the approval of the director of The Greatbatch School of Music, be permitted to count one D-level grade in the music theory sequence (MTH 225, 226, 325, 326) and one D-level grade in the music history sequence (MHS 231, 232, 333, 345).

Contract Minor

This option is available for students wishing to specialize in an area not covered by an existing minor. It consists of 12 to 15 hours of courses 200 or above and will be proposed by the student in consultation with the faculty advisor and approved by the Academic Dean's Office. Approval for such contract minors will include consideration of how the choice of courses supports the stated academic goals of the student.

Integrative Studies Requirements for BA and BS Degrees

In keeping with the major objective of the college, to provide a liberal arts education within the framework of the Christian faith, each candidate for the BA and BS degree is required to take a stipulated package of courses unless given graduation credit and/or advanced standing on the basis of advanced placement or standardized departmental tests. (Graduation credit and/or advanced standing are contingent on a favorable review of the examination papers by Houghton faculty members.)

POLICIES

Semester Schedule Load-Limit Policy

The flat-rate tuition plan at Houghton allows students to take 12 to 18 credits per semester, and a typical student's course load is 15 or 16 semester hours. However, some special limitations and conditions apply.

- A student admitted under "**light-load**" provisions is not permitted to take more than 14 credit hours. (Note: Highlander Adventure [2 credits] will appear on the fall transcript but does not count against load limits.)
- The student on **academic probation** is not permitted to take more than 15 hours. Any other student in good standing may take up to 17 hours. However, a student on **academic guidance** who wishes to take 16 or 17 hours must have the explicit approval of the advisor or mentor.
- To take 18 credit hours, a student must have the specific permission of his or her advisor recorded on a form in the Academic Records Office.
- To take 19 credit hours, a student must petition the associate academic dean for permission to do so. This academic petition requires the approval of the advisor.
- Special circumstances may be addressed through academic petition. (Academic petition blanks and load-limit forms are available in the Academic Records Office.)

The student's choice of courses, once made and filed, is expected to be permanent for the semester. If a course change becomes necessary, it must be recorded on a change of schedule form provided by the Academic Records Office. After the form has been signed by the student's curriculum advisor, it must be returned to the above office immediately.

Drop/Add Permission

Courses (including independent studies and tutorials) may not be added for credit after the first ten academic days. Courses from which a student withdraws during the third through the tenth weeks will be recorded as "W". Courses discontinued within the last four weeks of the semester are assigned "F". **Students are not officially withdrawn from a course until the signed change of schedule form is in the Academic Records Office.** The date on which a student officially withdraws is the date given on the notification sent to the instructor from the Academic Records Office. (See Mayterm policy for additional important information.)

Classroom Attendance

Students are expected to attend classes. Each instructor will state expectations in the course syllabus that is to be distributed at the start of each semester.

Audit

Courses may be audited with permission from the professor. This involves enrolling for the course, attending, but receiving neither grade nor academic credit. Charges vary according to the type of course being audited and the rest of the student's load. The full policy can be found at the Academic Records Office.

Double-counting

This policy addresses the situation in which a single course satisfies requirements in more than one major or minor subject. Such a course is permitted to count toward the credit-hour requirements in more than one major or minor subject if and only if (1) the student's program in each major subject includes a minimum of 24 credit-hours of coursework not double-counted and (2) the student's program in each minor subject includes a minimum of 12 credit hours of coursework not double-counted. This policy also applies to courses that are cross-listed, that is, that are identified by more than one prefix, as long as the course-level requirements for those cross-listed courses are the same. Courses that are not the same should be identified by different numbers as well as different prefixes. The restrictions on double-counting described above do not apply to courses that fulfill both integrative studies requirements and the requirements of a major or minor. That is, integrative studies courses may be counted toward a major or minor subject without limitation. *Neither do the restrictions on double-counting apply to concentrations associated with the Inclusive Childhood Education major.*

Religious Observances

In compliance with New York's Hevesi-Levy Act, Houghton College will accommodate any of its matriculated students who are unable to register for classes, take an exam, or attend a class because of religious beliefs (taken to mean the doctrinal beliefs of religious organizations which qualify as tax-exempt corporations under federal law).

Grading System

A literal system is used in the grading of college course work as follows:

A = Excellent	(94-100%)	A = 4.00	A- = 3.67	B+ = 3.33
B = Good	(85-93%)	B = 3.00	B- = 2.67	C+ = 2.33
C = Average	(73-84%)	C = 2.00	C- = 1.67	D+ = 1.33
D = Passing	(65-72%)	D = 1.00	D- = 0.67	
F = Below minimum standards		F = 0		

W-Withdrawn. An indeterminate grade applicable to a withdrawn course from the third through the tenth week of classes.

I-Incomplete. A temporary grade limited to a course in which a student has been excused for illness or given an extension for another significant reason. An incomplete grade is allowed to stand through one academic semester. Unless a grade has been provided at that time, the incomplete grade automatically reverts to "F". Incomplete forms must be obtained from the Academic Records Office.

P-Satisfactory work done (equivalent to a regular grade of D or above); gives semester hours but no quality points.

U-Unsatisfactory work; credit is not earned from the course and does not figure in the overall quality point average.

M-No grade assigned. It may be used at mid-semester when a class has not commenced, or for student teachers, or when special permission is granted by the Academic Records Office. It can never be used at the end of a semester or a summer session.

NR-No grade assigned. Used only for courses extending beyond one semester.

Grade Grievance Procedure

The college has approved a formal procedure for resolving those occasions when a student actively disagrees with the grade received in a course. The steps are:

1. Within the first two weeks of the subsequent semester, the student will meet with the instructor. If a grade inaccuracy is determined, the instructor will process a grade change request.
2. If agreement cannot be reached, the student may contact the instructor's department chair, in writing, within ten working days after the meeting with the instructor. If agreement is reached, a grade change request is processed. If there is no agreement, or if the instructor is also the department chair, go to the next step.
3. The student may appeal the decision to the associate academic dean (AAD), in writing, again within 10 working days. The AAD shall investigate carefully and render a decision, which shall be final. If the decision is to reconsider the grade:
 - a. The AAD shall, within 10 days, form a panel of uninvolved, tenured faculty from the instructor's department. (From a designated pool, the AAD, the instructor, and the student will each select one member of the panel.)
 - b. The panel, within 30 days, will review all appropriate material and determine the final grade. The panel may retain the original grade or assign a new grade (which may be higher or lower than the grade in question), and it will so inform the records office.

Quality Point Average (also known as grade point average)

To derive a scholastic average for all of a student's courses each semester, letter grades are assigned numerical equivalents (as shown above) then multiplied by the credit hours for the course. The quality point equivalents grade point for all courses taken are totaled, then divided by the number of semester average) hours carried.

An example:

Course	Hours	Grade	Value	Points
Biblical Literature	3	C	2.00	6.00
Western Civilization	2	B	3.00	6.00
Lifetime Wellness	1	B-	2.67	2.67
Intro to Calculus	3	D+	1.33	3.99
Intro to Psychology	3	B+	3.33	9.99
Intermediate Spanish	4	A-	3.67	14.68
Totals	16			43.33

QPA = 43.33 divided by 16 = 2.708, recorded as 2.71

Courses taken off-campus under Houghton College direction (see special studies section) are considered to be work taken at Houghton College and grades will be recorded. For all other satisfactory off-campus coursework, only a "P" grade can be recorded.

Repeating a Course

Students can only repeat courses in which they received "D+" or lower. When a course is repeated at Houghton, only the higher grade will count in the calculation of the cumulative average. The hours count only once. Both courses and both grades remain on the transcript with an indication of which course is counted. Repeating a course may influence a student's financial aid or sports eligibility.

Eligibility for Participation

A student in good standing must maintain a cumulative quality point average of 2.0; being in good standing is a prerequisite to eligibility to participate in all college activities (unless specifically waived). Note: some campus positions require a 2.5 QPA; investigate before any election.

Both the semester and cumulative quality point averages can affect one's eligibility.

Academic Honesty

Honesty is the foundation on which all intellectual endeavors rest. To use the ideas of others without acknowledging the authors of those ideas belies the nature and purpose of academic life. At Houghton where we strive to live out Christian calling and commitment, personal integrity, including academic honesty, should be the hallmark of our all of our work and relationships.

Students are expected to exhibit extreme care relative to personal honesty in all academic work, including in-class and out-of-class learning experiences, such as exams, quizzes, journals, papers, research projects, etc. Dishonest work includes but is not limited to the following:

A. obtaining aid or information without giving due recognition to the sources from which the aid or information was obtained. Such dishonesty encompasses 1) asking to copy or copying other students' work to claim as one's own on an exam or assignment of any kind, and 2) all forms of plagiarism. Plagiarism includes using ideas, words, or phrases from any source without citing that source and downloading or purchasing papers or parts of papers from others or the World Wide Web and claiming such work as one's own.

B. giving aid or information when it is clearly inappropriate to do so, such as providing answers for an exam or writing a portion of a paper or an entire paper for someone, including the selling of one's work.

Faculty members are required to report all offenses to the associate academic dean who will ensure that an appropriate record is kept. Students found guilty of intentional dishonesty will automatically receive a failing grade for that work. Instructors may require that such work be redone to their satisfaction as a requirement for passing the course. Nothing higher than the failing grade, however, can figure into the calculation of the final grade. Student questions about appropriate collaboration on specific assignments should be addressed to the faculty member.

At the academic dean's discretion, repeated offenses may result in failure of the course or dismissal from the college. If a student is already on disciplinary probation, any offense may result in suspension or dismissal by the dean of student life. Unauthorized use of college computing equipment, facilities, or programs may also be considered grounds for disciplinary probation, suspension, or dismissal from the college.

Academic Advising

All entering students are assigned a faculty advisor. When students have a strong interest in an academic major, every effort is made to provide an advisor whose area of expertise matches the students' interest. Students are encouraged to consult with their academic advisor at least once each semester and at any time they have questions that the advisor can address or provide appropriate resources. In consultation with the appropriate department chair, students typically change advisors when they select a new major. To select courses, students must obtain their academic advisor's approval. During a student's college experience, the academic advisor provides guidance for a wide range of student concerns, including developing an academic program, selecting courses, adjusting to collegiate course work, considering a vocation, developing a career, and pursuing graduate work. Although advisors provide guidance, it is the student's responsibility to understand academic policies and complete all requirements for a degree. Contact the Academic Records Office or the associate academic dean with any questions.

Classification

To receive classification as a sophomore, the student must have a minimum of 28 semester hours of accumulated credits; as a junior, a minimum of 60 hours; as a senior, a minimum of 90 hours. The student must also have maintained a quality point average of 2.0 for unconditional classification in any class.

Academic Guidance & Probation

Each incoming student is assigned a faculty advisor who is responsible for academic advising during the first year. A student receiving a semester quality point average below 2.0 but who is not placed on academic probation is placed on academic guidance and is encouraged to work closely with the advisor.

A student whose cumulative quality point average for Houghton College work falls below the following guidelines at the conclusion of a semester is considered in serious academic difficulty and is placed on academic probation, and the student is required to meet with the advisor to develop a plan for academic improvement. Such a student is limited to 15 credit hours in the following semester. (Hours earned includes transfer hours.)

If the total credit hours earned is less than 15, GPA must be at least 1.0.

If the total credit hours earned is at least 15, but less than 27, GPA must be at least 1.5.

If the total credit hours earned is at least 27, but less than 39, GPA must be at least 1.75.

If the total credit hours earned is at least 39, GPA must be at least 2.0.

The placement of students on guidance and probation occurs at the end of the semester grading period. If additional information is received that changes or completes the record, any change in status is made at the discretion of the academic dean.

Academic Dismissal

A student is academically dismissed if he or she meets the criteria for probation two semesters in a row.

Any student dropped from the college for academic reasons may petition the Admission Committee for readmission. The case will be carefully studied to see if there is a basis for resuming the college program at Houghton.

A student dropped from the student body for the above reason and readmitted by the Admission Committee is placed on academic probation and must maintain a quality point average of 2.00 or higher for each semester thereafter in order to remain in college.

Scholastic Honors:

President's List - To recognize students carrying a full load who achieve the ultimate grade point (4.0) in a semester, the president sends each student a letter of commendation.

Dean's Honor List - At the close of each semester, the dean of the college sends each student a letter who completes a minimum of 12 hours and who achieves a quality point average for the semester of 3.75 or above.

Dean's List - At the close of each semester, the dean of the college publishes on the college web site a list of all students completing a minimum of 12 hours whose quality point averages 3.5 or above.

Graduation Honors

The faculty will select for graduation honors students of outstanding scholarship. For the recognition of *cum laude*, the student must have a cumulative quality point average of at least 3.5; for *magna cum laude*, at least 3.7, and for *summa cum laude*, at least 3.9. **Students transferring from other colleges must complete 62 hours in Houghton College in order to be eligible for graduation honors.** Graduation honors as published in the May commencement program are based on the cumulative record at the end of the spring (normally eighth) semester, including the valedictorian and salutatorian. In order to be eligible to be valedictorian or salutatorian in 2009 or beyond, the student must be a May grad and have earned a minimum of 90 Houghton College credits.

Honors Project

Outstanding students may be candidates for honors study projects and commencement citations in their major fields. To be declared eligible to undertake this special study program, a student must have a cumulative quality point average of 3.25 and a 3.4 average in the major (courses numbered 200 and above). A proposal must be prepared and submitted for approval over one year prior to graduation. Guidelines and policy details can be found at the Academic Records Office.

Independent Study

Independent study is a directed course in reading or research in which the student pursues a topic of general or special interest and meets with the instructor for direction, progress reports, and evaluation. To be eligible for independent study, a student must have unconditional standing as a sophomore or higher and must have a cumulative GPA of 2.75 or better.

An application for independent study should be submitted during the semester **prior** to the semester of study. However, as an absolute cutoff, each application must reach the Academic Records Office on or before the **seventh calendar day** after the first day of classes. Mayterm/summer independent study applications should reach the associate academic dean by validation day.

A student may take independent study for one, two, or three hours a semester up to a maximum of 12 semester hours toward graduation. Any faculty member may supervise the independent study project, which **must not duplicate a regular course**. The burden of responsibility for learning will be on the student. Work on an independent study is to be completed within the semester, as in other courses.

Internships

Many academic programs at Houghton College recognize a field placement experience as an integral component of professional preparation. Internships are considered to be quality, experiential learning opportunities, generally in off-campus, nonacademic settings. They are intended as highly structured, professionally supervised experiences and usually occur during the junior or senior year of the student's academic program. Internships require approval by the supervising academic department and extensive involvement by the student. Supervision is a shared responsibility between the academic department and the selected field agency.

Tutorial Study

Tutorial work is for the benefit of the student who needs a currently unavailable course; for example, one not scheduled for the semester when it is essential for graduation or for remedial purposes. Tutorial courses must be from the regular college catalog. Course approval and registration for tutorial courses shall be made in advance of the instructor's assigning any tutorial work for credit. Concurrence by the advisor, instructor, department chair, and associate academic dean is required. The forms to be used for a proposed tutorial are available in the academic records office.

A tutorial fee shall be charged (see information on expenses). The teacher must meet with the student a minimum of 7.5 clock hours for each credit earned for the purpose of giving instruction and directing the work.

Mayterm

The three-week Mayterm begins on the Tuesday immediately following Commencement and usually concludes before June 1, except for four-hour courses. Participation in Mayterm is voluntary. The academic purpose is to permit students to take an additional three semester hours of credit before commencing summer employment. In general, catalog courses are offered. Students and professors also are encouraged to work together on campus doing independent studies. Off-campus practicums, if desired, are arranged by the department chair. Travel in the U.S.A. and abroad is a feature of this period. See Financial Information section for tuition information.

Senior-in-Absentia

Students of outstanding ability who are accepted by an accredited professional school after the completion of three years of undergraduate work may qualify for the appropriate degree by transferring back for Houghton credit the first two years of professional study, thus shortening by one year their professional training. Such students will be taking their senior year in absentia. In such instances the Houghton degree will be conferred at the end of the second year of professional studies. Senior-in-absentia privilege does not apply to AA or AAS students.

The privilege described above may be available to students wishing to enter professional training for a career in medicine, veterinary medicine, dentistry, law, or engineering. Students entering nursing also may qualify for the senior-in-absentia privilege by transferring two years of nurse's training for the Houghton degree.

Preliminary application for the senior-in-absentia privilege must be made to the Houghton associate academic dean in the spring of the junior year. Additional details on this plan may be obtained from the academic records office. Students should notify the office of records at the beginning of their senior year. All senior-in-absentia students are considered August graduates.

Withdrawal from college

Any student in good standing is entitled to honorable withdrawal at any time. A student desiring to withdraw from the college (or one who does not plan to return the following semester) must obtain from the Academic Records Office an application for withdrawal. After securing the appropriate signatures, the student must have the record cleared by the Student Financial Services Office. The form must be properly completed and filed with the Academic Records Office before the student leaves campus. Withdrawal from college without accomplishing the above procedure will result in forfeiture of the right to honorable dismissal. No refunds (if applicable) will be made by the student financial services office until the academic records office certifies that the withdrawal procedure has been properly completed.

A student called away during the semester by an emergency (including military duty) and who finds it impossible to resume, must notify the academic records office of withdrawal immediately. Unless this notice is filed within three weeks, the student may forfeit the right to honorable dismissal and receive a grade of F in each course.

A student who withdraws or terminates must leave the ID card with the student financial services office at the signing of the withdrawal or termination notice. If the ID card has been lost or misplaced, a statement must be signed to that effect.

Student Academic Services

Houghton College offers learning-support services for students who qualify, including those with learning, mobility, sensory, or health impairments. Any student may come for academic counseling or tutoring support. Services available include: analysis of study strengths and weaknesses; counseling in time management, learning strategies, and examination strategies; some course-specific peer tutoring, and screening for other learning problems.

Students with Disabilities

Houghton provides academic support services to students with disabilities including those with learning, mobility, sensory, health, or psychological impairments. These services include liaison with faculty members, promotion of self-advocacy skills, and securing appropriate classroom accommodations. Study skills counseling and some tutoring are also available. Students with disabilities are encouraged to contact the director of Student Academic Services during the application process to discuss required documentation and appropriate accommodations. Documentation should be no more than three years old. Diagnosis by an appropriately trained professional is required.

Students needing academic adjustments or learning support services must contact Dr. Susan M. Hice, Director, Student Academic Services (585.567.9239).

Students needing facility adjustments must contact the Director of Facilities (585.567.9480).

The complete "Policy for Students with Learning-Related Disabilities" may be obtained from Student Academic Services or from the Admission Office.

Academic Petitions

Each student at Houghton may petition the associate academic dean, through the academic petitions committee, regarding any academic matter. Specific actions requiring petition include: waiver of a specific academic requirement, waiver of a specific academic rule or stipulation, permission for a special academic condition or activity, or a request to take more than 18 credit hours in a semester.

Actions not requiring petition action: permission for 18 hours (use "Request for Academic Overload" form), permission to increase credits in variable-credit course (use "Change of Schedule" form), or permission to attend off-campus program (use specific application).

Further information is available in the Academic Records Office.

Courses of Instruction

Course Numbering System

100 level courses...

typically taken the freshman year
do not typically give major or minor credit

200-399 level courses...

typically taken the sophomore or junior year
major credit requires courses to be at this level or higher
foundational courses for majors and minors
courses that build upon one or more foundational courses in the same discipline
or represents advanced integrative studies

400 level courses...

typically taken late in the curriculum
build upon two or more lower numbered courses in the same discipline
class size is generally smaller
pedagogy is seminar style or discussion-oriented or collaborative

Course Description Codes

Code	Explanation
3	Number of credit hours for the course (variable: may be 1, 2, 3, 4, or more)
3/3	Credit hours for a two-semester sequence
1, 2, or 3	Credit hour options

Course Prefixes, Areas of Study, and Host Departments

F	Course offered in fall
S	Course offered in spring
F&S	Course offered in fall and spring
May	Course offered in Mayterm
Summer	Course offered in a summer session
OD	Course offered on demand
F06	Course offered in fall, even-numbered years
F07	Course offered in fall, odd-numbered years
S07	Course offered in spring, odd-numbered years
S08	Course offered in spring, even-numbered years
F/S	Course offered in two-semester sequence
F/S 06-07	Two-semester sequence, offered alternate years

Note: The courses listed and their descriptions are subject to change. Adjustments in teaching assignments and normal academic flexibility may modify the material in this catalog.

Elective courses for which demand is insufficient may be withdrawn at the discretion of the dean of the college. For a definitive listing of course offerings and times, consult the appropriate master schedule for each semester or special session, as published by the Academic Records Office.

Course Prefixes, Areas of Study, and Host Departments

Department of Art
ART art

Department of Biology
BIOL biology

Department of Business and Economics
ACCT accounting
BADM business administration
ECON economics

Department of Chemistry
CHEM chemistry

Department of Education
EDUC education

Department of English and Communication

COMM communication
ENGL English and literature
WRIT writing

Department of Foreign Languages and Literatures

FREN French
GERM German
LATN Latin
SPAN Spanish

Department of History and Political Science

HIST history
INDS interdisciplinary studies
POLS political science

Department of Intercultural Studies

INCL intercultural studies
LING linguistics
MISS missions
URMN urban ministries

Department of Integrative Studies

CLLS college life and leadership
INTS integrative studies

Department of Mathematics and

Computer Science

CSCI computer science
MATH mathematics

Greatbatch School of Music*

MCHU church music
MKBD practical keyboard
MCLV class voice
MED music education
MHS music history
MLT music literature
MTH theory and composition
MUS ensembles; instrumental and
piano classes; pedagogy
MAP applied study: private lessons

*See *Graduate Bulletin* for information regarding master's degree programs in music.

Department of Physical Education/

Exercise Studies and Recreation/Leisure

PHED physical education
HRSM horsemanship
REC recreation

Department of Physics and Earth Science

ESCI earth science
PHYS physics

Department of Psychology and Sociology

PSY psychology
SOC sociology and anthropology

Department of Religion and Philosophy

BIBL Bible
CHMN Christian ministries
EDMN educational ministries
GREK Greek
HEBR Hebrew

HUM humanities
MIN ministry
PHIL philosophy
REL religion
THEL theology

Adult Learning Opportunities

ADC adult degree completion

Pastoral & Church Ministries Program:

PBIB Bible
PEDM educational ministries
PENG English
PMAT mathematics
PMIN ministry
PMIS missions
PPHL philosophy
PSSC social science
PTHL theology

Academic program note:

A student's academic program normally contains six elements:
integrative studies - liberal arts foundation
integrative studies - liberal arts exploration
pre/co-requisites or additional requirements
academic major
academic minor(s) or concentration
electives

Each student should ask his or her academic advisor about individual program expectations in each of the six areas.

Integrative Studies

Faculty: Peter Meilaender (chair), Mark Hijleh, Ben Lipscomb, Ted Murphy, David Perkins, Stephen Woolsey, Mark Yuly

General Information:

The Department of Integrative Studies (IS) was created to express Houghton's commitment to the liberal arts and in particular to integrative studies or general education. It comprises faculty who serve jointly in this as well as their home departments. The goals of the department are:

1. To give IS equal standing with other aspects of the academic curricula;
2. To bring cohesion, sequence, and identity to IS, making it a distinctive of Houghton College;
3. To provide avenues of oversight, assessment, and innovation for the IS curriculum and its faculty;
4. To foster interdisciplinary cooperation within the IS curriculum;
5. To accomplish this by focusing on physical, emotional, social, cognitive, moral, and faith development as well as on integration of multiple disciplines, of values and faith with learning, and of theory and history with practice.

Major/Minor: None

Houghton College Integrative Studies Requirements - BA/BS

The following requirements *must* be taken in the first year: Biblical survey, college orientation, Western culture and writing. The following requirements *should* be taken in the first year: foreign language, physical education and library research. Total hours for integrative studies equal 53.

Liberal Arts Foundation Requirements (formerly Level 1) (41 hours)

First Year Core:

- (3) **Biblical Survey:** BIBL 101 Biblical Literature
- (1) **College Orientation Requirement:** INTS 101 First Year Introduction

- (3) **Writing:** ENGL 101 Principles of Writing *or* WRIT 212 or 213 Advanced Composition (for students with a score of 670 or higher on the verbal portion of the SAT).
- (0) **Library Research**
- (2, 2) **Western Culture:** HIST 101, 102 Western Civilization I and II
- First Year, if possible
- (3) **Intermediate Language**
 (3, 3) Beginning Language I and II may be prerequisite (Childhood education majors are required to take no more than two semesters of a modern foreign language.)
 FREN 103 French Level 3
 GERM 103 German Level 3
 BIBL/HEBR 322 Hebrew Exegesis
 BIBL/GREK 323 New Testament Exegesis
 LATN 221 Intermediate Latin
 SPAN 103 Spanish Level 3
 Complete the beginning level of two ancient languages: Greek, Hebrew, and Latin (beginning level of coursework is understood to mean 101 and 102)
 (Students whose native language is other than English may satisfy the foreign language requirement with English. Their English proficiency is demonstrated by their ability to meet all other Houghton College graduation requirements.)
- (3) **Mathematics**, chosen from:
 MATH 115 College Mathematics
 MATH 181 Calculus I
 MATH 182 Calculus II
 MATH 261 Linear Algebra
- (1, 1) **Physical Education:**
 PHED 101 Lifetime Wellness
 PHED 102 Physical Education
 Alternatives to PHED 102:
 PHED 103 Adaptive Physical Education
 PHED 220 Adventure Sports
 REC 103 Initiatives
 REC 104 Backpacking
 REC 105 Backpacking/Canoeing
 REC 109 Highlander Adventure Program
 REC 211 Ecotour in Honduras
 REC 212 Ecotourism in Africa
 REC 218 Winter Ski Outing
 REC 228 Trip Experience
 HRSM 113 Horsemanship I
 PHED 244 Instructor's Course in Red Cross Water Safety
- Second Year, if possible
- (2) **Communication:**
 BADM 301 Business Communication (3*)
 COMM 101 Fundamentals of Speech (2), or one of these:
 COMM 210 Public Speaking (3*)
 COMM 216 Organizational Communication (3*)
 [*Hours above 2 count for degree but not for foundation level]
- (3) **Christian Theology:** THEL 209 Intro to Christianity
- (3) **Literature:** ENGL 201 Literature of Western World
- (4) **Philosophical Foundation** chosen from
 a. PHIL 202 Metaphysics, Morality, and Mind (4); or
 b. PHIL 241 and 242 History of Philosophy I and II (8) – This combination also meets the Liberal Arts Exploration requirement in Humanities.
- No specific year
- (3) **Fine Arts**, chosen from
 ART 131 Introduction to Visual Arts
 ART 132 Art and Architecture in Context in Europe
 ART 161 Digital and Photographic Process Printmaking
 ART 211 Drawing I
 ART 221 Painting I

- ART 230 Art in Europe since the Renaissance
 ART 231 Ancient Art History
 ART 232 Renaissance Art History
 ART 234 Art and Architecture in Europe
 ART 237 Modern Art History
 ART 241 Two-dimensional Design
 ART 242 Three-dimensional Design
 ART 245 Graphic Design I
 ART 251 Sculpture I
 ART 261 Printmaking I
 ART 271 Ceramics I
 ART 281 Foundations of Photography
 ART 282 Experimental Darkroom Processes
 ART 284 Introduction to Digital Imaging
 ART 295 ST: Introduction to Watercolor Painting
 ART 295 ST: Imaging the Landscape
 ART 295 ST: Portraying Place
 ART 314 Art and History of Film
 ART 322 Contemporary Art and Critical Theory
 ART 395 ST: Introduction to Watercolor Painting
 ART 395 ST: Landscape Painting
 ART 395 ST: Portraying Place
 MLT 113 Masterworks of Sight and Sound
 MLT 211 Intro to Music and Listening
 MHS 222 Intro to Film Music
 MHS 254 Music of World Cultures
 MCHU 416 Intro to Hymnology (ministerial program only)
 MCHU 451 Music and Worship
 MUS 137, 143, 144, 145, 147, 149 Ensembles
- (3) **Social Science**, chosen from:
 ECON 210 Principles of Microeconomics
 ECON 211 Principles of Macroeconomics
 POLS 101 Introduction to Politics
 PSY 111 Introduction to Psychology
 SOC 101 Principles of Sociology
 SOC 243 Cultural Anthropology
- (4) **Science** (with lab), chosen from
 BIOL 103 Fundamentals of Biology
 BIOL 105 Conservation Biology
 BIOL 151 General Biology
 CHEM 187, 188 Intro to Nutrition and Lab (both required)
 CHEM 113 Elements of Biochemistry
 CHEM 151 General Chemistry
 ESCI 101 Physical Geology
 ESCI 102 General Astronomy
 ESCI 212, 213 Environmental Earth Science and Lab (both required)
 ESCI 224 Atmospheric Science
 PHYS 151 General Physics

Note: INTS 152 Honors Study in London satisfies foundation level requirements in western culture, philosophy, literature and fine arts. INTS 153 Honors: East Meets West satisfies the IS foundation level requirements of Western culture, Christian theology, literature, and social science.

Liberal Arts Exploration (formerly Level II) (12 hours)

Qualified courses are identified by the disciplinary prefix.

- (3) **Advanced Bible**
 A course with the BIBL prefix. Exclusions: BIBL 101 Biblical Literature; BIBL 251 Bible History and Geography; BIBL 261 Holy Land Tour; BIBL 341 Missions in Biblical and Theological Perspective; and BIBL 395 Special Topics in Bible, unless specifically approved. Special Topics in Bible courses that have been approved to meet this requirement include Women in the Bible and Science and Scripture.
- (3) **Humanities**

A course with the prefix ENGL, HIST, HUM, PHIL, THEL, or MHS, or any course in foreign language literature, or a course in art history from ART 231, 232, 235, 237, 314, or 322. Exclusion: Art majors may not use an ART course to meet the humanities requirement.

(3) Natural Science and Mathematics

A course with the prefix BIOL, CHEM, ESCI, MATH, PHYS, or CSCI 115. Mathematics majors may not use a MATH course to meet this requirement. Exclusion: MATH 190 Mathematical Applications and Issues, MATH 115 College Mathematics

(3) Social Science

A course with the prefix ECON, POLS, PSY, SOC. The discipline must be different from the one used to fulfill the liberal arts foundation requirement. The following courses do not meet this requirement: POLS/PSY/SOC 309 Statistics; POLS/SOC 312 Research Methods.

Houghton College Integrative Studies Requirements - BMus

These may be found in the Academic Programs section of the catalog under Music.

Course Descriptions

INTS 101 First-Year Introduction (FYI) (P/U) (1, F&S)

FYI is an introductory course which addresses issues that first year students need to know to better acquaint themselves with college life. The course is aimed at developing an overall perspective of the issues related to integration into a liberal arts college, addressing basic issues of adjustment to the academic milieu of higher education. Large-group and small-group sessions occur during the first nine weeks of the fall semester. Required of all entering first-year students. Liberal Arts Foundation - Orientation.

INTS 152 Honors Study in London (15, S)

(See course description in Off-Campus Programs-First Year Honors Program.) Liberal Arts Foundation - Western Culture, Philosophy, Literature and Fine Arts.

INTS 153 Honors: East Meets West (15, S)

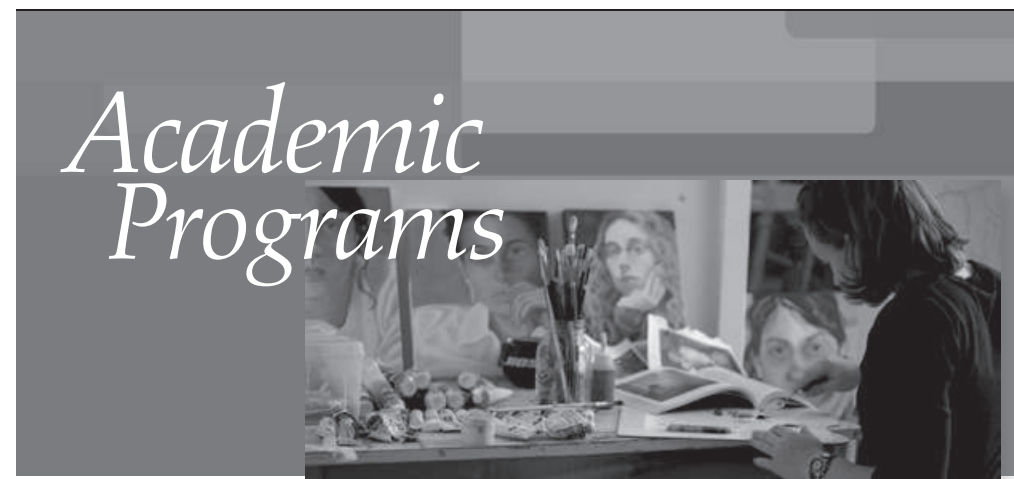
(See course description in Off-Campus Programs-First Year Honors Program.) This curriculum replaces 14 hours of the integrative studies requirements: Western Civilization, Literature of the Western World, Introduction to Christianity, and Introduction to Politics.

INTS 235 Interpreting the Environment: Trail Development (2, 3, or 4, F)

Principles, processes, and techniques used to interpret the environment and develop interpretive materials, centers, and trails. Through service-learning, students will develop interpretive, recreational, meditative, exercise, or other trails to complement their major program or integrative studies. One hour lecture/3, 4.5, or 6 hours applied (depending on credit hours chosen-3 applied hours for 2 credits, 4.5 for 3 credits, and 6 for 4 credits). Applied hours include research and preparation of interpretive presentations as well as trail development, as appropriate.

INTS 301 Engaging Australian Culture (1, F)

Weekly exploration of Australian culture outside the classroom, through travel, cultural events, and talking with Australians.



Accounting (major and minor)

Department of Business and Economics: Kenneth J. Bates, chair

Faculty: Kenneth J. Bates, Robert A. Black, Jonathan E. Bradshaw, Richard A. Halberg, Jeffrey B. Spear

Web site: www.businessathoughton.com

E-mail: business@houghton.edu

Phone: 585.567.9440

Mission: To develop Christ-like scholar-servants to serve the people and manage the resources of corporations, small businesses, not-for-profit organizations, and churches.

Major: 43 hours in the major; 12 in pre/co-requisites

Required courses for the major but without major credit:

ACCT 211	Financial Accounting	3
ACCT 212	Managerial Accounting.....	3
ECON 210, 211	Principles of Micro and Macroeconomics	3, 3
Total:		12

Major required courses:

BADM 212	Principles of Management	3
BADM 213	Business Law I.....	3
BADM 302	Investment Management.....	3
BADM 309	Statistics.....	3
ACCT 311, 312	Intermediate Accounting I & II.....	6
ACCT 314	Cost Accounting.....	3
ACCT 315	Auditing.....	3
ACCT 316	Federal Income Tax.....	3
ACCT 317	Management Information Systems	3
BADM 406	Financial Management.....	3
BADM 481	Senior Capstone: Senior Seminar	1
Total:.....		34

Elective credit courses; choose 9 hours from

ACCT, BADM, or ECON course numbered 211 or above.....	9
Integrative studies	50
Liberal Arts minor or electives	20
Grand Total	125

Double-major option: Students who wish to have a double major in accounting and business may accomplish this by taking Marketing, Business Strategy and Policy, and three additional hours of ACCT, BADM, or ECON numbered 211 or above.

CPA exam preparation: Licensure as a Certified Public Accountant in New York State requires the equivalent of an additional year of undergraduate study (150). As an alternative, agreements with other universities allow a Houghton accounting graduate to satisfy CPA exam educational qualifications through a one-year master's degree.

CMA exam preparation: Students considering the Certified Management Accountant designation are encouraged to take Business Communication and Operations Management in addition to required coursework. The Houghton accounting major qualifies students to take the CMA exam.

Minor

An accounting minor consists of 15 hours beyond Financial Accounting (ACCT 211). A student who opts for an accounting minor in conjunction with a business administration major may not use accounting courses to fulfill elective requirements in the major area.

Spreadsheet Competency Requirements

All students majoring in any program of the Department of Business & Economics must master a set of spreadsheet competences. (See details in the Business Administration section.)

Course Descriptions

ACCT 211 Financial Accounting (3, F)
An introduction to the basic theory and practices of financial accounting for proprietorships, partnerships, and corporations. The course emphasizes external reporting and compliance.

ACCT 212 Managerial Accounting (3, S)
An introduction to the basic theories and practices of providing accounting information for use by decision-makers within the organization. Prerequisite: spreadsheet competency.

ECON 210 Principles of Microeconomics (3, F)
Economic method, demand and supply, consumer and producer theory, models of product market structure, and selected topics on factor markets, public choice analysis, public expenditure, and finance.

ECON 211 Principles of Macroeconomics (3, S)
Circular flow of income and expenditure in a market economy with government, financial, and foreign sectors. Economic method, demand and supply, national income accounting, inflation, unemployment, business cycles, theories of aggregate price and output determination, fiscal and monetary policy, and the government budget.

BADM 212 Principles of Management (CDRP, see Foreign Language) (3, F&S)
Familiarizes students with the knowledge, roles, responsibilities, and skills required of new managers. Special attention is given to managerial decision-making, problem-solving, information, and human resources issues.

BADM 213 Business Law I (3, F)
An introduction to basic legal concepts, including contracts, agency, bailments, and negotiable instruments.

BADM 302 Investment Management (3, S)
A study of stocks, bonds, mutual funds, commodities real estate, investment analysis, and portfolio theory. Prerequisite: ACCT 211, 212 or permission.

BADM 309 Statistics (3, F&S)
Basic statistical methods such as graphs, probability, sampling, hypothesis testing, regression, correlation. Theory useful in research and interpretation of data. Prerequisite: spreadsheet competency.

ACCT 311 Intermediate Accounting I (3, F)
Intensive study of financial accounting issues including measurement, valuation, and reporting of balance sheet items. Prerequisite: ACCT 211, 212.

ACCT 312 Intermediate Accounting II (3, S)
Extension of ACCT 311, with emphasis on accounting for contingencies, bonds, pensions, leases and acquisitions. Prerequisite: ACCT 311.

ACCT 314 Cost Accounting (3, S)
Evaluation and analysis of an organization's internal accounting information needs, with special emphasis on the manufacturing environment. Topics covered include job order, process, standard, and activity-based cost accounting systems, allocations, budgeting, profit-volume analyses, and behavioral considerations. Prerequisite: ACCT 212.

ACCT 315 Auditing (3, S08)
A comprehensive introduction to the practices and procedure used by internal auditors and CPAs in their attestation role relative to external financial reporting and the evaluation of internal controls. Emphasis is placed on the legal and ethical requirements of the auditor, including Sarbanes-Oxley. Prerequisite: ACCT 212 or permission.

ACCT 316 Federal Income Tax (3, F06, F08)
Introduction to history and development of federal income tax. Study directed toward preparation of individual and corporate returns under IRS code and tax implications of management decisions. Prerequisite: ACCT 211, 212, or permission.

BADM 317 Management Information Systems (3, S07, S09)
Study of the design, maintenance, and monitoring of accounting and other information systems. Includes audit and internal control concepts. Prereq: spreadsheet competency, ACCT 211, 212.

ACCT 323 Tax Practicum (1, S)
Supervised preparation of tax returns through the VITA (Voluntary Income Tax Assistance) Program using resources and guidance provided by the Internal Revenue Service (IRS). Prerequisite: ACCT 316.

ACCT 330 Accounting for Government and Not-for-Profit Organizations (3, S07, S09)
Accounting for not-for-profit entities, specifically state and local government, healthcare providers, welfare, and charitable and religious organizations. Covers fund accounting, budget and control issues, revenue and expense recognition, and issues of reporting.

BADM 406 Financial Management (3, F)
Financial analysis, budgeting, working capital management, capital budgeting, sources of financing, cost of capital. Prerequisite: spreadsheet competency, ECON 110, ACCT 211, 212, or permission.

ACCT 418 Advanced Accounting (3, S)
Special problems in accounting with significant emphasis on business combinations and not-for-profit entities. Prerequisite: ACCT 312

ACCT 421 Internship in Accounting (6, F & 3, S)
Supervised experience in corporate or public accounting combining the theoretical background of coursework with practical activities in a professional setting. By application only. (Spring offering is for two days a week only.)

ACCT 460 CPA Review (P/F) (1-3, S)
Computer-assisted study and review of all areas covered on the CPA exam. Prerequisites: senior accounting major or by permission.

ACCT 295, 395, 495 Special Topics (1-4, OD)
Group study of special topics.

BADM 481 Senior Capstone: Senior Seminar (1 or 2, S)
Exploration of current issues faced by management. Required of all senior business, accounting, and information technology management majors.

Art (major and minor)

Department of Art

Faculty: Gary Baxter, Theodore J. Murphy, John M. Rhett, Jillian Sokso

Web site: www.houghton.edu/academics/programs/ART.HTM

Phone: 585.567.9401

General Information

The art department offers a program of study that is structured to develop in students an understanding of the meaning, both past and present, of art in society. Art majors and minors acquire comprehensive experience in use of materials and technique, while gaining confidence in their ability to integrate faith, knowledge, and creativity. The art major complements the Christian liberal arts experience to prepare students for teaching, professional art production, and graduate studies.

Studio areas in which majors and minors may concentrate include ceramics, drawing, graphic design, painting, photography, printmaking and sculpture. The program is diversified through visiting artists, on-campus gallery exhibits, and off-campus trips that expose students to cultural resources in cities throughout the northeast. The art department also offers Mayterm art history experiences every other spring in cities such as Paris, London, Florence, Rome, and Madrid.

Studio Art Major: BA (49 semester hours)

The studio art major requires 49 hours in art, including a concentration in one studio area, distributed as follows:

Required courses:

ART 211 Drawing I.....	3
ART 241 Two-dimensional Design	3
ART 242 Three-dimensional Design	3
ART 311 Anatomy & Figure Drawing <i>or</i>	
ART 411 Experimental Media in Drawing.....	3
Total	12

Three of the following six (preferably by the end of the sophomore year):

ART 221 Painting I.....	3
ART 245 Graphic Design I.....	3
ART 251 Sculpture I.....	3
ART 261 Introduction to Printmaking.....	3
ART 271 Ceramics I.....	3
ART 281 Introduction to Photography	3
Total	9

Four of the following seven:

ART 231 Ancient Art History.....	3
ART 232 Renaissance Art History	3
ART 234 Art and Architecture in Europe	3
ART 235 African Art History.....	3
ART 237 Modern Art History	3
ART 314 Art and History of Film	3
ART 322 Contemporary Art & Critical Theory	3
Total	12

Concentration:

ART 3xx Art Studio Elective**	3
ART 4xx Art Studio Elective**	3
ART 485 Senior Seminar & Concentration.....	2 or 3*
ART 486 Senior Concentration & Thesis	2 or 3*
Art electives (any ART courses except 131 and 233)	6-9**

*a double concentration requires 3 hours (total: 51)

**9 hours of electives for the drawing concentration; 6 hours for all other concentrations

Double major in art and another discipline: 37 hours

There is also a studio art major which requires 37 hours in art for those students who choose to double major, distributed as follows:

Required courses:

ART 211 Drawing I.....	3
ART 241 Two-dimensional Design	3
ART 242 Three-dimension Design	3
Total	9

Three of the following seven:

ART 231 Ancient Art History.....	3
ART 232 Renaissance Art History	3
ART 234 Art and Architecture in Europe	3
ART 235 African Art History.....	3
ART 237 Modern Art History	3
ART 314 Art and History of Film	3
ART 322 Contemporary Art & Critical Theory	3
Total	9

Concentration:

ART 2xx Art Studio Elective	3
ART 3xx Art Studio Elective**	3
ART 4xx Art Studio Elective**	3
ART 485 Senior Seminar & Concentration.....	2
ART 486 Senior Concentration & Thesis	2
Art electives (any ART courses except 131 and 233)	6-9*
**9 hours of electives for the drawing concentration; 6 hours for all other concentrations	

Art Minor: 15 semester hours

A student may obtain an art minor by completing 15 hours in art including any three hours of art history, Drawing I, and nine additional hours of art courses.

Course Descriptions

Ceramics

ART 271 Ceramics I

(3, F&S)

Basic study of clay as a three-dimensional artistic medium, working with hand-built and wheel-thrown techniques. Introduction to glazing, decorating, and firing processes. Liberal Arts Foundation - Fine Arts.

ART 371 Ceramics II

(3, S)

Intermediate study of clay as a three-dimensional artistic medium. Continuing development of form and craftsmanship through individual projects on the wheel and/or hand-built forms. Additional instruction in glaze chemistry and kiln-firing. Prerequisite: ART 271.

ART 471 Ceramics III

(3, S)

Advanced projects in clay. Emphasis shifted from purely investigatory exercises in form toward clarity of expression and execution. Individually designed projects with tutoring by instructor. Prerequisite: ART 371.

Design

ART 241 Two-dimensional Design

(3, F&S)

Theory and application of compositional elements and principles of design. Experiences in two-dimensional problem solving. Lecture, group critiques, discussion. Liberal Arts Foundation - Fine Arts.

ART 242 Three-dimensional Design

(3, F&S)

Theory and application of elements of three-dimensional design through model-scale sculptural projects. Awareness and comprehension of three-dimensional structural and spatial relationships. Liberal Arts Foundation - Fine Arts.

Drawing

ART 211 Drawing I

(3, F&S)

Basic introduction to drawing media and techniques; exploration of concepts of form and space in varied subject matter. Liberal Arts Foundation - Fine Arts.

ART 311 Anatomy and Figure Drawing

(3, S)

Elements, principles, and techniques of artistic anatomy. Emphasis on presentations as they relate to the figure and portrait. Study of skeleton and musculature from casts and live models. Prereq: ART 211.

ART 411 Experimental Media in Drawing (3, S)
Experimental processes, techniques, and concepts of investigative drawing. Emphasis is on drawing as an expressive media independent of immediate observation and as a viable end in itself. Prerequisite: ART 211.

Graphic Design
ART 245 Graphic Design I (3, F)
Introduction to theory and practice of graphic design communication. Emphasis on techniques for exploration of two-dimensional problems, and interpretation of verbal to visual form. Computer design is introduced. Liberal Arts Foundation - Fine Arts.

ART 345 Graphic Design II (3, S)
Further development of conceptualization and visualization skill within graphic design media, including computer design. Assignments directed towards commercial production.

ART 445 Graphic Design III (3, S)
Subjects include maintaining variety and consistency across multiple related projects, and a variety of complex contemporary design problems.

ART 447 Graphic Design Internship (3, OD)
Practical experience to include interviews, placement, work experience in situation of mutual benefit to student and publishing house or designer. Prerequisite: ART 445 and portfolio review.

Painting
ART 221 Painting I (3, F&S)
Visual problems of space, form, value and color studied in oil paint. Basic problems of pictorial composition and interpretation through representational/abstract approaches to observing life and the still life. Liberal Arts Foundation - Fine Arts.

ART 321 Painting II (3, S)
Intensive study of a single subject which is then extended into a series, to develop a more sophisticated personal visual statement. Examples of subjects include still life, figure, interiors, abstraction. Prerequisite: ART 221.

ART 421 Painting III (3, OD)
Emphasis on individual development and refinement of personal expression in various approaches to painting. Prerequisite: ART 321.

Photography
ART 281 Introduction to Photography (3, F&S)
Includes instruction of technical aspects of the camera, formal aspects of shooting, editing and printing in traditional black and white media. File and digital will be investigated, though all printing will be completed in the digital darkroom. Assignments based on four units of concept and formal elements of photographic consideration and image making. Course involves survey and research assignments based in the historical context of photography as well as contemporary issues in the media. Liberal Arts Foundation - Fine Arts.

ART 282 Experimental Darkroom Processes (3, S)
Examination of various darkroom image making and printing techniques, including pinhole, cyanotype, projection, photogram, as well as toning and hand coloring in traditional black and white prints. Liberal Arts Foundation - Fine Arts.

ART 284 Introduction to Digital Imaging (3, S)
An introduction to the various components of the computer and the auxiliary equipment needed to input and output images. The emphasis of this course is on image making, whether from original drawn images or scanned images and photographs. Four-unit course discusses image resources and development, printing, papers, inks and presentation. Students will also engage in research involving contemporary concerns. Liberal Arts Foundation - Fine Arts.

ART 382, 482 Advanced Topics in Photography (3, OD)
Course based on developing and furthering formal photography skills as well as investigating color in picture making. A continuation of technical instruction in terms of camera and digital darkroom techniques and equipment will be discussed. Course is geared to concept driven imagery, students will research and design photographic images based on their own personal ideas, vocabulary and aesthetic. Media can be carried through traditional darkroom processes or digital means. May be repeated for more independent projects into the advanced students' studio ventures. Prerequisite: ART 281 or 284.

ART 384 Advanced Digital Imaging (3, OD)
Continued study and development of the creative possibilities of digital image making. Investigation of advanced processes in use of digital cameras and manipulative creative possibilities. Study will be structured by art faculty to meet the needs of the advanced student. Prerequisite: ART 284.

Printmaking
ART 161 Digital and Photographic Process Printmaking (3, S)
This course serves as an introduction to printmaking from a photographic view. Development of imagery will concentrate on the concept of "the multiple" within the printmaking media of digital imaging, photo serigraph and photo intaglio processes. Liberal Arts Foundation - Fine Arts.

ART 261 Introduction to Printmaking (3, F&S)
This course serves as a comprehensive look into intaglio and relief methods of printmaking. Discussion and research will center on the concepts of editioning as well as unique images made through various print methods and techniques. Non-toxic methods and contemporary technique and studio practice, as well as dialog of historical context of printmaking will be discussed Liberal Arts Foundation - Fine Arts.

ART 361 Digital and Photographic Process Printmaking (3, S)
This course serves as an exploration of contemporary and traditionally based printmaking from a photographic view. Research and development of imagery will center on the social, historical and contemporary idea of the multiple within the printmaking media of digital imaging, photo serigraph and photo intaglio processes. Art majors only. Liberal Arts Foundation - Fine Arts.

ART 461 Advanced Topics in Printmaking (3, OD)
Students will use vocabulary and language of their own decided theme to execute images through the media of traditional and contemporary methods of Lithography and Etching. Students will work towards a portfolio of imagery that carries as a body of work. May be repeated for independent comprehensive investigation of any media. Prerequisite: ART 261 or 361.

Sculpture
ART 251 Sculpture I (3, OD)
Survey of traditional sculptural ideas, tools, techniques, and materials. Group and individual projects dealing with conceptual and formal problems of additive and subtractive methods in wood, metal, stone. Liberal Arts Foundation - Fine Arts.

ART 351 Sculpture II (3, OD)
Exploration of three-dimensional form/space through individual creative experiences working with various sculptural media. Prerequisite: ART 251.

ART 451 Sculpture III (3, OD)
Advanced exploration of various sculptural concepts with development of the personal statement in one or more media. Prerequisite: ART 351.

Special Topics
ART 295, 395 Special Topics (1-3, OD)
A course designed to provide opportunity for students to explore avenues not covered in other listed courses. Examples include: The Artistic Book (bookbinding and papermaking), Figurative Clay Sculpture, Illustration, Portrait Media, Landscape Painting, Landscape Photography, and Web design. *May* meet Liberal Arts Foundation - Fine Arts (check catalog listing: Integrative Studies).

History and Appreciation
ART 131 Introduction to the Visual Arts (3, F or S)
Overview of the visual arts illustrating basic principles and underlying philosophy of art. Emphasis on the contemporary. Liberal Arts Foundation - Fine Arts.

ART 132 Art and Architecture in Context in Europe (3, M06)
A course for the non-art student participating in the Mayterm trip to Europe. Approximately 20 days studying art and artists from antiquity to the present. Readings, journal-keeping and questions pertaining to site-specific works are required. Minor and Liberal Arts Foundation - Fine Arts.

ART 231 Ancient Art History (3, F07)
History of world art from prehistoric to the 14th century. Emphasis on role of art as visual communication of religious, political, and social concerns. Liberal Arts Foundation - Fine Arts; Liberal Arts Exploration-Humanities.

ART 232 Renaissance Art History (3, S08)
History of Western art from the 14th century to the mid-18th century. Relation of form and content to cultural attitudes. Unique contributions of major artists. Liberal Arts Foundation - Fine Arts; Liberal Arts Exploration-Humanities.

ART 234 Art and Architecture in Europe (3, M06)
Approximately 20 days studying the art and artists from antiquity to the present. Readings, journal-keeping, and questions pertaining to site-specific works are requirements. Course is intended for the art major. Liberal Arts Foundation - Fine Arts.

ART 235 African Art History (3, M, S)
A selective survey of the visual arts produced on the African continent from antiquity through the present. Consideration of colonial influences on African art and African art's influence on Western art, including the African American Diaspora. Emphasis upon seeing and understanding art in the context of daily life, religion and society.

ART 237 Modern Art History (3, S07)
History of Western art from the mid-18th century through the 19th and early 20th centuries. Analysis of major movements and artists, their underlying philosophy and cultural influences. Liberal Arts Foundation - Fine Arts; Liberal Arts Exploration-Humanities.

ART 314 The Art and History of Film (3, F)
An introduction to the history, craft, theory, and critical content of film; 15 films viewed in class, 20-25 outside of class research work. Liberal Arts Foundation - Fine Arts; Liberal Arts Exploration-Humanities.

ART 322 Contemporary Art & Critical Theory (3, F06, 08)
Introduction and discussion of influences and developments at work in the world of contemporary art, including pop, minimalism, and performance art. Multicultural and postmodernist ideas and the role of art critics in shaping dialogue will also be considered. Liberal Arts Foundation - Fine Arts; Liberal Arts Exploration-Humanities.

Senior Capstone
ART 485 Senior Seminar and Concentration (2, F)
Practical experience in organizing an exhibition, preparing a body of work for portfolio documentation, and written documentation through formal thesis statement. A variety of readings, discussion, studio work, and critique comprise the course atmosphere. Required of all senior art majors during the fall semester.

ART 486 Senior Concentration and Thesis (2, S)
Advanced study in chosen area of studio concentration with interdisciplinary critiques including all senior art majors. Emphasis on development of a quality body of work for exhibition and formal documentation through written thesis. Required of all senior art majors in the spring semester. This course is repeatable for extra studio emphasis.

Bible (major and minor)

Department of Religion and Philosophy: J. Michael Walters, chair
Faculty: Richard Eckley, Kelvin Friebe, Kristina LaCelle-Peterson, Terence Paige, Carl Schultz, Paul Shea, Külli Tõniste
Web site: campus.houghton.edu/orgs/rel-phil/
Phone: 585.567.9440

Bible: BA/BS (27 hours in the major; 3 in pre/co-requisites)

A major in **Bible** is recommended for those expecting to become missionaries, teachers of Biblical studies, or leaders in para-church ministries.

Required courses for the major but without major credit:	
BIBL 101 Biblical Literature	3
Major required courses:	
BIBL 221 Biblical Interpretation	3
BIBL 231 Pentateuch	3

BIBL 233 Life of Christ.....	3
At least one Old Testament.....	3
At least one New Testament.....	3
BIBL prefix 211 or above	6
BIBL 482 Senior Capstone: Senior Seminar	3
One theology course from the following	3
THEL 313 Systematic Theology or	
THEL 351 Biblical Theology: Old Testament or	
THEL 352 Biblical Theology: New Testament	
Total:	27

Minor: 12 hours in Bible, numbered 200 or above

Biblical Languages

Bible majors are encouraged to fulfill language requirements by studying either Hebrew and/or Greek. Three semesters of one language, or two semesters of both Biblical languages will fulfill the requirement. The third semester Exegesis classes can be counted towards meeting a major requirement in Bible.

Greek Minor: (9 hours beyond GREK 321)

Course Descriptions

BIBL 101 Biblical Literature (3, F&S & May)
Survey of the types of literature found in the Bible. Considers the origin of the biblical texts and canon; basic issues of interpretation (hermeneutics); and an outline of the history of Israel and of the New Testament church as a backdrop for the message. Literary, historical, and theological aspects of selected texts will be explored. **This is a prerequisite for all Bible courses and THEL 209.** Liberal Arts Foundation - Bible.

BIBL 221 Biblical Interpretation (3, F)
Development of Scripture interpretation within the Judeo-Christian tradition, noting both general and specific principles which will, in turn, be applied to issues of current concern. Liberal Arts Exploration - Advanced Bible.

BIBL 231 Pentateuch (3, S)
Analysis of critical and historical background, literary content, and development of the religion of Israel. Relevancy of contents. Liberal Arts Exploration - Advanced Bible.

BIBL 233 Life of Christ (3)
Jesus' life and teaching, with emphasis on his eschatology and ethics; the theological distinctives of the Gospel writers; and consideration of some critical issues in interpretation. Focus is mainly on the synoptic gospels. Liberal Arts Exploration - Advanced Bible.

BIBL 251 Bible History and Geography (3, OD)
Study of the history of the Jewish people and surrounding civilizations. Old and New Testament backgrounds. Intensive study of the geography of the Holy Land. No IS credit.

BIBL 261 Holy Land Tour (2/3, OD)
Through visits to cultural, historical, and archaeological sites in Israel, biblical history and geography will be elucidated. Visits will be preceded by lectures and the reading of preparatory materials and followed by lectures and discussions. No IS credit.

BIBL 303 Old Testament Historical Books (3, F)
Study of the 12 Books of History, including Joshua through Esther. Integrates critical, analytical, and devotional approaches, and combines inductive and lecture methods. Liberal Arts Exploration - Advanced Bible.

BIBL 310 Old Testament Prophets I (3, F)
Historical background, biographical data, critical problems, and contents of Isaiah, Jeremiah, and six minor prophets preceding the Babylonian captivity. Relevancy of messages. Liberal Arts Exploration - Advanced Bible.

BIBL 312 Old Testament Prophets II (3, S)
Historical background, biographical data, critical problems, and contents of Ezekiel, Daniel, and six minor prophets largely during and following the Babylonian captivity. Relevancy of messages. Liberal Arts Exploration - Advanced Bible.

BIBL 321 Poetic Books	(3, OD)
Consideration of the structure and contents of Hebrew poetry and wisdom literature with a comparative study of similar genre of literature in the Near East. Liberal Arts Exploration - Advanced Bible.	
BIBL 331 Early Pauline Epistles	(3, F)
The epistles of Paul's major missionary travels: the Thessalonian, Corinthian, Galatian, and Roman letters. Background; contents; analysis of key passages. Liberal Arts Exploration - Advanced Bible.	
BIBL 333 Later Pauline Epistles	(3, S)
Paul's prison epistles and pastoral epistles. Analysis of each book; exposition of great passages. Liberal Arts Exploration - Advanced Bible.	
BIBL 335 General Epistles	(3, S)
Historical and exegetical treatment of the books of Hebrews, James, 1 and 2 Peter, and Jude, focusing on key passages, theology, and problems of interpretation and application. Liberal Arts Exploration - Advanced Bible.	
BIBL 337 Gospel and Epistles of John	(3, OD)
John's gospel and epistles analyzed from a literary and theological perspective, with attention also to historical questions and to the nature of the Johannine community. Liberal Arts Exploration - Advanced Bible.	
BIBL 341 Missions in Biblical and Theological Perspective	(3, S06)
An examination of the biblical foundations of missions. The course will explore the extensive Old Testament roots of missions and the New Testament development. It will build a biblical view of culture, worldview, the nature and function of the church, and other relevant topics. Attention will be paid to the application of appropriate principles of biblical theology, exegesis, hermeneutics, and contextualization and to the development of a diachronic approach to Scripture. No IS credit.	
BIBL 351 Daniel/Revelation	(3, May)
A study of the nature of apocalyptic literature, critical problems, and various systems of interpretation. Liberal Arts Exploration - Advanced Bible.	
BIBL 361 Job	(3, S)
Historical, doctrinal, and cultural study of the book; special attention to the problem of human suffering, the afterlife in the Old Testament, and the concept that success indicates divine favor. Liberal Arts Exploration - Advanced Bible.	
BIBL 363 Dead Sea Scrolls	(3, OD)
Study of their discovery, their contents, their importance, their contribution to textual criticism and their influence on Judaism and Christianity; attention given to the community from which they came. Liberal Arts Exploration - Advanced Bible.	
BIBL 371 Book of Acts	(3, OD)
Study of the struggles and growth of the early church through in-depth analysis and discussion, with opportunity for contemporary application; lectures, group discussions, and student presentations. Liberal Arts Exploration - Advanced Bible.	
BIBL 395 Special Topics in Bible	(3, OD)
Study of select blocks or groups of Scripture related to a particular topic or theme. <i>May</i> meet Liberal Arts Exploration - Advanced Bible, check listing on page 40.	
BIBL 410 Isaiah	(3, OD)
A study of the historical, critical, and contextual issues, with an emphasis on a vital faith to our generation. Liberal Arts Exploration - Advanced Bible.	
BIBL 412 Jeremiah	(3, OD)
Historical, cultural background, structure and contents of Jeremiah will be studied. Attention given to Jeremiah's influence on his contemporaries and the relevance of his message for our time. Liberal Arts Exploration - Advanced Bible.	
BIBL 453 1 Corinthians	(3, OD)
An intensive study of the literary structure, the historical setting, and the theology of 1 Corinthians. Prerequisites: BIBL 221 Biblical Interpretation, and at least one other upper level Bible course, or permission of the instructor.	

BIBL 482 Senior Capstone: Senior Seminar in Bible	(3, S)
A discussion course focused on individual student projects addressing themes, issues, or problems that bring together biblical material, the Christian tradition, and contemporary concerns. Required of all Bible majors.	
BIBL 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2, or 3)
BIBL 496 Honors in Bible	
GREEK	
GREK 101, 102 Beginning Greek Level 1, Level 2	(3/3, F/S)
Elements of the Koine Greek language. Stress on facility in reading selections from New Testament and Hellenistic literature. Cultural backgrounds in Greek civilization. This course or its equivalent is a prerequisite for all other Greek courses.	
BIBL/GREK 323 New Testament Exegesis	(3, F)
Readings from the Greek New Testament and intermediate level study of Greek Syntax. Requires GREK 102, or special permission of the instructor.	
GREK 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2, or 3)
HEBREW	
HEBR 101, 102 Beginning Hebrew Level 1, Level 2	(3/3, F/S)
Elements of Biblical Hebrew. Reading from Old Testament.	
BIBL/HEB 322 Hebrew Exegesis	(3, F)
A reading course in prose and poetic passages of the Hebrew Bible. The student will demonstrate facility in translation, exegesis, and interpretation of these Biblical passages. Requires HEB 102 or special permission of the instructor.	
HEBR 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2, or 3)

Biology, BA, BS (major and minor)

Department of Biology: James M. Wolfe, chair
Faculty: Jacqueline M. Crisman, Matthew K. Pelletier, Aaron M. Sullivan, James M. Wolfe
Part-time: Alan Belford, David Brubaker, David Schwert
Web site: campus.houghton.edu/orgs/biology/
Phone: 585.567.9280

Biology: BS (26 hours in major; 8 prerequisites; 28 co-requisites)

Prerequisites (8):	
BIOL 151, 152 General Biology	8
Required (26) which must include:	
BIOL 251 Genetics	4
BIOL 281 Introduction to Research	1
BIOL 482 Senior Seminar	1
BIOL XXX Electives.....	20
Co-requisites (28):	
CHEM 151, 152 General Chemistry	8
CHEM 241, 242 Organic Chemistry	8
PHYS 101, 102 College Physics	8
MATH 181 Calculus I	4

Graduates from this major primarily enter graduate programs, some aspect of the health professions (allopathic medicine, osteopathic medicine, podiatry, optometry, dentistry, medical technology, physical therapy), veterinary medicine or environmental science. Those students interested in studies preparing them for the health professions should refer to the detailed description of these programs under Pre-Health Professions in this catalogue.

Biology: BA (26 hours in major; 8 prerequisites; 8 co-requisites)

Prerequisites (8):

BIOL 151, 152 General Biology 8

Required (26) which must include:

BIOL 251 Genetics 4

BIOL 281 Introduction to Research 1

BIOL 482 Senior Capstone: Senior Seminar 1

BIOL XXX Electives..... 20

Co-requisites (8):

CHEM 151, 152 8

Graduates from this program primarily enter the field of science teaching in secondary schools.

Environmental Programs

Environmental programs at Houghton take advantage of the college's location in the Allegheny Plateau (ranging in elevation from 1000 to 2500 feet), with access to forest, river, and lake ecosystems, and within a day's drive of the Adirondack Mountains (where Houghton now has a 40-acre campus and offers a semester-long program; see Off-Campus Programs-Adirondack Park) and the Atlantic Ocean. In addition, Houghton's 1300-acre campus has forest and field areas for study. The 91-acre Spring Lake preserve, incorporating an old growth forest and undeveloped kettle lake within eight miles of the campus, is available for environmental research.

Two Houghton programs emphasize Christian stewardship of the creation as well as environmental awareness and analysis. The BA/BS major in biology with environmental emphasis prepares students for careers in environmental education, research and analysis, and further study in graduate program. Field-oriented courses complement a strong biology background, including at least one course at AuSable Institute of Environmental Studies (see Off-Campus Programs section), a center for Christian environmental stewardship. The environmental stewardship minor (see Environmental Science) for science and non-science majors provides background for responsible stewardship. Required courses include Environmental Earth Science, Local Flora or Wildlife Biology, Natural Resource Management, and Writing about Nature and the Environment. A senior seminar offers exposure to environmental leaders at the local, state, and national level.

For further information on the biology programs, contact Professor James Wolfe at james.wolfe@houghton.edu.

Biology with Environmental Emphasis: BA (26 hours in major; 15 co-requisites):

Required (26) which must include:

BIOL 251 Genetics 4

BIOL 281 Introduction to Research 1

BIOL 301 Field Botany 4

BIOL 322 General Ecology 4

BIOL 482 Senior Capstone: Senior Seminar 1

BIOL xxx At least one course with zoological emphasis 4

Field experience requirement fulfilled by:

a) at least one biology course at the AuSable Institute of

Environmental Studies (max. 8 hours), or

b) field course (4) at another accredited institution, or

c) significant intern or work experience

Co-requisites (15):

CHEM 151, 152 General Chemistry I, II 8

ESCI 101 Physical Geology 4

ESCI 212 Environmental Earth Science..... 3

Recommended courses include the following:

SOC 309 Statistics 3

REC 401 National Resource Management 3

Biology with Environmental Emphasis: BS (26 hours in major; 35 co-requisites)

Required (26): see BA above

Additional co-requisites (20):

MATH 181 Calculus I 4

CHEM 241, 242 Organic Chemistry 8

PHYS 151, 152 General Physics I, II..... 8

Recommended courses: see BA above

The BA or BS in biology with environmental emphasis prepares students for careers in environmental education, analysis, and research. Students can take the New York state civil service exam for application as a conservation biologist to the NYS Department of Environmental Conservation.

Biologist (wildlife) (18 hours required): BIOL 105 Conservation Biology (4), BIOL 214 Wildlife Biology (3), BIOL 364 Animal Ecology (4), BIOL xxx Special Topics: Ornithology (4), BIOL 211 Ecology of Alaska (4), REC 401 Natural Resources Management (3).

Biologist (ecology) (18 hours required): BIOL 151 General Biology (4), BIOL 364 Animal Ecology (4), BIOL 301 Field Botany (4), BIOL 350 Forest Ecology (4), BIOL xxx Special Topics: Limnology (4), BIOL 211 Ecology of Alaska (4), BIOL 220 Biological Oceanography (2).

Biology minor: 12 hours above BIOL 151, 152**Course Descriptions**

BIOL 103 Fundamentals of Biology (4, S)
Principles of biological structure and function, particularly as they relate to man. Fulfills the liberal arts laboratory science requirement for non-majors. Three lecture, three laboratory hours each week. Liberal Arts Foundation - Lab Science.

BIOL 105 Conservation Biology (4, S08)
Principles of conservation biology including history of conservation, structure of aquatic and terrestrial ecosystems, endangered species and extinction, management, and Christian stewardship. Labs emphasize analysis of aquatic and terrestrial ecosystems. Three lectures, three laboratories each week. Liberal Arts Foundation - Lab Science.

BIOL 151, 152 General Biology (4/4, F/S)
Two-semester survey; preparation for advanced work. 151 includes ecology, plant and animal taxonomy and physiology, and animal behavior; 152 includes cell biology and metabolism, genetics, and origins. Three lecture, three laboratory hours each week. Note: BIOL 151 or permission is prerequisite to BIOL 152. BIOL 151 and 152 are prerequisites for major level courses above 200. Liberal Arts Foundation - Lab Science.

BIOL 207 or 212 Wildlife Behavior in East Africa (3 or 4, S)
(See course description in Off-Campus Programs - Tanzania section.)

BIOL 211 The Ecology of Alaska (3 or 4, Summer 07)
Study of Alaskan ecology through field experiences to Anchorage, Denali National Park, State Museum at Fairbanks, Tetlin Wildlife Refuge, Valdez, Kenai Fjords National Park, and Homer. Research paper on Alaska ecology and a daily journal required. Est. fee above tuition is \$1,500. Prerequisite: BIOL 152.

BIOL 213, 225 Natural History of the Adirondacks (3 or 4, F)
(See course description in Off-Campus Programs - Adirondack Park section.)

BIOL 214 Wildlife Biology (4, OD)
Study of North American wildlife with emphasis on vertebrate game animals. Topics include ecology, behavior, population dynamics, habitat development, conservation, and management. *May not be used toward the biology major or minor.*

BIOL 215 Local Flora and Vegetation (3, F)
Field identification of local ferns, shrubs, trees, and herbaceous flowering plants. Lecture covers broader vegetational ecosystems of North America. Small herbarium required. Two lecture, three laboratory hours each week. *May not be used toward the biology major or minor.*

BIOL 217 Human Anatomy and Physiology I (4, F)
Systematic study of structure and function of the human organism, including microanatomy of organs. General organization of the body, basic tissues, and the integumentary, skeletal, muscular, and nervous systems. Three lecture, three laboratory hours each week. *Does not count for major or minor credit except where required for graduate programs and upon permission of the department chair.*

BIOL 218 Human Anatomy and Physiology II (4, S)
Sequel to BIOL 217. Endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, reproductive systems; acid-base and fluid-electrolyte balance. Prerequisite: BIOL 217 or permission. Three lecture, three laboratory hours each week. Note: BIOL 217 and 218 are designed to fulfill the certification requirements for the physical education major and admission requirement for some schools of nursing and physical therapy. *Does not count for major or minor credit except where required for graduate programs and upon permission of the department chair.*

BIOL 220 Biological Oceanography (2, OD)
Laboratory adjacent to Acadia National Park, ME. Course includes adaptations of marine organisms to the marine ecosystems, biogeochemical cycles, stewardship of the marine environment. Field trips include rocky inter-tidal, cobble and sandy beaches, salt marshes, open ocean ecosystems. Cost above tuition and lab fee is \$600.

BIOL 221 Plant Anatomy and Physiology (4, OD)
Study of the biochemistry, physiology, structure, reproduction and commercial uses of the green plants and fungi. Laboratory includes research project in plant biology. Three lecture, three lab hours weekly.

BIOL 231 Comparative Vertebrate Anatomy (4, S07)
Comparative study of vertebrate structure. Laboratory includes dissection and detailed study of representative vertebrates. Two lecture, six laboratory hours each week.

BIOL 242 Microbiology (4, S)
Survey of viruses, prokaryotic organisms, and fungi with theoretical and applied approaches to morphology, metabolism, genetics, biotechnology, and host-parasite relations. Three lectures, three laboratory hours each week. Prerequisite: CHEM 151 or permission.

BIOL 251 Genetics (4, F)
Principles of inheritance in living organisms, including the modern concepts of “gene” action and DNA structure and function. Three lecture, three laboratory hours each week.

BIOL 281 Introduction to Research (1, F/S)
Introduction to biological research methods, selection and approval of a research topic, preparation of a comprehensive literature review, and submission of a formal written proposal. Required of all biology majors; recommended for junior year.

BIOL 301 Field Botany (4)
Introduction to taxonomy, systematics, and ecology of vascular plants. Course includes field trips throughout western New York and northwestern Pennsylvania; plant identification and classification; develop extensive herbarium. Two lecture, six laboratory hours each week.

BIOL 315 Marine Biology (4, S08)
Comprehensive study of marine ecosystems including the foundations of physical and chemical oceanography as they impact the ecology of marine organisms. Overview of structure, physiology, and ecology of marine life from phytoplankton to whales. Labs cover the representative marine divisions (plants) and phyla (animals) and may include a field trip to the northeast Atlantic coast.

BIOL 320 Limnology (4, S07)
Introduction to freshwater aquatic ecosystems with emphasis on lakes. Includes the study of physical, chemical, and biological factors which influence ecosystem function and health. Lake management and conservation included. Labs cover field analysis of a local lake ecosystem culminating in a comprehensive report. Three lecture and three laboratory hours each week.

BIOL 322 General Ecology (4, S)
Study of the interrelationships among living organisms, their physical and biological environment, and human impacts. Laboratory introduction to ecological techniques and field studies of local and state ecosystems. Three lecture, three laboratory hours each week.

BIOL 336 Animal Behavior (4, S)
Provides an introduction to the biological study of animal behavior. Lecture topics will focus primarily on why animals behave as they do and, to a lesser degree, how they get the job done. Topics to be covered include: genes and behavior, learning, organization of behavior, communication, mating systems, parental investment and cooperation. Three lecture, three laboratory hours each week. Prerequisite: BIOL 151, 152

BIOL 350 Forest Ecology (4, Mayterm, OD)
Study of forests and their interactions with physical, chemical, and biological factors in the context of ecosystems at the Star Lake Campus. Includes physiognomy, nutrient cycling, climatic factors, soils, fire and disturbance, succession, and harvesting and management. Lab includes forest mensuration and analysis and introduction to SILVAH. Three lecture, three laboratory hours each week. Prerequisites: BIOL 322 or 301.

BIOL 361 Vertebrate Histology (4, OD)
Microscopic anatomy of vertebrate tissues and organs. Two lecture, six laboratory hours each week.

BIOL 364 Animal Ecology (4, S07)
Focuses on the relationship between animals and their environments including basic principles, theory, applications, and Christian stewardship as applied to animal ecology. Lab is field-oriented including telemetry and tracking, demographics, niche partitioning, foraging strategies, and habitat selection. Three lecture, three lab hours per week. Prerequisites: BIOL 151, 152 and 322.

BIOL 365 Immunology (4, S)
Theoretical and clinical approaches to study of innate and adaptive immune systems: antigen recognition, immune response, immune system, and its pathologies. Three lectures, three lab hours each week.

BIOL 370 Molecular and Cell Biology (4, F)
The course provides an introduction to the biochemistry of cells, transport across membranes, cell-to-cell signaling, organelle function, and protein targeting, with an emphasis on methods in molecular and cell biology. Three lecture hours and one three-hour lab per week. Labs will focus on molecular techniques such as cloning, PCR, generation and purification of recombinant proteins, and blotting techniques (DNA, RNA, and Protein). Prerequisite: BIOL 251.

BIOL 372 Comparative Animal Physiology (4, F07)
General consideration of functional processes in animals with emphasis on the comparative aspects. Three lecture, three laboratory hours each week.

BIOL 373 Disease Pathogenesis (4, M)
Practical experiences in the health professions would be greatly enriched if students had a background in disease process. This course surveys diseases of major significance to the health professions and public health concerns for two weeks. Afterwards, students embark on a practical shadowing experience in the urban or rural missions fields found in the U.S. or overseas. Two lecture and two practicum hours. Prerequisite: BIOL 251.

BIOL 374 Human Genetics and Disease (3 or 4, S)
Our understanding of human genetics is increasing at an incredible pace. This course will explore a number of modern topics including the Human Genome Project, human genetic diseases and gene therapy, human genetic testing, human genetics and behavior, and quantitative traits. Connections between human genetics and society will also be explored. Three lecture hours, optional three-hour lab. Prerequisite: BIOL 251.

BIOL 382 Developmental Biology (4, F)
Study of morphogenesis and biochemical processes involved in development, with emphasis on vertebrates. Three lecture, three laboratory hours each week. Prerequisite: BIOL 251.

BIOL 383 Virology (4, F07)
Viruses have changed history and they are not even alive. With an eye on history, this course begins with the epidemiological features of infectious disease, and systematically covers the major families of viruses with impact on humans and animal health alike. The laboratory emphasizes the molecular techniques needed for recombinant vaccine production. Three lecture hours and three laboratory hours per week. Prerequisite: BIOL 251.

BIOL 384 Cancer Biology (2, F06)
One of the leading causes of death is a group of proliferative and invasive disorders called cancer. This course will emphasize the physiological, cellular and molecular features of this dreaded group of diseases, to develop a comprehensive understanding of this disease. Special attention will be placed on clinical therapeutic intervention methodologies. Two lecture hours, no laboratory requirement. Prerequisite: BIOL 251.

BIOL 394 Collaborative Research in Biology (4 or 5, F, S)
Research in collaboration with a faculty member focusing on current research in areas of immunology, molecular genetics, animal behavior, and forest/water ecosystem analysis. Students work in small teams reviewing literature, designing projects, performing experiments, collecting and analyzing data, and writing up their work in manuscript form. Students who opt for 5 credits will be required to publicly present their work and be exempted from the Introduction to Research requirement for the biology major. Prerequisite: BIOL 151, 152.

BIOL 195, 295, 395, 396 Special Topics (1-4, F&S)
Courses designed to meet the individual needs of advanced students in such areas as medical terminology, virology, disease pathogenesis, animal behavior, and research in biology. Some of the courses include laboratory.

BIOL 475 Environmental Stewardship Seminar (1, OD)
The course focuses on examining environmental issues and problems in light of the Christian faith with the goal of developing a personal stewardship ethic. Beginning with local environmental problems, and then moving to global issues and ethics. Outside speakers from the larger community, including representatives from the NYDEC, The Nature Conservancy, and local politicians.

BIOL 480 General Science Seminar (1, S)
Written thesis and oral presentation on a topic selected for interdisciplinary breadth describing current scientific research in the area of the student's concentration, based on a thorough review of scientific literature.

BIOL 482 Senior Capstone: Senior Seminar (1, S)
Discussions on history of biological science, ethical problems in biology and health related issues, and environmental issues. Required of all biology majors during their final spring semester. Open only to majors.

BIOL 391, -2; 491, -2 Independent Study (1, 2, or 3)
Research under the supervision of a biology department faculty member. Total five credits.

BIOL 496 Honors in Biology (3)

PRPR 202A Premedical-Pre dental Practicum (P/U) (3, May)
Observation and practical experience with physician or dentist on a one-to-one basis. Preparation and sharing of experiences on the Houghton campus. Open only to serious medical or dental school candidates.

Business Administration (*major and minor*)
Department of Business and Economics: Kenneth J. Bates, chair
Faculty: Kenneth J. Bates, Robert A. Black, Jonathan E. Bradshaw, Richard A. Halberg, Daniel C. Minchen, Jeffrey Spear
Executive-in-Residence: Craig Fellenstein, Senior Executive Consultant & Chief IT Architect for IBM Global Services
Web site: www.businessathoughton.com
E-mail: business@houghton.edu
Phone: 585.567.9440

Mission: To develop Christ-like scholar-servants to serve the people and manage the resources of corporations, small businesses, not-for-profit organizations, and churches.

Major: BS (34 hours; 6 in pre-co-requisites).

Courses for major but without major credit:

ECON 210, 211 Principles of Micro and Macroeconomics.....3, 3
Prerequisite total:6

Major core courses:

ACCT 211, 212 Financial and Managerial Accounting.....6
BADM 212 Principles of Management.....3
BADM 213 Business Law I.....3
BADM 218 Marketing Principles3
BADM 309 Statistics.....3
BADM 406 Financial Management.....3
BADM 417 Business Strategy and Policy.....3
BADM 481 Senior Capstone: Senior Seminar.....1
Total:25

Elective major credit courses:

Business, accounting, or economics
courses numbered 200 or above.....9
Total:40
Integrative studies.....50
Liberal arts minor(s) or electives35
Grand Total:125

Internships are strongly recommended for all academically qualified students. Most students are encouraged to participate in the college's flagship internship program offered from our suburban West Seneca campus in the fall semester of the senior year. Student-directed placements, arranged by faculty, are available in a wide range of organizations throughout the greater Buffalo area. This experience carries six credits. Two other senior-level courses are taught in the evening by Houghton faculty during this semester. Three-credit internships are also available in the spring semester for those who are unable to participate in the fall program.

Elective hours may be used to develop a concentration in any of the following six areas with the required courses as indicated.

Management (any 2):

BADM 314 Human Resources Management **and**
BADM 301 Business Communications **or**
BADM 317 Management Information Systems **or**
BADM 320 Leadership Developments **or**
BADM 330 Operations Management

Marketing (any 2):

BADM 312 Advertising Principles **and**
BADM 301 Business Communication **or**
BADM 319 Marketing Research **or**
BADM 340 eCommerce

Finance (any 2):

BADM 302 Investment Management
ECON 301 Money and Banking

Economics (any 2):

ECON 301 Money and Banking
ECON 315 Managerial Economics
ECON xxx Economics Elective

International Business (any 2):

IBI 331, 339, 350, 390 International Business Institute **or**
ECON 212 International Economics
BADM 313 International Business
an approved cross-cultural experience

International Economics (any 2):

ECON 212 International Economics
ECON 237 Comparative Economics

Minor: A minor in business administration requires the following courses in addition to Principles of Micro or Macroeconomics (ECON 210 or 211).

Required:

ACCT 212 Managerial Accounting3
BADM 212 Principles of Management3
Plus 6 hours in business courses numbered 200 or above.....6

4 + 1 Accelerated MBA

Five Years, Two Degrees. Houghton has established agreements with selected graduate schools whereby qualified students who have earned a Bachelor of Science degree in business can accelerate their MBA degree program. Students can waive certain MBA foundation courses, allowing them to complete a MBA in one year. Depending on the school, a grade of "B" or better in the designated undergraduate courses is needed to waive graduate level coursework. The courses must also be no older than five years upon matriculation into the MBA degree program. Students can consult with their advisor to obtain information about the courses selected for this program.

Houghton currently has 4+1 agreements with Alfred University, Clarkson University, and Rochester Institute of Technology.

Spreadsheet Competency Requirements

(for all majors in the Department of Business and Economics)

All students majoring in any program of the Department of Business & Economics must meet a spreadsheet competency requirement. Specifically this competency is a prerequisite for certain courses such as ACCT 212 Managerial Accounting, BADM 309 Statistics, BADM 406 Financial Management, and BADM 417 Business Strategy & Policy. These may be demonstrated in a number of ways.

The ways in which you may document your competency are:

1. Satisfactory completion of a college-level course (at HC or elsewhere), a major portion of which is in the development of spreadsheet competency. At Houghton College BADM 220 Advanced Computer *Applications* meets this requirement.
2. Satisfactory completion of a non-college level training course in the use of such software which requires at least 8 hours of instruction and is evidenced by a certificate or other written documentation, copies of which must be provided to HC.
3. Satisfactory completion of the HC competency examination on the use of Microsoft Excel®.
4. A letter on company letterhead from your employer attesting to your proficiency with Microsoft Excel® or an equivalent spreadsheet application as evaluated by the department faculty.

Course Descriptions

BADM 45 Spreadsheet Competency (0)
See description above.

BADM 102 Personal Finance (OD)
Basic understanding of concerning Christian perspectives toward stewardship, including managing the management of money & credit, insurance, credit, budgeting, investment, and retirement planning. Elective credit only.

BADM 103 Introduction to Business (3, F07)
Business operation, terminology, practices, and career opportunities. A survey course designed to give those interested in the business discipline an overview of what business is all about. A general survey of the entire field of business and management in the free enterprise system.

ACCT 211 Financial Accounting (3, F)
(See description under accounting section.)

ACCT 212 Managerial Accounting (3, S)
(See description under accounting section.)

BADM 212 Principles of Management (CDRP, see Foreign Languages) (3, F&S)
Familiarizes students with the knowledge, roles, responsibilities, and skills required of new managers. Special attention is given to managerial decision-making, problem-solving, information, and human resources issues.

BADM 213 Business Law I (3, F)
An introduction to basic legal concepts including contracts, agency, bailments, and negotiable instruments.

BADM 214 Business Law II (3, S07)
Basic law covering forms of business organization, sales, estates, bankruptcy. Prereq: BADM 213.

BADM 218 Marketing Principles (CDRP, see Foreign Language) (3, S)
Factors in product development, pricing, distribution, and promotion of consumer and business goods and services.

BADM 301 Business Communication (CDRP, see Foreign Language) (3, F)
A study of communication theory and principles as applied to business writing and oral communication. Liberal Arts-Foundation. Prerequisite: BADM 212 or permission

BADM 302 Investment Management (3, S)
A study of stocks, bonds, mutual funds, commodities, real estate, investment analysis, and portfolio theory. Prerequisite: ACCT 211, 212 or permission.

BADM 303 Entrepreneurship (3, F)
A study of entrepreneurship identifying an industry niche and the basics of starting and running a small business. Special emphasis given to business plan development.

BADM 309 Statistics (3, F&S)
Basic statistical methods such as graphs, probability, sampling, hypothesis testing, regression, correlation. Theory useful in research and interpretation of data. Prerequisite: Spreadsheet competency.

BADM 312 Advertising Principles (3, S)
(See description under the Communication major, COMM 312.) Prerequisite: BADM 218.

BADM 313 International Business (CDRP, see Foreign Languages) (3, S08)
An examination of the variations in business management and practices in developed and less developed countries around the world. Prerequisites: BADM 212, ECON 210, or permission.

BADM 314 Human Resources Management (CDRP, see Foreign Languages) (3, F)
The historical development of Human Resources Management, its context and scope, along with an in-depth coverage of such topics as planning, recruiting, selection, training, supervising, motivation, compensation, benefits, performance appraisals, discipline, and leadership. Prereq: BADM 212.

BADM 317 Management Information Systems (3, S07)
Design, maintenance, monitoring of information systems. Includes systems and audit concepts. Prerequisites: Spreadsheet competency, ACCT 211, 212.

BADM 319 Marketing Research (3, S08)
Study of the techniques used in collection and analysis of secondary and primary data and use of that format for decision-making in marketing environment. Student teams work on real business marketing research projects. Prerequisites: BADM 309, BADM 218.

BADM 320 Leadership Development (3, S08)
A study of the principles of leadership found in biblical leaders, throughout history, and in our own lives. Designed as an interdisciplinary course, specifically to help guide personal understanding both of leadership responsibilities and leadership abilities. It is not intended only for individuals who aspire to positions of leadership or just for those who think they have what are normally considered "leadership" abilities. It is intended for anyone seeking to understand how to better be able to influence others for good, regardless of their profession, position, gifts, or calling.

BADM 330 Operations Management (3, F07)
Management of processes or systems that create goods or provide services. Includes the basics of forecasting, capacity planning, scheduling, inventory management, total quality management, and supply chain management. Prerequisite: ACCT 212, MATH 110 or higher, Spreadsheet competency.

BADM 340 eCommerce (3, S07)
A course designed to give you exposure, understanding, and know-how in the ways the Internet is transforming and facilitating key functions of business. Exploration of the organizations that have succeeded and those that have failed. Understanding the eCommerce strategies companies employ. Covers the technological features that make eCommerce both possible and challenging. Implications in computer science, accounting, marketing, human resources, management, finance, economics, and international business.

BADM 406 Financial Management (3, F)
Financial analysis, budgeting, working capital management, capital budgeting, sources of financing, cost of capital. Prerequisite: Spreadsheet competency, ECON 210, ACCT 211, 212 or permission.

BADM 417 Business Strategy & Policy (CDRP, see Foreign Languages) (3, F)
Integrates social responsibility and ethics with instruction in the strategic planning process. Ethical core values act as guidelines for development of organizational plans. (Seniors only, except by permission.) Prerequisite: spreadsheet competency.

BADM 421 Internship in Business (6, F; 3, S)
Supervised experience in a business firm combining practical activities with integrating studies. By application only. (Spring offering is for two days a week only.)

BADM 431 Endowment Management (5, F&S)
An advanced investment course in which students who have excelled in business, economics, and/or accounting courses manage a portion of the Houghton College stock portfolio under faculty supervision. By application only. This course may be taken multiple semesters for a maximum of two (2) credit hours toward graduation.

BADM 460 PHR Review (P/F) (0-3, S)
Study and review of all areas covered on the PHR (Professional in Human Resources) nationally administered certification exam. Pre/Co-requisite: BADM 314 Human Resources Management.

BADM 481 Senior Capstone: Senior Seminar	(1 or 2, S)
Exploration of current issues faced by management. Required of all senior business administration, accounting, and information technology management majors.	
BADM 191, 291, 391, 491 Independent Study	(1, 2 or 3)
BADM 295, 395, 495 Special Topics	(1, 2, 3, or 4)
Group study of special topics.	
BADM 496 Honors in Business	(3, S)

Chemistry (major and minor)
Department of Chemistry: Irmgard Howard, chair
Faculty: Irmgard Howard, Mengyang Li
Part-time: Larry Christensen
Web site: campus.houghton.edu/orgs/chemistry/homepage.htm
Phone: 585.567.9280

Major: BS (33 hours in the major, 8 in prerequisites, 19 or 20 in co-requisites)
Major: BA (27 hours in the major, 8 in prerequisites, 19 or 20 in co-requisites)

Major (BS): The major in chemistry designed for preparation for professional employment or for graduate work culminates in the bachelor of science in chemistry.

Prerequisites:

CHEM 151, 152 General Chemistry 8

Required courses:

CHEM 241, 242 Organic Chemistry 8

CHEM 277 Analytical Chemistry 4

CHEM 278 Chemical Instrumentation in Research 4

CHEM 286 Special Topics 2

CHEM 361, 362 Physical Chemistry 8

CHEM 482 Senior Capstone: Chemistry Seminar 1

Additional 6 hours in chemistry selected from courses numbered above 300,
including no more than 3 hours in Research in Chemistry and honors.

Co-requisites:

PHYS 151, 152 General Physics..... 8

MATH 181, 182 Calculus I/II 8

MATH 241 Differential Equations (3) or

MATH 321 Multivariate Calculus..... 4

Major (BA): The major in chemistry designed for preparation for medical school (see Pre-Health Professions sections of this catalog) or for secondary teaching culminates in the bachelor of arts in chemistry.

Prerequisites:

CHEM 151, 152 General Chemistry 8

Required courses:

CHEM 241, 242 Organic Chemistry 8

CHEM 277 Analytical Chemistry 4

CHEM 278 Chemical Instrumentation in Research 4

CHEM 286 Special Topics 2

CHEM 361, 362 Physical Chemistry 8

CHEM 482 Senior Capstone: Chemistry Seminar 1

Co-requisites:

PHYS 151, 152 General Physics..... 8

MATH 181, 182 Calculus I/II 8

MATH 241 Differential Equations (3) or

MATH 321 Multivariate Calculus..... 4

Course Descriptions

CHEM 113 Elements of Biochemistry (4, OD)
Forms and functions of chemicals in life. Fundamentals of inorganic, organic, and biological chemistry with contemporary applications. Fulfills the liberal arts laboratory science requirement for non-science majors. Also designed for pre-nursing students. Three lecture, three laboratory hours per week. Liberal Arts Foundation - Lab Science.

CHEM 121 Impact: Science on Society (3, S)
Interrelationships between science, modern society, and Christianity. Nature and limitations of science. Political and social decisions with a scientific component. In-depth analysis of several areas where science plays a critical role in contemporary life. Fulfills the three-hour integrative studies science requirement.

CHEM 151 General Chemistry I (4, F)
Theories and principles of modern chemistry: stoichiometry, atomic theory and structure, bonding, properties of matter, descriptive chemistry of some important elements. Laboratory devoted to synthesis, analysis, and experiments based upon principles developed in lecture. Three lecture, three laboratory hours per week. Liberal Arts Foundation - Lab Science.

CHEM 152 General Chemistry II (4, S)
Continuation of CHEM 151; description and control of chemical reactions (equilibrium, thermodynamics, kinetics, electrochemistry, etc.) Laboratory devoted to qualitative analysis or student-designed research projects. Three lecture, three laboratory hours per week.

CHEM 187 Introduction to Nutrition (3, F&S)
Digestion, metabolism, nutrition of normal individuals. Essentials of adequate diets and food sources of nutrients; nutritional comparison of food in relation to normal and modified diets. Does not count for major or minor credit. Meets liberal arts exploration science, or if taken with CHEM 188, meets the liberal arts foundation lab science.

CHEM 188 Intro to Nutrition Laboratory (1, F)
This laboratory is designed to parallel the structure of CHEM 187, demonstrating at a hands-on level the components, concepts, and stewardship of contemporary nutrition. Three lab hours per week.

CHEM 221 Contemporary Organic Chemistry (4, OD)
For pre-nursing, pre-medical technology, BA biology, and general science majors. Fundamentals of organic chemistry; emphasis on structure, reactions, properties of organic molecules. Three lecture, three laboratory hours per week. Prerequisite: CHEM 151 or CHEM 113.

CHEM 241, 242 Organic Chemistry (4/4, F/S)
Modern organic chemistry: relationships between organic molecular structure and chemical reactivity; mechanisms of molecular transformations; synthesis and spectroscopy. Three lecture, four laboratory hours per week. (CHEM 241 must precede 242.) Prerequisite: CHEM 152.

CHEM 277 Analytical Chemistry (4, F)
Principles of gravimetric, volumetric, and electroanalytical methods of analysis. Acid base, precipitation, complexometric, redox titrimetry. Quantitative methods based on absorption of radiation. Statistical treatment of data. Laboratory: analysis of unknown samples. Two lecture, eight laboratory hours per week. Prerequisite: CHEM 152.

CHEM 278 Chemical Instrumentation in Research (4, S)
Instrumental methods of analysis. Principles and application of various types of spectroscopy (including UV-VIS, IR, NMR), atomic absorption and emission, mass spectrometry, thermal and electrochemical methods of analysis, etc. Three lecture, four laboratory hours per week. Prerequisite: CHEM 277.

CHEM 286 Special Topics in Chemistry (2, F)
An introduction to areas of chemistry not treated in other courses. Topics have included the following: medicinal, forensic, nutritional, environmental, and clinical chemistries. Consult the department for the topic offered in any given year. Prerequisite: CHEM 241.

CHEM 332 Biochemistry (3, S07)
Structures, functions, and metabolic relationships of representative compounds involved in life processes; brief introduction to enzymology, inborn errors, regulation of metabolism, nutritional implications, clinical applications. Prerequisite: CHEM 221 or CHEM 241.

CHEM 334 **Bioanalytical Laboratory** (1, S07)
The practice of analytical chemistry as applied to biochemical systems. Qualitative and quantitative laboratory experience in gravimetric, volumetric, potentiometric, and spectrometric techniques.

CHEM 343 **Advanced Organic Chemistry** (3, F06)
Theoretical and physical organic chemistry. Interrelationship of structure and reactivity; dynamics of organic reactions; methods of synthesis; current topics of special importance to organic chemistry and introduction to current original publications in organic chemistry.

CHEM 361, 362 **Physical Chemistry** (4/4, F/S)
Theoretical aspects of principles of chemistry: derivation and application, with emphasis on thermodynamics, kinetics, and molecular structure. Practical applications in laboratory. Three lecture, four laboratory hours per week. (CHEM 361 must precede CHEM 362.) Prerequisites: PHYS 151, 152; CHEM 242, 277, 278 (may be taken without 278, if not taken for major credit); MATH 241 or MATH 321.

CHEM 453 **Advanced Inorganic Chemistry** (3, OD)
Theories of atomic and molecular structure, bonding; emphasis on organometallic chemistry; descriptive chemistry of the elements; current topics of special importance. Prerequisite: CHEM 277.

CHEM 480 **General Science Seminar** (1, S)
Written thesis and oral presentation on a topic selected for interdisciplinary breadth describing current scientific research in the area of the student's concentration, based on a thorough review of scientific literature.

CHEM 482 **Senior Capstone: Chemistry Seminar** (1, S)
Journal reports and discussion of recent developments in chemistry. Required of all chemistry majors.

CHEM 291, 292, 391, 392; 491, 492 **Research in Chemistry** (1-3, Arr)

CHEM 496 **Honors in Chemistry** (3)

Christian Education (see Educational Ministries)

Christian Ministries (AAS) (Also, see ministry)

Department of Religion and Philosophy: J. Michael Walters, chair
Faculty: Under the direction of the department chair

The Christian ministries curriculum is a two-year program which leads to the associate of applied science degree. The course requires a total of 62 hours and provides a strong Bible-centered preparation for Christian service in the church or mission field.

The curriculum consists of 22 hours in integrative studies requirements, 25 hours in required religion courses, and a 12- to 16-hour concentration in communication, religion, educational ministries, or applied social science. Additional credit hours to total 62 will consist of electives.

The integrative studies requirements include three hours each of Bible (Biblical Literature), math or science, principles of writing, social science, philosophy, and theology.

The required religion courses are:

6 hours of Bible: Old Testament
6 hours of Bible: New Testament
3 hours of missions
6 hours of educational ministries
4 hours of internship

(See respective course descriptions in Bible, Missions, and Educational Ministry.)

Course Description

CHMN 251, 252 **Internship** (2/2, F/S)
A field experience in a church or a church-related organization during the student's second year or during Mayterm.

Communication (major and minor)

Department of English and Communication: Linda M. Woolsey, chair

Faculty: Bruce Brenneman, Douglas Gaerte, David Huth, Daniel C. Minchen

Web site: campus.houghton.edu/orgs/English/comm2.htm

Phone: 585.567.9451

Major: 33 hours

Whether one seeks a career in broadcasting, journalism, public relations, advertising, government service, law, business, teaching, or the ministry, the ability to communicate is essential. The communication major is an interdisciplinary program in the composition and rhetoric of oral and written discourse, examined theoretically and in various practical contexts.

Required courses:18

COMM 205 Introduction to Communication Theory

COMM 210 Public Speaking

(also satisfies the integrative studies communication requirement)

WRIT 212 Advanced Composition: Formal Essay

COMM 316 Rhetorical Strategy

COMM 315 Interpersonal Communication

COMM 417 Seminar in Public Communication

Additional electives from:15

COMM 214 Introduction to Mass Media

COMM 216 Organizational Communication

COMM 217 Debate

COMM 219 Oral Interpretation

COMM 225 Intercultural Communication

COMM 244 Readers Theatre

COMM 245 Theater Arts

COMM 251, 351 Television Programming and Production I, II

COMM 252 Radio Programming and Performance

COMM 312 Advertising Principles

COMM 313 Public Relations Principles

COMM 314 Copywriting

COMM 320 Special Topics in Communication

COMM 330 Conflict Management

COMM 350 Broadcast Journalism

COMM 291, 391 or 491 Independent Study in Communication

WRIT 303 Periodical Writing

WRIT 306 Creative Nonfiction: Writing about Nature, Landscape, etc.

WRIT 307 Creative Nonfiction: Writing about Spiritual Experience

WRIT 308 Creative Nonfiction: Writing about Cultural Issues

(Note: Students who anticipate participating in an off-campus cross-cultural experience must coordinate the trip with respect to major requirements. For example, students planning to participate in Houghton-in-London during the fall of their senior year must take COMM 315 Seminar in Interpersonal Communication in the fall of their junior year.

Minor: 15 hours

These hours include Introduction to Communication Theory (COMM 205) and Public Speaking (COMM 210). Nine additional hours are selected from any of the communication courses listed above under the major or WRIT 212, 303, 306, 307, or 308.

Communication Minor: Theater Emphasis (15 hours)

This is designed for students interested in the performing arts. This cross-disciplinary minor is intended to provide the student with experience in a variety of dramatic formats. The minor may only be taken by contract with the English and Communication Department chair. Required courses are Public Speaking (COMM 210), Oral Interpretation (COMM 219), Theater Arts (COMM 245), and Readers Theater (COMM 244). One additional option (selected by contract agreement) might be Creative Dramatics (EDUC 310), Opera Workshop (MUS 353), Modern Drama (ENGL 315), or Shakespeare (ENGL 413). Strongly recommended in addition to the above 15 hours is an individualized project (such as assistant director of a college production) listed under Theater Workshop (COMM 246) or Independent Study (COMM 291). *Note: Only eight hours of Theater Workshop may count toward graduation.*

Course Descriptions

COMM 101 Fundamentals of Speech (2, F&S)
Studies in the basic concepts of effective communication. Emphases on oral presentation skills, organization of information, use of evidence, and audience analysis. Deliver demonstrative, informational, and persuasive speeches. Liberal Arts Foundation - Communication.

COMM 205 Introduction to Communication Theory (3, S)
This course provides a foundation for subsequent communication courses by introducing the major theories that help to explain human communication behavior. The course encourages students to see theorizing as both a formal, systematic approach to learning and as an informal activity in which we all engage. Through practical application, the course emphasizes the understanding, evaluation, and use of communication theories in daily life.

COMM 210 Public Speaking (3, F&S)
The preparation and delivery of various kinds of public speeches such as the informative speech, the special event speech, the demonstration speech, the ceremonial address, the problem-solving presentation and the argumentative speech. Emphases on content, structure, and delivery. Liberal Arts Foundation - Communication.

WRIT 212 Advanced Composition: Rhetorical Patterns (3, F&S)
(See course description under writing major.)

COMM 214 Introduction to Mass Media (3, F)
Overview of the mass communication process and its application to mass media. Considers history, technological development, social implications, business functions, and legal aspects of mass media.

COMM 216 Organizational Communication (3, F&S)
Development of communication skills applicable within organizations: understanding communication channels, interviewing strategies, task-oriented groups, business and sales presentations, conducting effective meetings, conflict management. Liberal Arts Foundation - Communication.

COMM 217 Debate (3, S)
A performance course in competitive debating. Emphasis on evidence and reasoning, affirmative and negative case construction, refutation and rebuttal, cross-examination and extemporaneous delivery. Lincoln-Douglas formats. Recommended for communication, religion, sociology, political science and business administrative majors.

COMM 219 Oral Interpretation (3, 07/08)
Workshop in oral interpretation of literature. Emphasis on the selection and analysis of a literary work in preparation for presentation. Development of vocal skills for reading texts in a variety of literary genres.

COMM 225 Intercultural Communication (3, F)
Explores theory and practice of communicating interculturally. Recommended for those with an interest in international vocations, or working with ethnic or cultural groups within the United States.

COMM 244 Readers Theater (3, S)
An introduction to the dramatic format called Readers Theater. Emphasis on the analysis of literature and its adaptation into a form that can be presented by a group of readers. Literature formats include prose, poetry, scripture, and children's lit. Development of performance skills.

COMM 245 Theatre Arts (3, S)
Beginning acting; basic mime; introduction to stage techniques. Opportunity for practical experience in class production. Brief survey of Western theatre.

COMM 246 Theatre Workshop (1 or 2, F&S)
Practical work on major productions. Credit given according to degree of responsibility and amount of time spent on specific tasks. For advanced students. Instructor's permission required. Note: repeatable up to eight hours.

COMM 251 Television Programming and Production I (3, OD)
A workshop designed to develop an understanding of basic television production and the programming of entertainment, news, and advertising.

COMM 252 Radio Programming and Performance (3, OD)
Principles and practice of programming and performance within various formats. Considers social and business/ratings implications of programming. Requires weekly on-air shift on college radio station.

COMM 312 Advertising Principles (3, S)
Overview of the advertising field and how it functions in society. Studies research, strategies, methods, creativity, and media planning. Typically includes case study.

COMM 313 Public Relations Principles (3, F)
Brief overview of the public relations field and how it functions in society. Considers public relations to be a communication management function. Proceeds to study research, strategies, methods, and relationships with various publics.

COMM 314 Copywriting (3, tbd07/08)
Principles of copywriting including various strategies used for creating commercial copy. Includes writing radio and television commercials and public service announcements, newspaper and magazine headlines and body copy, institutional advertisements, press releases, direct mail, and others. Typically includes a service learning component - writing copy for area organizations and businesses.

COMM 315 Interpersonal Communication (3, F)
Principles, application of interpersonal skills in the context of friendships and families. Includes personal and relational awareness, person perception, verbal and nonverbal communication, relational development, and gender communication.

COMM 316 Rhetorical Strategy (3, S07)
The preparation and delivery of various kinds of problem-solving presentations including problem analysis, policy justification, policy rejection, and hostile audience. Emphasis on content, structure, and delivery. Prerequisite: COMM 210 plus junior or senior status.

COMM 320 Special Topics in Communication (2 or 3, F&S)
Opportunity for study of issues and problems not covered elsewhere in the curriculum.

COMM 330 Conflict Management (3, S)
An introduction to conflict management that balances coverage of major theories with practice in communication skills and conflict intervention techniques (e.g., assertiveness training, mediation, negotiation). Focus on experiential learning, with heavy emphasis on written analysis that includes analytical journaling and analysis of scientific journal articles.

COMM 350 Broadcast Journalism (3, OD)
Advanced course in radio and television journalism: writing, announcing, production techniques in intensive workshop experience. Students are strongly encouraged to take COMM 251 prior to this course.

COMM 351 Television Programming and Production II (3, OD)
See course description above for COMM 251. Instructor's permission required.

COMM 353 Communication Internship (1-3, F, S, Summer)
Experience in an applied communication field. Program tailored to individual student's needs and interests.

COMM 417 Seminar in Public Communication (3, S)
Analysis of specific public communication situations, such as social reform movements, political discourse, campaign rhetoric, war rhetoric, the documentary, and the role of media in shaping discourse in contemporary society. Prerequisite: COMM 205.

COMM 291, -2, 391, -2, 491, -2 Independent Study (1, 2, or 3, F&S)

COMM 496 Honors in Communication (3, S)

WRIT 303 Periodical Writing (3, S07)
(See course description under writing major.)

WRIT 306 Creative Nonfiction: Writing about Nature, Landscape, and the Environment (3, F07)
(See course description under writing major.)

WRIT 307 Creative Nonfiction: Writing about Spiritual Experience (3, F)
(See course description under writing major.)

WRIT 308 Creative Nonfiction: Writing about Cultural Issues (3, S)
(See course description under writing major.)

Computational Physics (major)

Department of Physics and Earth Science: Mark Yuly, chair

Faculty: Mark Yuly, Donell Brandon Hoffman

Web site: campus.houghton.edu/orgs/physics/

Phone: 585.567.9280

Computational Physics Major: BS (30 hours in major; 16 in prerequisites; 11 in co-requisites)

General Information: Traditionally, the study of physics has been divided into two areas: *experimental physics*, which deals with the design of experiments and measurement, and *theoretical physics*, which deals with theoretical models and predictions. More recently a third area has gained importance, namely, *computational physics*, which involves the use of computers in modeling and analyzing complex systems. This major is available to those students interested in studying physics with an emphasis on the use of computers. It provides students with highly sought-after computer and problem solving skills in a growing area of interdisciplinary study.

The requirements for the computational physics major are as follows:

Prerequisites (16):

PHYS 151, 152 General Physics I, II	8
MATH 181, 182 Calculus I, II	8

Required (30) which must include:

PHYS 251 Mechanics I	3
PHYS 212 Modern Physics	3
PHYS 353 Electricity and Magnetism I	3
PHYS 355 Thermal Physics	3
PHYS 471,472 Physics Project Lab	2
PHYS 482 Senior Capstone: Physics Seminar	1
CSCI 211 Programming I	3
CSCI 218 Programming II	3
CSCI 236 Data Structures and Algorithms	3
MATH 331 Numerical Analysis	3

One advanced theory course selected from:

PHYS 352 Mechanics II	3
PHYS 354 Electricity and Magnetism II	3
PHYS 356 Quantum Mechanics	3

Co-requisites (11):

MATH 241 Differential Equations	3
MATH 321 Multivariate Calculus	4
MATH 261 Linear Algebra	4

Additional recommended supporting courses include:

PHYS 258 Analog Electronics	4
PHYS 259 Digital Electronics	4
CSCI 226 Computer Architecture	3
CSCI 245 Software Engineering	3

Computer Science (major and minor)

Department of Mathematics and Computer Science:

Richard Jacobson, chair

Faculty: Wei Hu, David Perkins

Web site: campus.houghton.edu/orgs/compsci/CSindex.html

Phone: 585.567.9280

Major: 34 hours (22 in core, 12 in a track; 8-11 in co-requisites)

Computer Science Major Core: 22 hours

Major core courses:

CSCI 211 Programming I	3
CSCI 218 Programming II	3
CSCI 236 Data Structures and Algorithms	3
CSCI 340 Data Bases	3
CSCI 420 Networking	3
CSCI 480 Senior Capstone: Senior Seminar	2
Two elective CSCI courses	5

Total hours: 22

Computer Science Track: 12 hours

Required courses:

CSCI 214 Discrete Math	3
CSCI 226 Computer Architecture	3
CSCI 245 Software Engineering	3
CSCI 326 Operating Systems	3

Total hours: 12

Co-requisites are Calculus II and either Linear Algebra or Numerical Analysis. Calc I is a prerequisite

Information Technology Track: 12 hours

Required courses:

CSCI 331 Web Programming	3
CSCI 336 Programming III	3
CSCI 344 Enterprise Application Integration	3
CSCI 428 IT Architecture	3

Total hours: 12

The co-requisite is Calculus II.

Calc I is a prerequisite.

Minor in Computer Science: 15 hours

Required courses:

CSCI 211 Programming I	3
CSCI 218 Programming II	3
CSCI 226 Computer Architecture	3
CSCI 236 Data Structures and Algorithms	3

One elective CSCI course

Total hours: 15

Minor in Information Technology: 15 hours

Required courses:

CSCI 211 Programming I	3
CSCI 218 Programming II	3
CSCI 331 Web Programming	3
CSCI 340 Databases	3

One elective CSCI course

Total hours: 15

This computer science major emphasizes the theoretical foundations and application techniques for solving problems in today's technological environment. It is a necessary preparation for those that plan to create the technology of tomorrow whether in the pursuit of graduate study or in information management leadership positions in business, industry, or government. This major provides the flexibility to be tailored to the student's particular career interests. The Senior Project provides an opportunity to gain valuable pre-graduation experience while working with current computer theories and applications. It is this flexibility and the broad exposure to computer concepts, together with a liberal arts education, that has been appreciated by and will continue to appeal to employers of computer professionals.

Course Descriptions

CSCI 115 Perspectives on Computing

(3, OD)

An overview of how computers process, transmit, and store information. Designed for the non-major and includes many applications and issues found in contemporary culture. For example, privacy issues related to databases maintained by insurance companies or protection of intellectual property in light of increasingly popular file sharing applications. There are no prerequisites. This does not count toward a major or minor in computer science.

CSCI 211 Programming I (3, F)
This course covers the fundamentals of object-oriented programming utilizing the Java programming language. This first programming course provides students with basic Java programming concepts, data types, operators, flow control statements, objects, classes, methods, arrays, strings, applications, applets, and graphics user interfaces.

CSCI 218 Programming II (3, S)
This course extends the concepts learned in Programming I. It covers some advanced features of Java including advanced graphical user interfaces, exceptions, threads, graphics, multimedia, input/output, and networking. Prerequisite: CSCI 211.

CSCI 214 Discrete Mathematics (3, S08, S10)
Topics include: sets, functions, relations (incl. Partial order), methods of propositional logic, introduction to predicate logic, counting, recurrence relations, asymptotic analysis, proof (incl. Induction), introduction to probability, and graphs.

CSCI 226 Computer Architecture (3, S08, S10)
Structure and internal organization of digital computers. Machine language and assembly language, representation of numbers, CPU organization, subroutines and linkage. Prerequisite: CSCI 211 or equivalent proficiency.

CSCI 236 Data Structures and Algorithms (3, F)
This course covers the fundamental data structures of computer science and accompanying algorithms. Linked Lists, Stacks, Queues, Binary Trees, Priority Queues, Heaps and other ADTs will be included. Classical sorting and searching algorithms will be learned and implemented. Prerequisite: CSCI 218.

CSCI 245 Software Engineering (3, S07, S09)
This course covers both a theoretical and a practical foundation in software engineering. In the theoretical part, it covers principles and methods of software engineering, including requirements, specification, design, implementation, testing, validation, operation, and maintenance. In the practical part, it covers the development of software products from an industry perspective, including generation of appropriate documents. Prerequisite CSCI 218.

CSCI 326 Operating Systems (3, F06, F08)
A study of computer architecture at the register level. Management of the processor, memory, peripheral devices, and information. Interrelationships of architecture and operating systems. Performance evaluation. Exposure to system manager responsibilities in UNIX and Windows. Prerequisite: CSCI 226 and CSCI 236 or permission.

CSCI 328 Foundations of Computing (3, F07, F09)
This course covers the introduction to the classical and contemporary theory of computation including regular, context-free, and computable (recursive) languages with finite state machines, pushdown automata, and Turing machines. It also covers the historical reasons and the need that gave rise to many different programming languages and discusses the features of the most successful and more influential of them. The similarities and the differences among procedural, functional, object-oriented, logic as well as parallel programming languages will also be covered.

CSCI 331 Web Programming (3, F06, F08)
This course covers the new programming models that are used to support Web applications. It covers software design, interface design, the development side of Web applications. It helps the students learn how to build software that accepts information from users across the Web and returns data to the user, and understand how to interact with database engines to store and retrieve information. Specific topics that are included are HTML, XML, JSP (Java Server Page) and Java servlets. Prerequisite: CSCI 218.

CSCI 336 Programming III (3, S07, S09)
This course covers J2EE (Java Enterprise Edition). The topics will include how to develop n-tier applications, design various application architectures based on the J2EE platform, and enterprise technologies - JDBC, RMI, JNDI, EJB, JMS, and JINI. Prerequisite: CSCI 236.

CSCI 340 Databases (3, S08, S10)
Introduction to relational databases. Fundamentals of database design and query design. Database management topics include security, integrity, and concurrency techniques. Use of relational database software (including SQL) for application projects. Topics include decision-based and object-based databases. Exposure to database manager responsibilities. Prerequisite: CSCI 218 or permission.

CSCI 344 Enterprise Application Integration (3, F07, F09)
EAI overview, types of legacy systems, EAI and e-business, data-level EAI, application interface-level EAI,

method-level EAI, user interface-level EAI, middleware models, RPCs, messaging (Microsoft MSMQ and IBM MQ Series), distributed objects, Java middleware, WML basics. Prerequisite: CSCI 336 and CSCI 331.

CSCI 420 Networking (3, S07, S09)
An introduction to the basics of data communication and networking. Topics include the OSI model, physical processes used for digital transmission, standardization, local area networks, the network protocols, and network applications. Exposure to network manager responsibilities in UNIX and Windows NT. Prerequisite: CSCI 326 or permission.

CSCI 428 IT Architectures (3, S08, S10)
The course focuses on the principles and priorities of enterprise systems design, emphasizing the new requirements brought by e-commerce and distributed integrated systems. It also discusses middleware technology alternatives, resiliency, performance and scalability, security, systems management, information access and accuracy. Prerequisites: CSCI 336 and CSCI 331.

CSCI 480 Senior Capstone: Computer Science Seminar (2, S)
For seniors, except by permission. Required of all computer science majors.

CSCI 490 Senior Project (3, OD)
The senior project allows seniors to participate in a scholarly endeavor with faculty and other students or in a formally controlled internship. This project will include at least the following three components: (1) A review of one or more scholarly papers from primary literature of computer science; (2) The writing of a significant scientific paper or substantial document to give the student experience in writing for a scientific audience; (3) An oral presentation to students and/or faculty.

CSCI 391, -2; 491, -2 Independent Study (1, 2 or 3)

CSCI 496 Honors in Computer Science (3)

CSCI 295, -6; 395, -6; 495 Special Topics in Computer Science (1, 2 or 3, OD)
Previous topics include: wireless Java; Java message service; wavelets: neural networks; C#; and NET.

Earth Science (*concentration in General Science*)
Department of Physics and Earth Science: Mark Yuly, chair
Faculty: Donell Brandon Hoffman, Mark Yuly
Web site: campus.houghton.edu/orgs/physics/
Phone: 585.567.9280

General Information

Courses support current environmental and space interests, and lead to the concentration required for a general science major. General science majors are required to take Physical Geology (ESCI 101) and another four-hour Earth Science course; an Earth Science concentration in General Science is fulfilled by adding eight more hours, including independent study.

Listed courses may be supplemented by appropriate AuSable courses (listed under Off-Campus Programs).

Course Descriptions

ESCI 101 Physical Geology (4, S)
Study of materials, structure, and dynamics of the Earth's crust. Identification of rocks and minerals; topographic map studies. Three lecture, three laboratory hours each week. Liberal Arts Foundation - Lab Science.

ESCI 102 General Astronomy (4, F)
Space orientation and a descriptive understanding of the solar system, our galaxy, and the universe. Current theories of cosmic origins. Three lecture, three laboratory hours each week. Liberal Arts Foundation - Lab Science.

ESCI 202 Ecological Sustainability in Community Development (GO Ed) (3)
(See Off-Campus Programs - GO Ed for description.)

ESCI 212 Environmental Earth Science (3, F)
Relationship between humans and Earth systems in the atmosphere, hydrosphere, lithosphere. Environmental problem solving. Introduction to remote sensing and GIS. Liberal Arts Foundation - Lab Science.

- ESCI 213 **Geographic Information Systems (GIS) Laboratory** (1, F)
Optional laboratory to accompany Environmental Earth Science. The laboratory will focus on applications of GIS and GPS to environmental and earth science problems. Liberal Arts Foundation - Lab Science.
- ESCI 224 **Atmospheric Science** (4, OD)
Comparative study of planetary atmospheres. Phenomena of Earth's atmosphere and aerospace, weather, meteorology, and climatology. Three lecture, three laboratory hours each week. Liberal Arts Foundation - Lab Science.
- ESCI 230 **Hydrology** (3, OD)
A study of the properties and circulation of water on the surface of the land, underground and in the atmosphere. Topics to be covered include fluid mechanics, groundwater, wastewater, and environmental concerns. An engineering perspective will be used.
- ESCI 291, 292, 391, 392, 491, 492 **Independent Study** (1, 2, or 3)
- ESCI 295, 395, 495 **Special Topics in Earth Science** (1, 2, 3 or 4)
- ESCI 480 **Senior Capstone: General Science Seminar** (1, S)
Written thesis and oral presentation on a topic selected for interdisciplinary breadth describing current scientific research in the area of the student's concentration, based on a thorough review of scientific literature.

Economics (minor)

Department of Business and Economics: Kenneth J. Bates, chair

Faculty: Robert A. Black

Web site: www.businessathoughton.com

E-mail: business@houghton.edu

Phone: 585.567.9440

Mission: The economics program at Houghton develops a student's ability to think clearly about economic cause and effect and to apply economic theories, models, concepts, and analytical methods to real-world problems with a view toward equipping them to serve in fields such as management, finance, international relations, government, law, education, and history. Economics courses at Houghton intentionally consider a Christian world view and its interaction with economic concepts, methods, and policies.

Minor: 15 hours

Economic theory provides essential background for careers in business, law, politics, teaching, and all areas of private and public administration.

Minor required courses:

Principles of Micro and Macroeconomics (ECON 210, 211) 3, 3

Additional hours from list below numbered 200 or above..... 9

Course Descriptions

- ECON 210 **Principles of Microeconomics** (3, F)
Economic method, demand and supply, consumer and producer theory, models of product market structure, and selected topics on faith integration, economics & ethics, economic systems & perspectives, public economics. Liberal Arts Foundation - Social Science.
- ECON 211 **Principles of Macroeconomics** (3, S)
Circular flow of income and expenditure in a market economy with government, financial, and foreign sectors. Economic method, demand and supply, national income accounting, inflation, unemployment, business cycles, theories of aggregate price and output determination, fiscal and monetary policy, and the government budget. Liberal Arts Foundation - Social Science.
- ECON 212 **International Economics** (3, F06, 08)
International trade, international finance, and government policies regarding trade and finance. Why nations trade, protectionist policies, multinationals, financing trade, exchange-rate determination, and international trade and finance in developing nations. Prerequisite: ECON 210 or 211.
- ECON 213 **American Economic History** (3, OD)
Economic and business development of the United States, colonial period to the present. May be counted toward economics minor or history major/minor. Liberal Arts Foundation - Social Science.

- ECON 237 **Comparative Economic Systems** (3, F07)
Examination of alternative economic systems; comparison of U.S. economic system with other economies along capitalist-socialist spectrum. Prerequisite: ECON 210, 211, or permission.
- ECON 240 **Development Economics** (3)
(See Off-Campus Programs — GO Ed for description.)
- ECON 301 **Money and Banking** (3, S)
Role of money and financial institutions in a market economy, development of the U.S. monetary system, Federal Reserve System, money creation process, financial regulation and deregulation, financial innovation, and monetary theory and policy. Prerequisite: ECON 210 and 211.
- ECON 302 **History of Economic Thought** ((3, OD)
Development of modern economic thought in Europe and United States. Limited to juniors and seniors. Prerequisites: ECON 210 and 211.
- ECON 303 **Industrial Organization** (3, OD)
Examination of firm behavior in theory and practice; case studies of major industries; government policies toward business (e.g.: antitrust actions and regulation of business environment). Prerequisite: ECON 210 and 211.
- ECON 315 **Managerial Economics** (3, S)
Theories of the firm with applications to management and business ethics; the firm in competition and in the macro and international environments; economics of the firm's organization; decision-making under risk with applications to insurance and investment basics of efficient production management, benefits of competition and costs of monopoly, and information and price determination. Prerequisite: ECON 210.
- ECON 191,- 2; 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2 or 3)
- ECON 295, 395, 495 **Special Topics** (1-4, OD)
Group study of selected topics.

Education (majors and minor)

Department of Education: Mark LaCelle-Peterson, chair

Faculty: Darlene Bressler, Constance Finney, Cathy Freytag, Mark LaCelle-Peterson, Susan Martin, Charles Massey, Daniel Woolsey **Part-Time:** Sunshine Sullivan

Web site: campus.houghton.edu/orgs/education/

Phone: 585.567.9670

Majors: Adolescence Education (leading to certification to teach grades seven to 12 in a specific content area) 38 hours in the major; six hours in pre/co-requisites.

Inclusive Childhood Education (leading to certification to teach grades one to six, for general education and the education of students with disabilities) 56 hours in the major; nine hours in pre/co-requisites.

General Information

In the spring semester of 2006, a total of 166 students were enrolled in Education Department majors: 59 in Adolescence Education, 78 in Inclusive Childhood Education (ICE), and 29 in Childhood Education (the program which has been replaced by the ICE major).

Admission to the Houghton College Teacher Education program is by application, and continuation in the program requires meeting the standards outlined below.

For admission to the **teacher education program**, a student must:

1. Complete an application (available from the department office),
2. Successfully complete the writing sample assessment,
3. Present a cumulative grade point average of at least 2.5, and
4. Receive formal approval from Teacher Education Committee.

For entry into **upper level education courses** (courses numbered 300 and higher), a student must:

1. Have been admitted to the teacher education program,
2. Have successfully completed EDUC 219 Educational Psychology or EDUC 240 Teaching in

- Urban America; students in the ICE program must also have completed EDUC 114 Math for Elementary Teachers, and
3. Present a cumulative grade point average of at least 2.6.

To be approved for **student teaching**, a student must:

1. Complete and submit the Application for Professional Field Semester **by the end of the second week of the semester prior to the requested professional semester**,
2. Have successfully completed the junior level course sequence appropriate to the major,
3. Have presented an acceptable junior teacher education program portfolio,
4. Present a cumulative grade point average of at least 2.7,
5. Complete all state-mandated training sessions required for certification, and
6. Receive formal approval from the Teacher Education Committee.

Adolescence education majors seeking approval for **student teaching outside the United States** must present a cumulative grade point average of at least 2.8 and submit for the Teacher Education Committee's consideration an essay explaining qualification for and anticipated benefits of such a placement along with a letter of support from an academic advisor. (Overseas student teaching placements are currently not available in the Inclusive Childhood Education major.)

Student Teaching Policy: Recognizing the importance of academic responsibility during teacher training and the challenges inherent in the teaching profession, the Teacher Education Committee has established a 2.7 cumulative grade point average as the necessary requirement for approval to student teach. However, there are occasions when a student, whose cumulative GPA is below the 2.7, shows reasonable potential for success in student teaching. When such students are identified by their education department advisor and/or the student teacher coordinator, the student may prepare a letter of appeal and the case will be considered by the Teacher Education Committee.

Any student dismissed from the college for disciplinary reasons during the junior year or student teaching semester and subsequently readmitted must reapply to the Teacher Education Committee for acceptance for student teaching.

During the student teaching semester, students are not allowed to receive remuneration from the school for teaching services.

New York State Teacher Certification

Students completing adolescence education, inclusive childhood education, music education, or physical education majors may apply for an Initial Teaching Certificate from New York state. In addition to completing the requirements for the major, applicants for New York state teacher certification must complete the required New York State Teacher Certification Examinations (NYSTCEs) appropriate to the desired teaching certificate(s) including, at the time of this catalog's printing, the Liberal Arts and Sciences Test, the Assessment of Teaching Skills-Written, and the appropriate Content Specialty Test. Information on the NYSTCEs and New York state teacher certification is available from the education department office or from the New York State Education Department (www.nysed.gov). Information regarding the music education and physical education majors is available in the respective sections of this catalog.

Those intending to teach in states other than New York are advised to familiarize themselves with the requirements of the state(s) in which they desire to be certified and to select courses accordingly. New York state has reciprocity agreements with 38 states, the District of Columbia, and Overseas Dependent Schools; further information about reciprocity agreements may be obtained through the education department.

Adolescence Education

This major prepares students to teach at the secondary level (grades seven through 12) in one of the following subjects: biology, chemistry, English, French, mathematics, social studies, Spanish, or physics. The major includes a minimum of 100 clock hours of field experience which must be completed prior to student teaching; that field experience is linked to education courses, including the following: EDUC 240, EDUC 338.

Students majoring in adolescence education must complete one of the following as an additional major: augmented history (for social studies), biology, chemistry, English, French, mathematics, Spanish, or physics. New York state teacher certification requires at least 30 credit hours in the content to be taught, so in some cases, an additional elective course in the major is required.

Pre/Co-requisites

PSY 111 Introduction to Psychology	3
PSY 215 Adolescent Psychology	3

Adolescence Education Major Requirements

EDUC 202 Topics in Professionalism.....	0
EDUC 219 Educational Psychology	3
EDUC 218 History and Philosophy of Secondary Education.....	3
EDUC 223 Adolescent Literature OR	
EDUC 351 Linguistics for TESOL.....	3
EDUC 235 Educating Exceptional Learners	3
EDUC 240 Teaching in Urban America	3
EDUC 313 Language and Literacy in the Content Areas	3
EDUC 338 Curriculum and Assessment in Secondary Classrooms.....	3
EDUC 33x Secondary Teaching: Content-Area Methods	3
332 English Methods	
333 Foreign Language Methods	
334 Math Methods	
335 Science Methods	
336 Social Studies Methods	
EDUC 409 Secondary Student Teaching I.....	6
EDUC 409 Secondary Student Teaching II.....	5
EDUC 411 Senior Capstone: Seminar in Secondary Teaching	3

Inclusive Childhood Education

This major prepares students to teach at the elementary level (grades one through six) in general and special education settings. The major includes a minimum of 150 clock hours of field experience in general and/or inclusive classroom settings which must be completed prior to student teaching; that field experience is linked to education courses, including the following: EDUC 114, EDUC 219, EDUC 221, EDUC 240, and EDUC 314.

In addition to completing the major requirements in education, students must complete one of the eight 30-hour concentrations detailed below. (The eight concentration areas are: English Language Arts; French Language, Culture, and Linguistics; Intercultural Studies; Mathematics; Mathematics and Science; Science; Social Studies; and Spanish Language, Culture, and Linguistics.)

Pre/Co-requisites

PSY 111 Introduction to Psychology	3
PSY 214 Child Psychology.....	3
American Studies: one of the following:.....	3
HIST 220 American History Survey	
POLS 222 American Political System	
POLS 295 ST: Governing the Adirondacks	

Inclusive Childhood Education Major Requirements

EDUC 114 Math for Elementary Teachers.....	3
EDUC 202 Topics in Professionalism.....	0
EDUC 219 Educational Psychology	3
EDUC 217 History and Philosophy of American Education	3
EDUC 221 Children's Literature	3
EDUC 235 Educating Exceptional Learners	3
EDUC 236 Language, Culture, and Human Development.....	3
EDUC 240 Teaching in Urban America	3
EDUC 314 Inclusive Childhood Practicum I.....	1
EDUC 313 Inclusive Childhood Practicum II.....	1
EDUC 320 Curriculum and Assessment in Inclusive Classrooms	4
EDUC 328 Foundations of Language and Literacy	4
EDUC 329 Language and Literacy for Diverse Learners.....	4
EDUC 341 Soc. Studies and Lang. Arts in Inclusive Classrooms	3
EDUC 342 Math and Science in Inclusive Classrooms	3
EDUC 408 Inclusive Childhood Student Teaching	10
EDUC 420 Issues in Inclusive Education	3
EDUC 485 Senior Capstone: Seminar on Reflective Teaching	2

Concentrations

1. English Language Arts (30 hours)

Literature: 15 hours	
ENGL 201 Literature of the Western World	3

ENGL 221 Children's Literature	3
ENGL electives-Any 3 courses in ENGL numbered 203 or above.....	9
<i>Writing/Communication: 15 hours</i>	
ENGL 101 Principles of Writing.....	3
COMM 205 Introduction to Communication Theory.....	3
COMM 210 Public Speaking.....	3
Two of the following, including 1 WRIT and 1 COMM	6
COMM 219 Oral Interpretation.....	3
COMM 244 Readers Theater	3
COMM 245 Theater Arts.....	3
COMM 315 Interpersonal Comm	3
WRIT 211, 212, or 213 Advanced Composition	3
WRIT 306 Creative Non-Fiction.....	3

2. French Language, Culture, and Linguistics (30 hours)

Language: 18 hours

FREN 101/102 Beginning French	6
FREN 103 Intermediate French	3
FREN 301/302 French Conv. & Reading I & II	6

One of the following.....

FREN 305 French Phonetics	
FREN 350 Advanced French Grammar	

(Students may take a language placement exam that will place them in an advanced level. If this occurs, students will work with individual advisors on how to meet the 18-hour language requirement.)

Culture and Literature: at least 6 hours to include a combination of:

French Civilization and Culture Course (300 or above)	3
French Literature Course (300 or above).....	3
May Term in a French speaking environment.....	3

Linguistics: one of the following course groupings (6 hours):

LING 220 Introduction to Linguistics.....	3
LING 351 TESOL.....	3
or	
LING 312 Sociolinguistics	3
COMM 325 Cross-cultural Communication.....	3

Additional courses to total 30 hours. Students may also complete the French major.

3. Intercultural Studies (at least 30 hours)

Cultural Studies: 16 hours

HIST 101,102 Western Culture.....	4
INCL 201 Intro Intercultural Studies	3
SOC 243 Cultural Anthropology	3

One of the following:.....

INCL 236 Language, Culture, and Human Development	
SOC 330 Culture & Family	
SOC 361 Majority-Minority Relations	

One of the following:.....

LING 220 Intro Linguistics.....	3
LING 312 Sociolinguistics	3
LING 350 First and Second Language Acquisition.....	3
LING 352 Linguistics for TESOL.....	3
MISS 222 The Contemporary Church in Missions.....	3
URMN 212 Urban Ministry	3
MISS 395 ST: Missions in Africa	3
MIN/MISS/URMN/SOC 325 Life in the City.....	3

Global & Community Awareness: 15 hours

COMM 325 Cross-cultural Communication	3
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Two of the following, no more than one from each department (6)

POLS 220 World Regional Geography	3
HIST 223 Latin American History to 1800	3
HIST 224 Latin American History since 1800	3

HIST 249 African History	3
HIST 251 History of East Africa.....	3
HIST 306 Australian History.....	3
MHS 254 Music of World Cultures	3
MISS 321 World Religions	3
ENGL 308 Australian Literature.....	3
ENGL 361 Contemporary World Literature	3
SOC 293 Eastern African Culture	3
SPAN 211 Ecotour in Honduras	3
ENGL 390 ST: African Folklore	3
Two from the following:.....	6
INCL 310 Intercultural Competencies	3
INCL 311 Intercultural Experience.....	3
INCL/MISS 231 Global Relief & Development	3
INCL/POLS 320 Community Org & Dev	3
INCL/POLS 336 Gov & Pol in Dev Countries	3
URMN 250 Evang & Social Action in Urban Context	3
SOC 295 Special Topics: Urban Policy	3
INCL 295 Special Topics	3
MISS 295/395 Special Topics.....	3

4. Mathematics (30 hours)

Mathematics: 17 hours

MATH 181,182 Calculus I & II.....	8
EDUC 114 Math for Elementary Teachers	3
MATH 2xx (any two courses at 200 level)	6

Mathematics & Computer Science: 13 hours

Choose from among the following courses:.....

CSCI 211 Programming I.....	3
CSCI 218 Programming II.....	3
MATH 115 College Mathematics.....	3
MATH 190 Math Apps & Issues	2
MATH 231 Probability	3
MATH 232 Math Stats	3
MATH 241 Differential Equations	3
MATH 261 Linear Algebra	4
MATH 281 History of Mathematics	3
MATH 321 Multivariate Calc	4
MATH 422 Real Analysis.....	3
MATH 452 Point Set Topology	3
MATH 462 Algebra I	3
MATH 471 Complex Analysis	3

5. Mathematics & Science (30 hours)

Mathematics: at least 12 hours, which must include EDUC 114

MATH 115 College Mathematics	3
or	
MATH 181 Calculus I	4

EDUC 114 Math for Elementary Teachers.....	3
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At least 6 hours from among the following:

MATH 181 Calc I (if not taken above).....	4
MATH 182 Calc II	4
MATH 190 Math Apps & Issues	2
MATH 281 History of Mathematics	3
CSCI 211 Programming I.....	3
CSCI 218 Programming II.....	3

Science: at least 14 hours

Choose two or more from among the following areas: BIOL, CHEM, and PHYS/ESCI

BIOL 103 Fund. of Biology	4
BIOL 105 Conservation Biology.....	4
BIOL 214 Wildlife Biology	3
BIOL 215 Local Flora	3

BIOL 217/218 Human Anatomy & Physiology	4
CHEM 121 Impact of Science on Society.....	3
CHEM 187 Intro Nutrition	3
CHEM 188 Intro Nutrition Lab.....	1
ESCI 101 Physical Geology.....	4
ESCI 102 General Astronomy.....	4
ESCI 212/213 Env. Earth Science.....	3

Note: While these science courses are recommended, students may take any science courses for which they have met prerequisites.

6. Science (30 hours)

At least two courses from each of the following areas: BIOL, CHEM, and PHYS/ESCI

BIOL 103 Fund. of Biology	4
BIOL 105 Conservation Biology.....	4
BIOL 214 Wildlife Biology	3
BIOL 215 Local Flora & Vegetation	3
BIOL 217/218 Human Anatomy & Physiology	4, 4
CHEM 121 Impact of Science on Society.....	3
CHEM 187 Introduction to Nutrition	3
CHEM 188 Intro Nutrition Lab.....	1
ESCI 101 Physical Geology	4
ESCI 102 General Astronomy.....	4
ESCI 212 Environmental Earth Science	3
ESCI 214 Environmental Earth Science Lab.....	1

Note: While these science courses are recommended, students may take any science courses for which they have met prerequisites.

7. Social Studies (31 hours)

History: 19 hours

HIST 101/102 Western Civilization I & II	4
HIST 220 American History Survey.....	3
HIST 226 New York State History	3
HIST Two electives, numbered above 220	6
HIST One elective, non-European, non-American	3

Political Science: 6 hours

POLS 101 Introduction to Politics	3
POLS 220 World Regional Geography	3
POLS 222 American Political System.....	3
POLS 230 Introduction to International Relations.....	3
POLS 240 Comparative Government	3
POLS 260 Introduction to Political Thought.....	3

Social Science: 6 hours

PSY 111 Introduction to Psychology	3
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And one of the following..... 3

ECON 210 Microeconomics	3
ECON 213 American Economic History	3
SOC 101 Principles of Sociology.....	3
SOC 243 Cultural Anthropology	3
SOC 330 Culture and Family	3

8. Spanish Language, Culture, and Linguistics (30 hours)

Language: 18 hours

SPAN 101/102 Beginning Spanish	6
SPAN 103 Intermediate Spanish	3
SPAN 301/302 Spanish Conversation & Reading I & II.....	6

One of the following..... 3

Span 305 Spanish Phonetics	
SPAN 350 Advanced Spanish Grammar	

(Students may take a language placement exam that will place them in an advanced level. If this occurs, students will work with individual advisors on how to meet the 18-hour language requirement.)

Culture and Literature: at least 6 hours to include a combination of:

Spanish Civilization and Culture Course (300 or above)	3
Spanish Literature Course (300 or above)	3
May Term in a Spanish speaking environment.....	3

Linguistics: one of the following course groupings (6 hours):

LING 220 Introduction to Linguistics.....	3
LING 351 TESOL.....	3
or	
LING 312 Sociolinguistics	3
COMM 325 Cross-cultural Communication.....	3

Additional courses to total 30 hours. Students may also complete the Spanish major.

Education minor: 15 hours

An education minor may be chosen by students who wish to broaden their understanding of the educational process yet are not seeking certification.

Required Courses:

EDUC 219 Educational Psychology	3
EDUC 217 History & Philosophy	3
or	
EDUC 218 History & Philosophy of Secondary Education	3

Choose three of the following in consultation with an Education Department faculty member:

EDUC 114 Math for Elementary Teachers	3
EDUC 221 Children's Literature	3
EDUC 223 Adolescent Literature	3
EDUC 236 Language, Culture, and Human Development.....	3
EDUC 240 Teaching in Urban America.....	3
EDUC 235 Educating Exceptional Learners.....	3
EDUC 313 Lang. & Lit. in the Content Area	3
EDUC 351 Linguistics for TESOL.....	3
EDUC 355 Theory & Practice of Bilingual Education.....	3

Course Descriptions

EDUC 102 College Study Methods (P/U) (1, F&S)

Improve study habits: reading textbooks, taking notes, improving memory, preparing for and taking exams, writing research papers, time management. For any student who wishes to work to full potential.

EDUC 114 Math for Elementary Teachers (3, F & S)

Builds a conceptual framework for understanding number, numeracy, number operations, probability, statistics, geometry, and measurement. Focus on problem-solving and the use of manipulative materials for developing conceptual understanding.

EDUC 202 Topics in Professionalism (0, F & S)

This pass or fail course is designed to enable all education majors to meet New York state regulations for training in special topics (Identification and Reporting of Suspected Child Abuse or Maltreatment; School Violence Prevention and Intervention; Prevention of Child Abduction; Prevention of Alcohol, Tobacco and other Drug Abuse; Safety Education; Instruction in Fire and Arson Prevention). In addition it will provide information about certification, state testing requirements, and student teaching. Required before practicum experiences.

EDUC 203 WKSP: Child Abuse +ID (0)

All HCTEP majors and applicants for certification must complete two clock hours of coursework or training in the identification and reporting of suspected child abuse and maltreatment, as required by Sections 3003(4) and 3004 of the Education Law. Upon completion of the workshop, each participant will receive a certificate of completion.

EDUC 204 WKSP: School Violence (0)

All HCTEP majors and applicants for certification must complete two clock hours of coursework or training in school violence prevention and intervention, as required by section 3004 of the Education Law. Upon completion of the workshop, each participant will receive a certificate of completion.

EDUC 217 History and Philosophy of Education (3, F & S)
A survey of the philosophical and historical antecedents of American education and their relationships to current educational debates. Students develop an initial statement of their personal philosophy of education.

EDUC 218 History and Philosophy of Secondary Education (3, F)
A survey of the philosophical and historical antecedents of American education and their relationships to current educational debates with a focus on secondary schools. Students develop an initial statement of their personal philosophy of education.

EDUC 219 Educational Psychology (3, F&S)
The individual in the teaching/learning process. Focus on learning models and theories, cognition, individual differences, motivation, and instructional psychology. Prerequisite: PSY 111

EDUC 221 Children's Literature (3, F&S)
Offers a survey of various genre in literature for pre-school and elementary grade children with an emphasis upon developing criteria for selection and evaluation utilizing reader response theory, literary criticism, child development and philosophical perspectives.

EDUC 223 Adolescent Literature (3, F)
Students will read and analyze a variety of literature of interest to adolescents with an eye toward understanding adolescents and their place in society, developing criteria for evaluating adolescent literature, and exploring current trends in this literature. In this process students will investigate critical theories about the function and purpose of literature for adolescents, including developmental, aesthetic, and cultural considerations.

EDUC 235 Educating Exceptional Learners (3, F & S)
Examines the historical and legal contexts for providing services for children with special educational needs. Explores the scope of exceptionalities and the processes used to identify and address special needs. Emphasis is placed on the role of the general educator in meeting the needs of exceptional learners in inclusive settings.

EDUC 236 Language, Culture, and Human Development (3, F & S)
This course focuses on the cultural foundations of education. Students consider the roles that culture and language (both native and second language) play in shaping the development of individuals, families, and communities. Comparisons between the linguistic practices of families and communities of varied social status and cultural background and those of schools and other institutional settings provides the framework for understanding differences in the educational experiences of individuals and groups.

EDUC 240 Teaching in Urban America (3, M)
Provides exposure to and an understanding of race, class and culture issues in contemporary urban schools. The student will develop an awareness of family and community as partners with schools in the education enterprise. Students will participate in a 10 day field experience in an urban school, working as teachers' assistants. Recommended sophomore year. **Prerequisite: EDUC 202.**

EDUC 313 Language and Literacy in the Content Area (3, S)
Analysis of theory and practice of effective use of reading, writing and thinking across the curriculum, as applied to specific secondary school content areas.

EDUC 314 Inclusive Childhood Practicum I (1, F)
Two half-days per week in either a primary (grades one-three) or intermediate (grades four-six) classroom. Focus on observing children and the learning environment, assisting the classroom teacher with daily routines, and supporting the learning of individual children. **Taken concurrently with EDUC 320 and EDUC 328. Prerequisites: EDUC 202, EDUC 217, and EDUC 219.**

EDUC 315 Inclusive Childhood Practicum II (1, S)
Continuation of EDUC 314. Two half-days per week in same classroom assigned for EDUC 314. Focus on increasing responsibility for planning and teaching of lessons under the guidance of the classroom teacher. **Taken concurrently with EDUC 329, EDUC 341, and EDUC 342. Prerequisites EDUC 314, EDUC 320 and EDUC 328.**

EDUC 320 Curriculum and Assessment in Inclusive Classrooms (4, F)
Provides an exploration of the development of elementary curriculum and assessment and the creation of learning environments that support diverse learners in inclusive settings. Includes an examination of lesson planning and unit planning. **Taken concurrently with EDUC 314.**

EDUC 328 Foundations of Language and Literacy (4, F)
Introduces the nature of children's language and literacy learning and the assessment and instruction of the English language arts in inclusive classrooms. Considers the means of developing a learning environment that nurtures the language learning of all children. Students articulate a philosophy of teaching the English language arts and begin to develop their program portfolio. **Prerequisites: EDUC 217, EDUC 219, and EDUC 221, or permission of instructor. Taken concurrently with EDUC 314 and EDUC 320.**

EDUC 329 Language and Literacy for Diverse Learners (4, S)
Examines authentic assessment and instruction of the English language arts in inclusive classrooms with particular focus on children with special needs, English language learners, and students from diverse cultures. Students focus on educational research and the continued development of their program portfolio. **Prerequisite: EDUC 328. Taken concurrently with EDUC 315, EDUC 341, and EDUC 342.**

EDUC 338 Curriculum & Assessment in Secondary Classrooms (3, F)
Examination and analysis of the strategies and dynamics of teaching and learning in middle and high school classrooms. Students will begin the ADE junior practicum. **Prerequisite: EDUC 218 and EDUC 219.**

EDUC 33X Secondary Teaching: Content Methods (3, S)
Adolescence Education majors register for the appropriate content area methods course. This course should be taken the year prior to student teaching. Each course will address instructional methods, New York State Learning Standards, and curricular issues particular to the given content. **Prerequisite: EDUC 338**

EDUC 332 **English Methods**
EDUC 333 **Foreign Language Methods**
EDUC 334 **Math Methods**
EDUC 335 **Science Methods**
EDUC 336 **Social Studies Methods**

EDUC 341 Social Studies and Language Arts in Inclusive Classrooms (3, S)
Exploration of methods and materials for addressing the needs of diverse students in pursuing various aspects of national and state curriculum standards in social studies and language arts. Our emphasis will be upon thinking, speaking, listening, reading, and writing about world, U.S., and New York history and geography, as well as citizenship and multicultural education. **Prerequisites: EDUC 217, EDUC 219, and EDUC 221, or permission of instructor.**

EDUC 342 Mathematics and Science in Inclusive Classrooms (3, S)
Exploration of methods and materials pertaining to teaching elementary mathematics and science in inclusive settings. National curriculum standards are examined as well as New York State Learning Standards in each subject. **Prerequisites: EDUC 217 and EDUC 219. Taken concurrently with EDUC 315, EDUC 329, EDUC 341 and EDUC 342.**

EDUC/LING 351 Linguistics for TESOL (Teaching English to Speakers of Other Languages) (3, F)
This course will examine some of the unique challenges of English structure (phonological, morphological, syntactical, semantics and pragmatics) and the transfer problems that non-native speakers may have. There will also be an introduction to first and second language acquisition theories. Recommended prerequisite: LING 220.

EDUC 355 Theory and Practice of Bilingual Education (3, OD)
Designed as an introduction to bilingual education and bilingualism. Study of the sociolinguistic and psycholinguistic issues that surround bilingualism and bilingual education. An attempt is made to balance the psychological and the sociological, the macro education issues and the micro classroom issues, the linguistic and the sociopolitical, and to balance discussion at the individual and societal levels. Recommended prerequisite: LING 220.

***EDUC 408 Inclusive Childhood Student Teaching** (10, F&S)
Twelve weeks in a supervised student teaching experience in one inclusive classroom, either primary (grades one-three) or intermediate (grades four-six) depending on the elementary practicum placement. **Designed for students who have completed all education course work except EDUC 420 and EDUC 485. Students must also register for EDUC 203, 204, 420 & 485. (See department policy on "Employment and Activities While Student Teaching.")**

***EDUC 409 Secondary Student Teaching I** (6, F&S)
Minimum seven-week placement in either grades seven-nine or grades 10-12 in the appropriate content area. The experience will include a minimum of two weeks with full teaching load responsibilities. **Prerequisite:** EDUC 33x (Secondary Teaching Methods), EDUC 338, and EDUC 313. Taken concurrently with EDUC 203, 204, 410 & 411. (See policy below on "Employment and Activities while Student Teaching.")

***EDUC 410 Secondary Student Teaching II** (6, F&S)
Minimum six-week placement in either grades seven-nine or grades 10-12 in the appropriate content area. The experience will include a minimum of two weeks with full teaching load responsibilities. **Prerequisite:** EDUC 33x (Secondary Teaching Methods), EDUC 338, and EDUC 313. Taken concurrently with EDUC 409 & EDUC 411. (See policy below on "Employment and Activities while Student Teaching.")

***EDUC 411 Senior Capstone: Seminar in Secondary Teaching** (3, F&S)
Serves as a capstone course to the major, exploring issues related to the teaching professions through reflective thinking and research-based learning. **Taken concurrently with EDUC 409 & 410.**

EDUC 420 Issues in Inclusive Education (3, F&S)
This course addresses current issues in inclusive education, including the ongoing assessment of children with special needs; assistive technology; collaboration among parents, teachers, administrators, and students; and legislative initiatives and revisions impacting the education of students with special needs. **Taken concurrently with EDUC 408 and EDUC 485.**

***EDUC 485 Senior Capstone: Seminar on Reflective Teaching** (2, F&S)
Provides an opportunity for inclusive childhood student teachers to summarize and reflect on their knowledge and understanding of the liberal arts and the nature of teaching and learning in inclusive classrooms and to apply their understanding of the intellectual tools of their major disciplines through the final revision and development of their program portfolio. **Taken concurrently with EDUC 408 and EDUC 420.**

***EDUC 230, 330, 430 Special Topics** (1, 2, or 3 OD)
Depending on interest, demand and faculty availability, courses will be offered to allow students to consider issues and aspects of educational theory and practice which are not fully explored elsewhere in the curriculum.

***EDUC 191, -2; 291, -2; 391, -2; 491, -2 Independent Study** (1, 2, or 3)

***EDUC 496 Honors in Education** (3, OD)

*IMPORTANT INFORMATION FOR STUDENT TEACHING

Employment and Activities while Student Teaching:

It is the responsibility of the college to provide each student with the greatest opportunity for success during student teaching. Students are **expected** to eliminate all employment during the student teaching semester. However, because students may have extenuating circumstances that necessitate exemption from this restriction, the Teacher Education Committee agrees that under the following guidelines, a student may be permitted to work:

- The student has shown a history of responsible behavior with respect to course requirements and Department of Education guidelines.
- The student presents a written request stating his/her financial need and the anticipated work responsibilities, including days and hours.
- A supporting letter from his/her advisor affirming the student's ability to meet student teaching responsibilities and work involvements with a high degree of success.
- The student can demonstrate that outside employment will not interfere with normal after-school responsibilities associated with the student teaching assignment.
- The student indicates willingness to abide by any restrictions concerning working that the Teacher Education Committee requires.

PLEASE NOTE: If outside employment hinders a student's teaching performance, the Teacher Education Committee reserves the right to require the student teacher to further limit or eliminate work hours.

Failure to follow the appeal procedure may result in the student being removed from the field experience.

Students may be members of intercollegiate teams and club sports only if they have received special approval from the Teacher Education Committee prior to placement. During the student teaching semester students may not enroll in other college classes with the exception of EDUC 411, 420, or 485.

Educational Ministries

(major, minors, and youth ministries concentration)

Department of Religion and Philosophy: J. Michael Walters, chair

Faculty: Richard Eckley, Kelvin Friebe, Kristina LaCelle-Peterson, Terence Paige, Carl Schultz, Paul Shea, Külli Töniste, John Tyson, J. Michael Walters

Web site: campus.houghton.edu/orgs/rel-phil/

Phone: 585.567.9440

Major: BS (35 hours plus a minor in Bible)

The **educational ministries** major, along with its **youth ministries concentration**, includes a strong liberal arts foundation plus theoretical and applied studies in religious education, to assist the student in preparing for church or para-church vocations such as Christian education director, children, youth, or adult education director, or careers in denomination educational programs or publications. The department expects that majors will fully prepare themselves for the above vocations through subsequent graduate programs in a university or seminary. To be eligible for TAP, New York state residents must also declare a second major and work toward a BA degree.

14 hours in educational ministries:

EDMN 231 Foundations of Educational Ministry	3
EDMN 325 Bible Study and Teaching Methods	3
EDMN 330 Christian Development of Children, Youth, and Adults	3
EDMN 442 Internship in Educational Ministries	3
EDMN 482 Senior Capstone: Seminar in Educational Ministries	2

6 hours in ministry:

MIN 210 Introduction to Christian Ministries	3
MIN 317 Leadership in the Church	3

6 hours in theology

THEL 313 Systematic Theology	3
THEL 320 Spiritual Formation	3

3 hours in psychology or education chosen from:

PSY 214 Child Psychology	3
PSY 218 Social Psychology	3
PSY 306 Psychology of Religion	3
EDUC 219 Education Psychology	3

3 hours in family studies chosen from:

PSY 230 Lifespan Development of the Family	3
PSY 326 Introduction to Family Systems	3
SOC 237 Introduction to Marriage & Family Studies	3

3 hours in urban ministry chosen from:

URMN 212 Urban Ministry	3
URMN 250 Evangelism & Social Action in the Urban Context	3

The Standard Teacher Diploma issued by the Evangelical Training Association (ETA), of which Houghton College is a member, is awarded to all who complete a major in educational ministries.

Youth Ministries Concentration (47 hours; plus a minor in Bible)

The youth ministry concentration requires the full core of Educational Ministries courses listed above, plus twelve hours as follows:

EDMN 350 Youth Evangelism and Discipleship	3
EDMN 351 Theological Explorations of Youth Cultures and Ministry	3
PSY 215 Adolescent Psychology	3
And three hours chosen from the following:	
PSY 230 Lifespan Development of the Family	3
PSY 326 Introduction to Family Systems	3
SOC 237 Introduction to Marriage and Family Studies	3
THEL 337 Theological Foundations of the Family	3

Contract Minor: (15 hrs arranged with the Educational Ministries program advisor)

The following courses are required:

MIN 210 Introduction to Christian Ministries	3
EDMN 325 Bible Study and Teaching Methods	3
THEL 313 Systematic Theology	3

In addition, six hours of electives are included as an *emphasis* in the following areas:

1. Educational Ministries core (except EDMN 442)
2. Youth
3. Missions
4. Urban Ministry
5. Sports Ministry

Sports Ministry Minor: (18 hours, interdisciplinary) – See Sports Ministry entry.

Course Descriptions

EDMN 231 **Foundations of Educational Ministry** (3, S)
Historical, philosophical, and theological developments of religious and Christian education in relation to the practice of ministry.

EDMN 325 **Bible Study and Teaching Methods** (3, F)
Survey of methods of Bible study and approaches to teaching/learning. Emphasizes: lesson design, planning and presentation, small group leadership, curricula.

EDMN 330 **Christian Development of Children, Youth and Adults** (3, F)
Examines principles and methods used to foster the spiritual development of children, youth, and adults in their respective life situation.

EDMN 350 **Youth Evangelism and Discipleship** (3, S)
Eclectic, descriptive, and critical examination of theory and practice of contemporary youth evangelism and discipleship in selected church and para-church models, including denominational programs, Campus Life, and Young Life.

EDMN 351 **Theological Explorations of Youth Cultures and Ministry** (3, F)
Explores the relationship between theology and youth subcultures, with a view to providing theologically-informed and culturally engaged perspectives for ministry with youth. Students will explore contributions of major figures in the field, apply theological perspectives to issues such as play, sport, and other aspects of popular culture, and learn practical ways to lead youth to Christian discipleship.

EDMN 442 **Internship in Educational Ministries** (3, F/S)
Supervised field experience in a church or para-church agency combining academic work with practical and professional responsibilities and relationships. Prerequisites: MIN 210, EDMN 325, and 330 or permission of the educational ministries advisor.

EDMN 482 **Senior Capstone: Senior Seminar in Educational Ministries** (2, F)
A senior capstone colloquium required of all students with a major in Religion or Educational Ministries.

EDMN 191, -2; 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2 or 3)

EDMN 496 **Honors in Educational Ministries** (3, S)

Engineering

Department of Physics and Earth Science: Mark Yuly (chair)

Faculty: Mark Yuly, Donell Brandon Hoffman **Part Time:** John Andrews

Web site: campus.houghton.edu/orgs/physics

Phone: 585.567.9280

Applied Physics Major – Engineering Emphasis: BS (31 hours in major; 17 in prerequisites; 14 in co-requisites)

General Information

This major is for those students interested in the engineering applications of physics, and is preparation for an engineering-related career or graduate school in engineering or physics.

The requirements for the engineering physics major are as follows:

Prerequisites (17):

PHYS 151,152 General Physics I, II.....	8
MATH 181,182 Calculus I, II.....	8
PHYS 170 Introduction to Engineering.....	1

Required (31):

PHYS 275, 276 Experimental Physics Lab	2
PHYS 215 Engineering Mechanics: Statics	3
PHYS 250 Engineering Mechanics: Dynamics.....	3
PHYS 258 Analog Electronics	4
PHYS 259 Digital Electronics.....	4
PHYS 212 Modern Physics.....	3
PHYS 353 Electricity and Magnetism I.....	3
PHYS 355 Thermal Physics.....	3
PHYS 471, 472 Physics Project Lab	2
PHYS 482 Senior Capstone: Physics Seminar	1

One advanced theory course selected from:

PHYS 352 Mechanics II.....	3
PHYS 354 Electricity and Magnetism II.....	3
PHYS 356 Quantum Mechanics	3

Co-requisites (14):

MATH 241 Differential Equations	3
MATH 321 Multivariate Calculus.....	4
CHEM 151 General Chemistry I	4
CSCI 211 Programming I.....	3

Additional recommended supporting courses include:

PHYS 260 Optics.....	3
CHEM 152 General Chemistry II	4
CSCI 211 Programming I.....	3
ECON 210 Microeconomics.....	3
BADM 303 Entrepreneurship	3

Dual-Degree Engineering Program

General Information

This is a cooperative program involving Houghton and a partner engineering school. Houghton College currently maintains formal dual-degree program arrangements with Washington University in St. Louis, MO, and Clarkson University in Potsdam, NY. Both of these universities offer outstanding engineering programs.

In a typical dual-degree program, the student will spend three years at Houghton and two years at the partner school of choice. At the conclusion of five years of study, a student making normal progress will have completed all requirements to receive degrees both from Houghton College and from the partner university. The Houghton College degree would be in an appropriate field of study, typically physics, general science, chemistry, or biology, and the degree from the partner school would be in the student's chosen engineering field. To be eligible to receive a Houghton degree, the student must satisfy the "senior in absentia" requirements (see Index for page number).

A typical course load during that time might include

MATH 181, 182 Calculus I, II	8
PHYS 170 Introduction to Engineering.....	1
PHYS 151, 152 General Physics I, II	8
CHEM 151, 152 Chemistry I, II.....	8
CSCI 211 Programming I.....	3
MATH 241 Differential Equations	3
MATH 321 Multivariate Calculus.....	4

Other courses may include

PHYS 175 Engineering Mechanics: Statics	3
PHYS 250 Engineering Mechanics: Dynamics.....	3
PHYS 258 Analog Electronics	4
PHYS 259 Digital Electronics I	4
PHYS 352 Mechanics II.....	3
BIOL 151, 152 General Biology I, II.....	8

CHEM 241,242 Organic Chemistry	8
CSCI 236 Data Structures and Algorithms	3

The remainder of a student's load at Houghton would consist of major requirements and integrative studies courses. The integrative studies requirements at Houghton would, of course, meet humanities and/or social science requirements at the partner school.

English (major and minor)

Department of English and Communication: Linda M. Woolsey, chair
Faculty: Bruce N. Breneman, Charles E. Bressler, Laurie A. Dashnau, Douglas M. Gaerte, John R. Leax, Susan Bruxvoort Lipscomb, James F. Wardwell, Linda M. Woolsey, Stephen A. Woolsey, James A. Zoller
Web site: campus.houghton.edu/orgs/English/Eng2.htm
Phone: 585.567.9451

Major: 36 hours in the major

The major in English provides students with strong liberal arts preparation for a variety of careers including education, business, and the media. It is also appropriate for pre-seminary and pre-law students.

Required courses:21

WRIT 213 Advanced Composition: Writing about Literature	3
ENGL 203, 204 English Literature I, II	3,3
ENGL 215, 216 American Literature I, II	3,3
ENGL 412 Literary Criticism	3
ENGL 418 Senior Capstone: Seminar in Problems of Literary Study	3

An additional five courses of electives are to be selected as follows:.....15

Choose two or three courses from:

ENGL 311 English Renaissance	3
ENGL 312 Restoration and Eighteenth Century	3
ENGL 313 Romanticism in Literature and Culture	3
ENGL 321 British Fiction	3
ENGL 350 Shakespeare	3
ENGL 355 Modern English Grammar in Historical Perspective.....	3

Choose two or three courses from any ENGL course above 216 not listed above (except 353)

ENGL 221 Children's Literature.....	3
ENGL 222 Adolescent Literature	3
ENGL 315 Modern Drama	3
ENGL 319 Modern American Poetry	3
ENGL 320 Modern British Poetry	3
ENGL 322 American Fiction	3
ENGL 334 American Short Story	3
ENGL 361 Contemporary World Literature	3
LING 220 Introduction to Linguistics	3

Special Topics in Literature (ENGL 390) may be included in either category its subject matter suggests; the major advisor will provide approval.

Minor: 18 hours

Students electing a minor in English are required to take either both semesters of English Literature (ENGL 203, 204) or both semesters of American Literature (ENGL 215, 216). An additional 12 hours of electives are to be selected from literature courses with an ENGL prefix. Advanced Composition: Writing about Literature (WRIT 213) is also strongly recommended and may be substituted for a literature course.

Course Descriptions

ENGL 101 Principles of Writing (3, F&S)
 Development of writing skills. Focus on narrative, descriptive, and expository essays. Principles taught by frequent writing, peer workshops, discussions, conferences. Extra tutorial contact required of those with difficulties with mechanics. Liberal Arts Foundation - Writing.

ENGL 201 Literature of the Western World (3, F&S)
 An introduction to the Western literary heritage from the classical to the postmodern era. Emphasis on how to read poetry, drama, and fiction for better comprehension and interpretation as well as for enjoyment.

Liberal Arts Foundation - Literature.

ENGL 203 English Literature I (3, F)
 Surveys major works and literary movements in England from Beowulf to Neoclassicism. Provides biographical, historical, and ideological information to enhance understanding. Liberal Arts Exploration-Humanities.

ENGL 204 English Literature II (3, S)
 Surveys major works and literary movements of the romantic, Victorian, modern and postmodern periods in their biographical, historical, and ideological contexts. Liberal Arts Exploration-Humanities.

ENGL 206 Post-Colonial African Literature (3)
 (See Off-Campus Programs - GO Ed for course description.)

ENGL 215 American Literature I (3, F)
 Emphases on Puritan thought, deism, romanticism, transcendentalism. Close reading of primary texts. Required of English majors. Liberal Arts Exploration-Humanities.

ENGL 216 American Literature II (3, S)
 Emphasis on emerging realism, the development of naturalism, literary modernism, and new directions in the 20th century. Close reading of primary texts. Required of English majors. Liberal Arts Exploration-Humanities.

ENGL/LING 220 Introduction to Linguistics (3, F&S)
 An introduction to the basic elements of linguistics. Emphasis on phonology (the study of sounds), morphology (the study of word formation), syntax (phrase and sentence formation), and semantics (meaning in language). Liberal Arts Exploration-Humanities.

ENGL 221 Children's Literature (3, F&S)
 A survey of various genre in literature for children and young adults with an emphasis upon developing criteria for selection and evaluation. Also explores a range of techniques for enhancing children's understanding and enjoyment of literature. Liberal Arts Exploration-Humanities.

ENGL 223 Adolescent Literature (3, F&S)
 Students will read and analyze a variety of literature of interest to adolescents with an eye toward understanding adolescents and their place in society, developing criteria for evaluating adolescent literature, and exploring current trends in this literature. In this process students will investigate critical theories about the function and purpose of literature for adolescents, including developmental, aesthetic, and cultural considerations. Liberal Arts Exploration-Humanities.

ENGL 308 Australian Literature (3, F)
 (See course description in Off-Campus Programs -- Australia section.) Liberal Arts Exploration-Humanities.

ENGL 311 The English Renaissance (3, S07)
 Poetry and prose from Sidney to Milton (excluding Shakespeare). Attention given to political, historical, religious background. Emphases on Spenser, Milton, and the 17th century devotional poets. Liberal Arts Exploration-Humanities.

ENGL 312 Restoration and Eighteenth Century (3, S08)
 Major figures of English letters 1660-1800. Attention given to satire, comedy of manners, literary criticism, and the rise of the novel. Liberal Arts Exploration-Humanities.

ENGL 313 Romanticism in Literature and Culture (3, F07)
 Study of Romanticism as a European phenomenon, with emphasis on the impact of Romantic ideas and literary trends on British writers working between 1780 and 1848. Liberal Arts Exploration-Humanities.

ENGL 314 Victorian Literature and Culture (3, ??)
 Study of the literature of the Victorian period in the context of selected intellectual, artistic, and popular culture movements. Liberal Arts Exploration-Humanities.

ENGL 315 Modern Drama (3, S07)
 Emphasis on American and English drama from around 1900 to the present. Beckett and O'Neill as progenitors of significant theatrical trends such as realism, expressionism, and the absurd. Liberal Arts Exploration-Humanities.

- ENGL 319 **Modern American Poetry** (3, F07)
American poetry from 1900 to present. Emphases on trends and selected major figures such as Eliot, Frost, Pound, Stevens, Williams. Liberal Arts Exploration-Humanities.
- ENGL 320 **Modern British Poetry** (3, F06)
British poetry from 1900 to present. Emphases on trends and selected major figures such as Hopkins, Hardy, Yeats, Auden, Thomas. Liberal Arts Exploration-Humanities.
- ENGL 321 **British Fiction** (3, S08)
History and development of the English novel, with emphasis on such writers as E. Bronte, Eliot, Hardy, Wilde, Conrad, Forster, Joyce. Liberal Arts Exploration-Humanities.
- ENGL 322 **American Fiction** (3, F07)
History and development of the American novel, with emphases on such writers as Melville, James, Dreiser, Cather, Fitzgerald, Hemingway, Faulkner, and Baldwin. Liberal Arts Exploration-Humanities.
- ENGL 334 **The American Short Story** (3, F06)
Development of the American short story from its beginnings with Irving, Poe, and Hawthorne to modern practitioners such as Malamud, O'Connor, and Updike. Liberal Arts Exploration-Humanities.
- ENGL 350 **Shakespeare** (3, F)
Survey of significant examples of Shakespeare's histories, comedies, tragedies, and some poetry. Includes biographical, historical and critical background; emphasis on close reading of texts. Liberal Arts Exploration-Humanities.
- ENGL 355 **Modern English Grammar in Historical Perspective** (3, S07)
This course focuses on traditional English grammar and the historical principles on which grammatical analysis is based. Emphasis placed on understanding the language system of grammar, its historical origins and development, grammatical theory, and the conventions of American English usage.
- ENGL 353 **Internship for English Majors** (3, Summer)
Opportunities for off-campus experiences investigating a career option in fields other than teaching, such as advertising, government service, industrial publications, and library science.
- ENGL 361 **Contemporary World Literature** (3, S07)
Selections from world masterpieces of the 20th century, especially novels since World War II from the non-English-speaking world. Liberal Arts Exploration-Humanities.
- ENGL 390 **Special Topics in Literature** (3, F&S & May)
Opportunity for study of issues, literary figures, or problems not covered elsewhere in the curriculum (e.g., the Oxford Christians, African-American literature, literature by women). Liberal Arts Exploration-Humanities.
- ENGL 412 **Literary Criticism** (3, F&S)
Theoretical and practical study of the principles of criticism. Emphasis on contemporary critical schools. Brief historical survey. Prerequisite: six hours of literature above ENGL 210.
- ENGL 418 **Senior Capstone: Seminar in Problems of Literary Study** (3, S)
Original research and study into selected literary topics. Integration of faith and learning. Intensive library work. Required of all majors. Prerequisite: 21 hours of literature plus Literary Criticism (ENGL 412).
- ENGL 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2, or 3)
- ENGL 496 **Honors in English** (3, S)

Environmental Science/ Environmental Studies

Department of Biology: James M. Wolfe, chair

Faculty: John Leax, Ronald Oakerson, Robert Smalley, James Wolfe, others as determined by chair

Web site: campus.houghton.edu/orgs/biology/

Phone: 585.567.9280

Biology with Environmental Emphasis major (BA, BS)

For students wanting to major in environmental science, we recommend the environmental emphasis track within the biology major (see BIOLOGY). The major builds upon a strong field curriculum (including options of off-campus courses and programs in Africa, Alaska, and the Adirondacks) and prepares students to take the New York state civil service exam for application as a conservation biologist with the NYS Department of Environmental Conservation as well as those planning on further graduate study.

Environmental Stewardship minor

The environmental stewardship minor provides background for students who plan careers that intersect with environmental issues. The minor is supradisciplinary with courses from biology as well as other areas (e.g. English, recreation). The minor can be completed via two options:

- 1) The Houghton in Adirondack Park program (see Off-Campus Programs) at Star Lake offers a fall semester of courses which complete the minor. This program builds upon the Adirondack Park model to examine issues of environmental stewardship in both local and global contexts.

- 2) The minor can be completed by the following on-campus courses:

Required courses:

BIOL 214 Wildlife Biology <u>or</u>	
BIOL 215 Local Flora and Vegetation*	3
REC 401 Natural Resource Management	3
ESCI 212 Environmental Earth Science*	3
WRIT 320 Writing About Nature and the Environment	3
BIOL 475 Environmental Stewardship Senior Seminar	1
Total:	13

*Biology majors with environmental emphasis (where such courses are duplicated or superseded) would substitute Atmospheric Science (ESCI 224), and Public Policy Analysis (POLS 242) or World Regional Geography (POLS 220).

Recommended courses: BIOL 105 Conservation Biology (4); an internship or independent study with environmental management is strongly recommended (1-2).

Equestrian Studies (minor)

Department of Physical Education/Exercise Studies & Recreation/

Leisure: Thomas R. Kettelkamp, chair

Faculty: Andrea Boon, Jill Paxton, Jo-Anne Young

Web site: campus.houghton.edu/orgs/equestrian/

Phone: 585.567.8142

Minor: 13-14 hours

Students take two of these three courses:

REC 220 Leisure and Society	3
REC 221 Intro to Leisure Service Delivery Systems	3
REC 411 Seminar	2

Students also take HRSM 224 Riding Instructor Certification (2) plus six hours of equestrian studies electives (HRSM, 211 level or above). **Note: no more than eight hours of HRSM courses may be counted towards graduation.**

Course Descriptions

ALL equestrian courses have fees. HRSM 113 has a single fee; others have double fees.

HRSM 113 Horsemanship I (1, F&S)
Fundamental skills in hunt seat, dressage, and/or western riding, according to student background or interest. Grade based on improvement in skills. One riding lab per week; written final. (Counts for PHED 102 integrative studies credit.) Liberal Arts Foundation - PE Activity.

HRSM 223 Foundations of Equestrian Studies (Activity Lab) (3, S)
Principles of horse management and other areas related to equitation studies. Hunt-seat equitation, basic dressage, ring riding, and cross-country riding.

HRSM 224 CHA Riding Instructor Certification (3, S)
Camp Horsemanship Association (CHA) curriculum: CHA clinic and horsemanship teaching certification in CHA camp programs. Teaching and equitation skills in ring and trail riding of hunt and stock seat. Horsemanship teaching practicum. Prerequisite: REC 113, 223 or permission.

HRSM 276 Dressage (2, S)
Philosophical and physiological building blocks of dressage, leading to mastery of Training Level and introduction to First Level dressage; lays the necessary foundation for effective horsemanship in all higher level disciplines.

HRSM 323 Eventing (2, F)
Fundamentals of dressage and introduction to eventing (three-phase horse trials; includes dressage, cross-country galloping and jumping, stadium jumping techniques). Prerequisite: REC 223 or permission.

HRSM 324 Training the Horse (1, F)
Foundations of training the young horse and re-training the problem horse. Students work with the actual training of a young horse, utilizing classical principles, philosophy, methodology. Prerequisite: REC 223 or permission.

HRSM 325 Horsemanship: Jumping I (2, F&S)
Fundamentals of basic jumping position and introduction to correctly navigating a course. Philosophy of the hunt seat system of riding. Prerequisite: HRSM 223 or permission.

HRSM 326 Horsemanship: Jumping II (2, S)
Building skills, refining techniques, and expanding technical knowledge learned in HRSM 325. Prerequisite: HRSM 223 or permission.

HRSM 327 Mini-Prix Jumping Equitation (2, F)
Riding jumper seat equitation and showing hunters and jumpers; learning principles, practices, and philosophy of course design for the various classes and competitions for jumpers.

HRSM 328 Horsemanship: Judging (3, F)
Lectures and field trips incorporating judging assignments for learners; understanding the duties of the judge; using good judging to educate riders.

HRSM 295, 395, 495 Special Topics (2 or 3, OD)
Courses may be taught relative to special topics in horsemanship, such as riding for the disabled, CHA trail guide certification, CHA instructor of riders with disabilities certification, western reining, etc.

Family Studies (minor)

Department of Psychology and Sociology: Daryl H. Stevenson, chair

Coordinators: Michael Lastoria, Jayne Maugans

Web site: campus.houghton.edu/orgs/psychology/psynsochp.htm

Phone: 585.567.9440

Minor: 15 hours

The family studies minor is an interdisciplinary program, combining the fields of anthropology, sociology, psychology, and religion. Special topics in other disciplines are also offered according to interest and demand. The minor is designed to provide students with adequate knowledge and skills needed for professional careers in human services and leadership roles in the church, family, and community, in addition to preparing students for further education in Family Studies and related areas.

Prerequisites:

PSY 111 Introduction to Psychology

Required courses:

SOC 237 Introduction to Marriage and Family Studies

PSY 326 Introduction to Family Systems

Nine hours selected from:

PSY 230 Lifespan Development of the Family

PSY 325 Human Sexuality

THEL 337 Theological Foundations of the Family

SOC 330 Culture and Family

SOC 362 Gender Relations

SOC 390 Practicum in Family Studies

SOC 297 Special Topics Courses (*preapproved by a coordinator of Family Studies*)

SOC 394 Internship in Family Studies

Course Descriptions (see Sociology and other areas)

Foreign Languages (majors and minors)

Department of Foreign Languages and Literatures: Marlene Collins-Blair, chair

Faculty: Marlene Collins-Blair, Marcus Dean, Nan Hussey, Justin Niati, Jean-Louis Roederer

General Information:

Normally, native speakers of French or Spanish are not admitted to the conversation courses for credit.

Majors are required to spend one semester off campus in a study program in the target language.

Junior-year abroad programs are available in France, Canada, Spain, Colombia, Guatemala, Costa Rica, and Germany/Austria.

CDRP: Cross-disciplinary Research Project - A collaborative effort between the Foreign Language Department and select academic disciplines, allowing qualified students to enrich their studies in both areas through a joint research project. Gives **one** hour of credit in the foreign language, repeatable to a maximum of **three**. Credit may be applied to language majors, minors, or electives. Consult the Foreign Languages Department for specific guidelines and eligibility requirements. Applicable CDRP courses are identified by "CDRP" in departmental course listings. Collaborating departments are: Business and Economics, History and Political Science, Psychology and Sociology. Students taking a CDRP must fill out a special form that can be obtained from the Records Office.

French Major: (34 hours), **Spanish Major:** (34 hours)

French, German, & Spanish Minors: (12 hours beyond beginning 103 level)

FRENCH

The French major consists of 34 credit hours. Students are required to take a semester off campus in a French speaking country (France or Québec at present). The program and courses need to be approved by your academic advisor. NOTE: You are required to take INCL 211 Intercultural Transition before the off campus program.

Required Course	What year?	Hours (16 Hours)
FREN 301 Con & Reading 1	1st	3
FREN 301 Con & Reading 2	1st	3
FREN 305 French Phonetics	1st or 2nd	3
FREN 350 Adv French Grammar	2nd	3
FREN 485 Senior Capstone	4th	3
INCL 211 Intercultural Transition	2nd or 3rd	1
Open Options (see note 1 below)		18 Hours
FREN 321 Survey of French Lit	3rd or 4th	3
FREN 407 20th Century Drama	3rd or 4th	1
FREN 408 20th Century Novel	3rd	6
FREN 409 19th Century Novel	4th	3
FREN 421 French Civ.	3rd or 4th	3

FREN 395 Special Topics	3rd or 4th	3
FREN 315 Paris	Mayterm	3
FREN 391 Independant Study	3rd or 4th	1,2,3
FREN 461 Adv Conversation	4th	3
FREN 481 Honors Internship	4th	3
FREN 496 Honors in French	3rd	7
Electives (see note 2 below)		

Note 1: The courses selected from this category should reflect the student's interest and career goals in consultation with his/her advisor. Students must take 6 hours of French Literature and 3 hours of French Civilization.

Note 2: These electives will be normally met during the Off Campus Study Abroad program.

SPANISH

The Spanish major consists of 34 credit hours. Students are required to take a semester off campus in a Spanish speaking country. The program and courses will need to be approved by your academic advisor.

Required Course	What year?	Hours
SPAN 301	1st	3
SPAN 302	1st	3
SPAN 305 Spanish Phonetics	1 st or 2nd	3
SPAN350 Adv Spanish Grammar	2 nd	3
SPAN 405 Civ. Of Latin America	2 nd or 3 rd	3
SPAN 406 Civ. of Spain	2 nd or 3 rd	3
SPAN 423 or 424 Latin American Lit	3 rd or 4th	3
SPAN 401 or 402 Spanish Lit	3 rd or 4th	3
INCL 211Intercultural Transition	2 nd or 3 rd	1
*Electives	3rd	6
Senior Seminar	4th	3
		= 34

*A semester off-campus is required for this major and these electives will normally be met at that time.

Course Descriptions

FRENCH

FREN 101, 102 **French Level 1 and 2** (3 F, 101) (3 S, 102)
Development of the skills of comprehending, speaking, reading, and writing French. Lab practice may be required.

FREN 103 **French Level 3** (3, F)
Grammar review, selected literary readings and oral practice. Reading ability stressed. Prerequisite: FREN 102, or placement by examination. Liberal Arts Foundation - Foreign Language.

FREN 301, 302 **Conversation and Readings 1 and 2** (3/3, F&S)
Intensive practice in speaking French. Oral discussions and reports based on contemporary readings. Prerequisite: FREN 103 or equivalent for 301 and FREN 301 for 302. Students who have completed FREN 305 and above must obtain permission of instructor.

FREN 305 **French Phonetics** (3, S07, S10)
Designed for the English-speaking student, this course stresses corrective measures for difficulties arising from Anglo-American pronunciation habits. Language lab practice required. Prerequisite: FREN 301 or equivalent.

FREN 204 or 315 **Paris: Capital of French Culture** (3, May, 08)
A three-week field trip course in Paris. Daily lecture-visits and excursions to places of cultural interest both in Paris and its environs. Language instruction and a long and short paper required for integrative studies or major/minor credit. Approximately \$2500 above tuition.

FREN 321 **Survey of French Literature** (3, F06, F09)
Masterpieces of French literature from its beginnings to the present. Prerequisite: FREN 302 or equivalent. Liberal Arts Exploration-Humanities.

FREN 350 **Advanced French Grammar** (3, S09)
A study of advanced grammar and style. Practice in writing compositions. Prerequisite: FREN 302 or equivalent.

FREN 395 **Special Topics** (3, OD)
Opportunity for study of topics not covered elsewhere in the curriculum, such as: Quebec studies. Depending

upon qualifications and student needs, others may be proposed by the French faculty. Prerequisite: FREN 302 or equivalent.

FREN 407 **French Literature of the 20th Century: Drama** (3, S08, S11)
Masterpieces of the French drama since 1900. Prerequisite: FREN 302 or equivalent. Liberal Arts Exploration-Humanities.

FREN 408 **French Literature of the 20th Century: Novel** (3, F08, S11)
Masterpieces of the French novel since 1900. Prerequisite: FREN 302 or equivalent. Liberal Arts Exploration-Humanities.

FREN 409 **French Literature of the 19th Century: Novel** (3, S07, S10)
A study of selected masterpieces of the French romantic and realistic novel. Prerequisite: FREN 302 or equivalent. Liberal Arts Exploration-Humanities.

FREN 421 **French Civilization** (3, F07, F10)
Historical backgrounds and major contributions of France to contemporary culture. Prerequisite: FREN 302 or equivalent.

FREN 461 **Advanced French Conversation: Current Events** (3, S08, S11)
Intensive oral practice with a focus on current issues in Francophone countries. Prerequisite: FREN 302 or permission of instructor.

FREN 481 **French Honors Internship** (3/3, F&S)
Experience in a college classroom. The student will be expected to assist the college professor in the classroom at the 103 level (or above) three days a week. Introduction to prevailing language methods of instruction. **Permission of instructor required.** Must be a French major to be eligible. Upperclassmen and students in education will be given priority.

FREN 485 **Senior Capstone: French** (3, S)
Taken as the final course in a French major, this course allows students to demonstrate mastery of the target language and integration of their knowledge of related cultures, history, literature, and linguistics. Students will not only work with a faculty member on a significant research paper or project (related to their chosen track), but will also assemble a portfolio that demonstrates the process of their learning. A presentation of the compete portfolio, including the final project, will be the culmination of this course and the French major. Prerequisites: Senior status and approval of the department chair.

FREN 391, -2; 491, -2 **Independent Study** (1, 2, or 3)

FREN 496 **Honors in French** (3, S)

SPANISH

SPAN 101 **Spanish Level 1** (3, F&S)
This course emphasizes the development of communicative competence in the Spanish language, bringing students to the novice-mid level of oral proficiency. At this level, communicative tasks are specifically focused on interpersonal and interpretive modes. Additional activities are designed to develop an awareness and appreciation of the variety of cultures of the Spanish-speaking world.

SPAN 102 **Spanish Level 2** (3, F&S)
This course emphasizes the development of communicative competence in the Spanish language, bringing students to the novice-high level of oral proficiency. At this level, students continue to develop their ability to communicate in interpersonal and interpretive modes. Additional activities are designed to develop an awareness and appreciation of the variety of cultures of the Spanish-speaking world.

SPAN 103 **Spanish Level 3** (3, F&S)
This course emphasizes the development of communicative competence in the Spanish language, bringing students to the intermediate-low level of oral proficiency. At this level, communicative tasks are interpersonal, interpretive, and presentational. Additional activities are designed to develop an awareness and appreciation of the variety of cultures of the Spanish-speaking world.

SPAN 204 or 341 **May in Spain** (3, OD)
Tour of approximately six renowned Spanish cities. Visit museums, historic structures, other cultural sites; see highlights of Spain's past in art and architecture. Cost: \$1500 (est.) above tuition.

SPAN 205 or 342 **MesoAmerican Civilization** (3, OD)
Tour of the Aztec and Mayan heartland in Mexico. Includes visits to the ancient Aztec capital of Tenochtitlan in Mexico City and the pyramids of Teotihuacan in the Valle de Mexico, and then to the Mayan ruins of Uxmal, Chitzen Itza and Tulum in the Yucatan peninsula. Includes extended tours of the anthropological museums in Mexico City and Merida. Cost: \$1000 (estimated) above tuition.

SPAN 206 or 344 **Latin-American Seminar: Current Issues** (3, OD)
Three-week study tour in Latin America. Lectures and discussions on historical background, social problems, role of the church, revolutionary ferment, relations with the United States. Excursions to points of interest. Emphasis on a Christian response to third-world realities. Cost approximately \$1500 above tuition. (SPAN 206 fulfills SPAN 103; 344 fulfills conversational language requirement for Intercultural Studies majors.)

SPAN 207 or 346 **Aspects of Costa Rica: Language, Culture, and People** (3, M)
(SPAN 207 fulfills SPAN 201; 346 fulfills conversational language requirement for Intercultural Studies majors.)
Four-week service-learning experience in Costa Rica. Students will be hosted in the homes of nationals as they undergo two weeks of intense language instruction in the historic "City of Flowers," Heredia. Opportunities for service, relationships with university students, involvement in church activities, and excursions will present a broad picture of the current realities of life in Latin America. Prerequisite: SPAN 102 or equivalent. Cost approximately \$2,000 above tuition.

SPAN 211 **Ecotour in Honduras** (4, M)
Students will have a third-world experience including a service project with Christian Camping International. Visits to national parks and Mayan Indian ruins. Activities include hiking, snorkeling, and attending cross-cultural classes. Check with professor for cost above tuition. (Fulfills SPAN 103).

SPAN 301 **Spanish Conversation and Grammar** (3, F/S)
Exercises, dialogue, readings, discussions and oral practice are used to improve the student's ability to comprehend and communicate in Spanish. A key component is a comprehensive review of Spanish grammar with a strong emphasis on the subjunctive. Prerequisite: SPAN 103 or equivalent.

SPAN 302 **Spanish Conversation and Readings** (3, F/S)
This course focuses on the development of oral proficiency through discussions of contemporary life issues and of selected readings in Hispanic literature. Prerequisite: SPAN 301 or equivalent.

SPAN 305 **Spanish Phonetics** (3, S)
A survey of pronunciation problems, designed to help the English speaker develop an accurate pronunciation of Spanish. Introduction to the phonetic alphabet and to basic concepts of linguistic science. Extensive oral practice. Prerequisite: SPAN 301; co-requisite: SPAN 302.

SPAN 350 **Advanced Spanish Grammar** (3, F)
A comprehensive course in structure and usage. Prerequisite: SPAN 302 or permission.

SPAN 401 **Survey of Spanish Literature** (3, F07, F09)
A survey of representative works of Spanish Peninsular literature from the pre-medieval *jarchas* to contemporary times. Prerequisite: SPAN 350.

SPAN 402 **Spanish Literature and Film: Twentieth Century - Present** (3, S08)
This course focuses on emerging structures of gender, class and nationality in contemporary Spain with a view to examining the multiple ways in which identity is culturally and historically inscribed through political, sexual and social movements. Prerequisite: SPAN 350.

SPAN 405 **Civilization and Culture of Latin America** (3, F06, F08)
A survey of Spanish-American civilization and culture from pre-Colombian times to the present, with special emphasis on socio-economic problems in Spanish America and its relations with the United States. Prerequisite: SPAN 305; co-requisite: SPAN 350.

SPAN 406 **Civilization and Culture of Spain** (3, F07, F09)
This course explores the cultural diversity of contemporary Spain through an examination of key elements such as its architecture, literature, history, geography, music and the visual arts, including film. Prerequisite: SPAN 305; co-requisite: SPAN 350 .

SPAN 423, 424 **Masterpieces of Spanish-American Literature** (3/3, F06, S07)
Selected readings from outstanding Spanish-American authors representing different countries, periods and genres. Prerequisite: SPAN 350. Liberal Arts Exploration-Humanities .

SPAN 481 **Spanish Honors Internship** (3/3, F&S)
Experience in a college classroom. The student will be expected to assist the college professor in the classroom at the intermediate level (or above) three days a week. Introduction to prevailing language methods of

instruction. **Permission of instructor required.** Must be a Spanish major to be eligible. Upperclassmen and students in Education will be given priority.

SPAN 485 **Senior Capstone: Spanish** (3, S)
Taken as the final course in a Spanish major, this course allows students to demonstrate mastery of the target language and integration of their knowledge of related cultures, history, literature, and linguistics. Students will not only work with a faculty member on a significant research paper or project (related to their chosen track), but will also assemble a portfolio that demonstrates the process of their learning. A presentation of the compete portfolio, including the final project, will be the culmination of this course and the Spanish major. Prerequisites: Senior status and approval of the department chair.
SPAN 191, -2; 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2, or 3)

SPAN 496 **Honors in Spanish** (3, S)

GERMAN
GERM 101, 102 **German Level 1 and 2** (3/3, F&S)
Activities are designed to introduce and develop the skills of comprehending, speaking, reading and writing German, with particular attention paid to pronunciation and intonation. Additional activities introduce students to the cultures and histories of German-speaking countries.

GERM 103 **German Level 3** (3, F&S)
Review and expansion of grammatical patterns, composition, and conversation; modern fiction, biography, and cultural-historical material. Prerequisite: GERM 102 or placement by exam. Liberal Arts Foundation - Foreign Language.

GERM 295, 395, 495 **Special Topics** (3, OD)

GERM 301 **German Conversation & Readings** (3, S)
Intensive practice in speaking German. Oral discussions and reports based on contemporary readings. Laboratory practice required. Prerequisite: German 103 or equivalent.

GERM 191, -2; 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2, or 3)

LATIN
LATN 101, 102 **Beginning Latin** (4/4, S07, F07)
Elements of the Latin language. Stress on facility in reading. Cultural backgrounds in Roman civilization. Current relevancy.

LATN 221 **Intermediate Latin** (4, F06, S08)
Grammar review and introduction to Latin literature. Prerequisite: Beginning Latin (101, 102) or two entrance units of Latin. Liberal Arts Foundation - Foreign Language.

Forestry (emphasis within the Biology major, minor)

Department of Biology: James M. Wolfe, chair

Faculty: as determined by the chair

Web site: www.campus.houghton.edu/orgs/biology/

In a world of increasing human effects on world ecosystems, stewardship of forest resources is increasingly important, from ecological, aesthetic, and economic viewpoints. Deforestation in both tropical (tropical rainforest and savannas), temperate and coniferous forest (forest fragmentation and logging in coniferous forests) regions has been in the headlines of popular media for some time. Houghton's programs capitalize on our present resources (a large forested main campus and a campus within the Adirondack Park) and look to the future of mission organizations seeking out people with a background in forestry. The program, which includes a minor in forestry and a forestry emphasis within the biology major, is based on a cooperative agreement with the State University of New York - College of Environmental Science and Forestry using the Forest Technology program at the Ranger School based at Wanakena in the Adirondack Park. The Ranger School was established in 1912 and is one of the oldest forestry programs in the country leading to an A.A.S. degree in forest technology. It is supported by the strength and reputation of SUNY-ESF. The Forestry Technology program is a rigorous 48 credit hours taken over an extended year at the Wanakena campus. Graduates from the Ranger School program have gone on for advanced degrees in forestry, jobs in industry and wildlife management, as well as entered the Peace Corps.

Students have the option of taking fall semester at the Ranger School and transferring back the credits for a forestry minor or spending the whole year (Fall and Spring semesters) receiving the A.A.S. degree from SUNY-ESF as well as the forestry minor. There are three options, based on ultimate educational and career goals.

General prerequisites (SUNY-ESF Ranger School requirements) required of all participants:

General Biology I and II	8 hours
Writing courses	6 hours
Trigonometry or Pre-Calculus	3 hours
Economics	3 hours
Electives	10 hours
Total	30

Option A – Biology major who wants a forestry minor – fall semester

Forest Ecology (counts towards Houghton biology major)	4 hours
Courses counting for the minor	
Dendrology	3 hours
Introduction to Forest Measurement and Statistics	4 hours
Spatial Analysis of Forest Resources	5 hours
Total	12
Additional courses taken but <u>not</u> transferred back:	
Introduction to Surveying	4 hours
Leadership and Forest Technology	4 hours

Option B – Biology major who wants a forestry emphasis – fall and spring
(courses count for Houghton biology major)

Forest Ecology (fall)	4 hours
Dendrology (fall)	3 hours
Silviculture (spring)	5 hours

These students will need a minor other than forestry

They will also graduate with an A.A.S. in Forest Technology (SUNY-ESF Ranger School)

These students will take the fall courses indicated in Option A plus spring courses of:

Silviculture – 5 hours
Forest Inventory Practicum – 2 hours
Timber Harvesting, Transportation, and Utilization – 5
Forest Protection – 5 hours
Intro to Wildlife and Recreation Management – 4 hours
Forest Management – 3 hours

Option C – non-Biology major who has the necessary prerequisites

- a) Can take the fall program as outlined in Option A and earn a forestry minor.
- b) Can take fall and spring programs as outlined in Option B, earns:
 1. biology minor
 2. forestry minor
 3. A.A.S. degree from SUNY-ESF Ranger School

General Science (major)

Department of Physics and Earth Science: Mark E. Yuly, chair

Web site: campus.houghton.edu/physics

Phone: 585.567.9280

Major: BA/BS (49 hours)

General Information

The general science major is made up of eight hours each in mathematics, biology, chemistry, physics, and earth science, eight or more hours additional concentration in one of the four science areas in courses numbered 200 or above, and a one-hour seminar.

Required courses:

MATH 181, 182 Calculus	8
PHYS 151, 152 General Physics	8
BIOL 151, 152 General Biology	8
CHEM 151, 152 General Chemistry	8
ESCI 101 Physical Geology	4
ESCI Elective	4
Concentration	8
BIOL/CHEM/PHYS/ESCI 480 Senior Capstone: General Science Seminar	1

For the BS degree, the minor requirement is satisfied if this additional concentration is 12 hours or more. For the BA degree, the 12-hour minor should be from an unrelated area.

Course Descriptions

BIOL/CHEM/PHYS/ESCI 480 **Senior Capstone: General Science Seminar** (1)

Written thesis and oral presentation on a topic selected for interdisciplinary breadth describing current scientific research in the area of the student's concentration, based on a thorough review of scientific literature.

History (majors and minor)

Department of History and Political Science: Peter Meilaender, chair

Faculty: A. Cameron Airhart, William R. Doezeema, David A. Howard, Meic Pearse

Web site: www.campus.houghton.edu/orgs/history/dept_hist_poli.html

Phone: 585.567.9440

History Major: 27 hours

This major consists of 27 hours in any history course numbered 200 or above. All majors must take the Senior History Seminar (HIST 481). The remaining 24 hours are elective, except that no more than two of the courses marked by an asterisk (*) count toward the major. Transfer students have to take at least half of their major at Houghton - at least 12 hours of non-asterisk courses and no more than six hours of asterisk courses.

General Information

The history major involves a strong liberal arts concentration. The major provides excellent background for careers in law, the ministry, public administration, government service, college and secondary teaching, business, foreign service, and preparation for archivists, museum curators, historic site specialists, librarians, editors, and writers.

Augmented History Major: 36 hours

No more than two of the courses marked by an asterisk (*) count toward the major.

An augmented history major for certification at the secondary level consists of 36 hours as follows:

ECON 210 Principles of Microeconomics	3
HIST xxx American History (NY history is recommended for students planning to teach in NY state)	3,3
HIST xxx European History	3,3
HIST xxx Non-European, non-American History	3,3
POLS 220 World Regional Geography	3
POLS 222 American Political System	3
Total	27
PLUS 9 hours in either	
HIST xxx History Electives	3,3
HIST 481 Senior Capstone: Senior History Seminar	3
or	
POLS xxx Political Science Electives	3,3
(both must be major-level courses and one must be at the 300 or 400 level; neither can be POLS 309 or 312)	
POLS 480 Senior Capstone: Senior Politics Seminar	3
Total	9

Minor: The history minor consists of any 12 hours of history courses numbered 200 or above except that no more than one course marked by an asterisk (*) counts toward the minor.

Course Descriptions

HIST 101 Western Civilization I: Ancient Civilization to 1650 (2, F)
Survey of Western civilization from its cultural roots in ancient Near Eastern, Greek and Roman civilizations through its development during the Middle Ages, Renaissance, Reformation, and age of discovery and expansion. Attention to analyzing primary source materials. (Reserved for first-year students. Upper-class transfer students may take this course during Mayterm.) Liberal Arts Foundation - Western Culture.

HIST 102 Western Civilization II: 1650 to the Present (2, S)
Survey of Western civilization from the rise of science, the Enlightenment, Industrial Revolution, nationalism and other ideologies, two World Wars, the Cold War and beyond. Attention to analyzing primary source materials. (Reserved for first-year students; upper-class students during Mayterm.) Liberal Arts Foundation - Western Culture.

American History

***HIST 213 American Economic History** (3, OD)
Economic and business development of the United States, colonial period to the present. May be counted toward history major/minor or economics minor. Liberal Arts Exploration-Humanities.

HIST 220 American History Survey (3, F)
Overview of American history to the present. Liberal Arts Exploration-Humanities.

***HIST 226 New York State History** (3, F07)
This course surveys the Empire State's history from the Colonial period through the present. The state's history is explored in its own right, but attention is also given to showing how New York state in many respects has been a notable microcosm for broader Colonial and national developments. Liberal Arts Exploration-Humanities.

HIST 359 Colonial America, 1600-1788 (3, F06)
Settlement of North America with emphases upon religious and social developments as well as upon the American Revolution. Liberal Arts Exploration-Humanities.

HIST 360 Early National Period, 1788-1850 (3, F07)
Establishment of national political institutions and ideologies. Manifest Destiny, institution of slavery, antebellum revivalism and reforms, nascent industrialization. Liberal Arts Exploration-Humanities.

HIST 361 Civil War and Industrial America, 1850-1920 (3, F08)
Sectionalism and Civil War, Reconstruction, and adaptation to accelerating industrialization and urbanization, and World War I. Liberal Arts Exploration-Humanities.

HIST 362 Recent American History, 1920 to Present (3, S09)
Immigration, Depression and New Deal, World War II, Cold War, and resurgence of Evangelicalism. Liberal Arts Exploration-Humanities.

European History

HIST 325 Europe in the 19th Century (CDRP, see Foreign Languages) (3, F06)
Growth of liberal democracy, influence of industrial revolution and impact of nationalism. French Revolution to 1890. Liberal Arts Exploration-Humanities.

HIST 326 Europe, 1890-1945 (3, F07)
The changing intellectual climate, World War I, problems of inter-war period, challenges to democracy, background of World War II. Liberal Arts Exploration-Humanities.

HIST 332 History of Rome (3, F06)
Survey of Roman history and cultures from the beginning of the republic until the disintegration of the empire, emphasizing political and religious developments. Liberal Arts Exploration-Humanities.

HIST 342 The English Civil War and Republic (3)
The course begins with a searching examination of English society, politics, culture and religion in the early 17th century, taking in the debate about the origins of the upheavals of the 1640s and 1650s. The course of the wars themselves will be traced; the startling religious and political movements (Baptists, Quakers, democratic Levellers, apocalyptic Fifth Monarchy Men, and others) will be examined; the reasons for the fragility and failure of the republic will be explored – all with the aid of many source documents from the period.

HIST 344 The Celtic Fringes: Scotland, Wales, and Ireland since the Anglo-Saxon Invasions (3, S07)
This course will give an overview of the historical, cultural, religious and political development of these three countries since ancient times, down to the present. There will certainly be a comparative element – but also a look at each country's development in its own terms, and in the dynamics of inevitable domination by the often fraught, sometimes fruitful, relationship with England.

HIST 368 The Reformation (3, F07)
A survey of the continental, English, and Roman Catholic reformation of the 16th century. Liberal Arts Exploration-Humanities

HIST 370 Modern Evangelicalism (3, F06)
This course looks at Evangelicalism from the 1730s to the present, especially in Britain and America, where most of the movements originated and developed. However, attention is also paid to developments elsewhere, especially in recent decades, when African, Asian and Latin American churches have begun not merely to grow, but to foster innovations of their own, with wider effects.

HIST 371 Religion, Fascism, and Communism in 20th Century Europe (3)
This course looks at the interaction between Christianity and the churches (evangelical, Protestant, Catholic and Orthodox) on one hand, and the totalitarian ideologies and regimes of twentieth-century Europe on the other. In the process, such ideas as nationhood, class, modernization and secularization are considered, along with their implications for Christian belief and practice, and the various possible, and actual, Christian responses to them.

HUM 401 Pagans and Christians: Ancient and Medieval Texts (3, OD)
Close analysis of some primary texts from ancient medieval times: Plato, Aristotle, Thucydides, Cicero, Augustine, Dante, et al. Develop scholarly skills of research, interpretation, writing; foster awareness of influence of such works on modern thought. Major/minor credit in history. Liberal Arts Exploration-Humanities.

HIST 430 English History to 1714 (3, OD)
Roman England to the Stuarts, with attention to constitutional and religious developments. Liberal Arts Exploration-Humanities.

HIST 431 English History since 1714 (3, OD)
Hanoverian Britain to the present, with attention to political and social developments. Liberal Arts Exploration-Humanities.

***HIST 453, 454 History of Christianity** (3/3, F&S)
Ancient medieval modern development of Christianity in historical context; doctrines, prominent lives, institutions of each era. Fall: ancient through medieval; spring: reformation through modern. Major/minor credit in history, but will not fulfill the secondary social science portion of the integrative studies requirements. Liberal Arts Exploration-Humanities. (Cross-listed with Theology)

Regional History

HIST 223 Latin American History to 1800 (3, S07)
An introductory survey, with attention to cultural interaction during the colonial period. Liberal Arts Exploration-Humanities.

HIST 224 Latin American History since 1800 (3, F07)
An introductory survey of Latin America from the revolutionary era to the present. Liberal Arts Exploration-Humanities.

HIST 249 African History (3, F06)
Sub-Saharan Africa from earliest times. Medieval empires of western Sudan, colonial rule, emergence of national states. Liberal Arts Exploration-Humanities.

***HIST 251 East African History** (3, S)
(See Off-Campus Programs section for course description.) Liberal Arts Exploration-Humanities.

***HIST 306 Australia History** (3, F)
(See Off-Campus Programs section for course description.) Liberal Arts Exploration-Humanities.

***HIST 355 East Asia: History and Politics** (3, F06)
Introduction to history and politics of East Asia from ancient time to present, with focus on China and Japan. Emphasis on historical and political developments in 19th and 20th centuries leading to founding of Communist China and new Japan. Liberal Arts Exploration-Humanities.

***HIST 357 Russia and the USSR: History and Politics** (3, S07)
Introduction to Russian and Soviet history and politics from first records to present with focus on government, institutions, culture and society of Imperial and Soviet periods. Liberal Arts Exploration-Humanities.

HIST 381 Historiography (3, OD)
History of historical writings and methods; theories of history. Liberal Arts Exploration-Humanities.
HIST 295, 395, 495 Special Topics (CDRP, see Foreign Languages) (2 or 3, OD)
Group study of selected topics; open only by permission.

HIST 481 Senior Capstone: Senior History Seminar (3, S)
Each student will work with a departmental faculty member to develop or revise a research paper into a substantial historical article. Required for the history major.

HIST 191, -2; 291, -2; 391, -2; 491, -2 Independent Study (1, 2 or 3, OD)

HIST 496 Honors in History (3, OD)

* only one course with asterisk counts toward the minor

Humanities (major)
Department of Religion and Philosophy: J. Michael Walters, chair
Program Director: W. Christopher Stewart
Web site: campus.houghton.edu/orgs/rel-phil/
Phone: 585.567.9440

Major: 37 hours

The interdisciplinary major in humanities consists of an equal emphasis on courses selected from the departments of history, literature, and philosophy. The program encourages students to learn the methodologies of several disciplines, to trace interrelationship among disciplines, and to study common themes and issues from a variety of perspectives. Intensive and extensive study in the intellectual, social, and aesthetic movements of Western culture culminates in a senior paper in which the student has the opportunity to synthesize some of the developments which he or she studies.

Students majoring in humanities often look toward careers in professional fields such as teaching and the Christian ministry. Library services, geriatrics, and elementary education are other career options. This major appeals particularly to students with a broad range of intellectual interests and with a desire to study widely as well as in depth. The program, which involves the departments of History and Political Science, English and Communication, Foreign Languages, and Religion and Philosophy, is administered by the Department of Religion and Philosophy.

Major required courses:

Literature (3 may be in classics or a modern foreign language)	9
History	9
Philosophy	9
Additional course in one of above	3
Art History or	
Music History	3
Elective (with consent of advisor)	3
Senior Capstone: Humanities Seminar	1

HUM 306 Varieties of Postmodernism (3)
Interdisciplinary analysis of the many faceted cultural phenomenon known as "postmodernism." Moves from an initial starting point considering postmodernism as a reaction to various philosophical claims associated with modernity to the meaning and significance of postmodern ideas as they have been transposed into a variety of other contexts in the analytic humanities, literature, arts and sciences.

HUM 395 Special Topics (1, 2, 3, or 4)

HUM 481 Senior Capstone: Humanities Seminar (1)
The student undertakes a directed studies project in which he or she produces a paper that synthesizes the historical, literary, and philosophical developments relevant to a selected theme or person.

Information Technology Management (major)
Department of Business and Economics: Kenneth J. Bates, chair
Faculty: Kenneth J. Bates, Robert A. Black, Jonathan E. Bradshaw, Jeffrey B. Spear, Douglas M. Gaerte, Richard A. Halberg, Wei Hu, Richard A. Jacobson, David Perkins
Executive-in-Residence: Craig Fellenstein, Senior Executive Consultant & Chief IT Architect for IBM Global Services.
Website: www.businessathoughton.com
E-mail: business@houghton.edu
Phone: 585-567-9440

Major (BS): 55 hours in the major (19 in the business core; 36 in the major; 10 in co-requisites)

General Information

Information and the technology that puts it within reach are strategically significant resources in today's organization. When they are properly managed they can provide the organization with a distinct competitive advantage.

Recognizing both the value of these resources and the knowledge, skills, and understanding needed by the entry-level manager in this field, our program in information technology management (ITM) is designed to prepare graduates to meet this need.

Accordingly, the principal objective of the IT Management program is two-fold:

- to develop the skill set necessary to analyze, design, and evaluate an organization's information technology systems, and
- to familiarize students with the leadership skills necessary to leverage the full potential of information technology and services in support of the organization's mission.

To this end, courses in the program present technical, economic, and behavioral dimensions of technology based information systems whose purpose is to support a firm's information and decision infrastructure. Throughout the program there is a great emphasis placed on "hands on" project related work using a variety of application development tools.

A significant difference the ITM program offers compared to most majors is that it is interdisciplinary in nature. It has been carefully crafted from existing courses in two departments, the department of Business & Economics and the department of Math and Computer Science. The curriculum for this program is the work of a broadly based team of faculty in both departments and a consulting group of six professionals in the field. The result is a program consisting of the seven-course business core, eleven courses in IT, and three prescribed liberal arts courses in the college's Integrated Studies core.

Note: this is an interdisciplinary major (equivalent to a double major) thus no minor is required with this major.

Courses for the major but without major credit

ECON 210	Principles of Microeconomics	3
COMM 216	Organizational Communication	3
MATH 181	Calculus I	4
	Co-Requisites total	10

Business Core

ACCT 212	Managerial Accounting	3
BADM 212	Principles of Management	3
BADM 213	Business Law I	3
BADM 218	Marketing Principles	3
BADM 309	Statistics	3
BADM 417	Business Strategy and Policy	3
BADM 481	Senior Capstone: Senior Seminar	1
	Business Core total	19

Information Technology

BADM 220	Advanced Computer Applications	3
CSCI 221	Programming I	3
CSCI 218	Programming II	3
CSCI 226	Computer Architecture	3
BADM 395	eCommerce	3
CSCI 236	Data Structures and Algorithms	3
BADM 317	Management Information Systems	3
CSCI 326	Operating Systems	3
CSCI 340	Databases	3
CSCI 420	Networking	3
BADM 421	Internship/co-op/practicum	6
	Information Technology total	36

Course Descriptions

ECON 210 Principles of Microeconomics (3, F)
Economic method, demand and supply, consumer and producer theory, models of product market structure, and selected topics on factor markets, public choice analysis, public expenditure, and finance.

COMM 216 Organizational Communication (3, F&S)
Development of communication skills applicable within organizations: understanding communication channels, interviewing strategies, task-oriented groups, business and sales presentations, conducting effective meetings, conflict management. Satisfies the Integrative Studies speech requirement.

MATH 181 Calculus I (4, F&S)
Single variable calculus of algebraic and trigonometric functions. Applications involving maximum, minimum, and related rates. Intensive use of graphing calculators and computer software. Prerequisite: MATH 107 or equivalent proficiency.

ACCT 211 Financial Accounting (3, F)
Basic theory and practices of financial accounting for proprietorships, partnerships, and corporations. Prerequisite: spreadsheet competency.

BADM 212 Principles of Management (CDRP, see Foreign Language) (3, F&S)
Familiarizes students with the knowledge, roles, responsibilities, and skills required of new managers. Special attention is given to managerial decision-making, problem-solving, information, and human resources issues.

BADM 213 Business Law I (3, F)
Basic law covering contracts, agency, bailments, and negotiable instruments.
BADM 218 Marketing Principles (CDRP, see Foreign Language) (3, S)
Factors in product development, pricing, distribution, and promotion of consumer and industrial goods.

BADM 309 Statistics (3, F&S)
Basic statistical methods such as graphs, probability, sampling, hypothesis testing, regression, correlation. Theory useful in research and interpretation of data. Prereq: spreadsheet competency.

BADM 417 Business Strategy & Policy (CDRP, see Foreign Language) (3, F)
Integrates social responsibility and ethics with instruction in the strategic planning process. Ethical core values act as guidelines for development of organizational plans (Seniors only, except by permission.) Prerequisite: spreadsheet competency.

BADM 481 Senior Capstone: Senior Seminar (1 or 2, S)
Exploration of current issues faced by management. Required of all senior business, accounting, and information technology management majors.

BADM 220 Advanced Computer Applications (3, F07)
Mastery of programs and processes of selected business computer applications. Develops skills in charting, tracking and setting deadlines using project based software. Students will learn how to organize large volumes of data in a manner that facilitates access, reporting, and summarizing to support business decisions. Prerequisite: spreadsheet competency.

CSCI 211 Programming I (3, F&S)
This course covers the fundamentals of object-oriented programming utilizing the Java programming language. This first programming course provides students with basic Java programming concepts, data

types, operators, flow control statements, objects, classes, methods, arrays, strings, applications, applets, and graphics user interfaces.

CSCI 218 Programming II (3, F&S)
This course extends the concepts learned in Programming I. It covers some advanced features of Java including advanced graphical user interfaces, exceptions, threads, graphics, multimedia, input/output, and networking. Prerequisite: CSCI 211.

CSCI 226 Computer Architecture (3, S08)
Structure and internal organization of digital computers. Machine language and assembly language, representation of numbers, CPU organization, subroutines and linkage. Prerequisite: CSCI 211 or equivalent proficiency.

BADM 340 eCommerce (3, S07, S09)
A cutting edge designed to give you exposure, understanding, and know-how in the way the Internet is transforming and facilitating key functions of business. Exploration of the organizations that have succeeded and those that have failed. Understanding the eCommerce strategies companies employ. Covers the technological features that make eCommerce both possible and challenging. Implications in computer science, accounting, marketing, management, human resources, finance, economics, and international business.

CSCI 236 Data Structures and Algorithms (3, F)
This course covers the fundamental data structures of computer science and accompanying algorithms. Linked Lists, Stacks, Queues, Binary Trees, Priority Queues, Heaps and other ADTs will be included. Classical sorting and searching algorithms will be learned and implemented. Prerequisite: CSCI 218.

BADM 317 Management Information Systems (3, S07, S09)
Design, maintenance, monitoring of information systems. Include systems and audit concepts. Prerequisites: spreadsheet competency, ACCT 211, 212.

CSCI 326 Operating Systems (3, F08)
A study of computer architecture at the register level. Management of the processor, memory, peripheral devices, and information. Interrelationships of architecture and operating systems. Performance evaluation. Exposure to system manager responsibilities in UNIX and Windows. Prerequisite: CSCI 226 and CSCI 236 or permission.

CSCI 340 Databases (3, S08)
Introduction to relational databases. Fundamentals of database design and query design. Database management topics include security, integrity, and concurrency techniques. Use of relational database software (including SQL) for application projects. Topics include decision-based and object-based databases. Exposure to database manager responsibilities. Prerequisite: CSCI 218 or permission.

CSCI 420 Networking (3, 07)
An introduction to the basics of data communication and networking. Topics include the OSI model, physical processes used for digital transmission, standardization, local area networks, the network protocols, and network applications. Exposure to network manager responsibilities in UNIX and Windows NT. Prerequisite: CSCI 326 or permission.

BADM 421 Internship in Business (6, F & 3, S)
Supervised experience in a business firm combining practical activities with integrating studies. By application only. (Spring offering is for two days a week only.)

Intercultural Studies (major and minor)

Department of Intercultural Studies: Andrew F. Gallman, chair
Faculty: Jonathan E. Arensen; Marcus W. Dean, Richard K. Eckley; Andrew F. Gallman; Sherry W. Gallman; Benjamin L. Hegeman; Ronald J. Oakerson; Paul W. Shea

Major: (34-54 hours which includes a 26-30hour core plus either eight hours of electives or one 20-hour concentration. The concentration options include: international development, linguistics, missions, urban studies, TESOL, Spanish, French.)

General Information

The mission of the Intercultural Studies major is to prepare Christians to respond to key problems of global concern in culturally relevant ways that follow kingdom principles. The major, drawing heavily on the methodologies and perspectives of anthropology and related social sciences, integrates the theory of cross-cultural development work with experiential learning in cross-cultural settings. This major will provide competence for students seeking to serve in such fields as community development, relief work, health services, education, missions, and Bible translation in developing countries and inner-city context.

Students choosing to do a concentration are not required to take a minor. However, if you do not choose to do a concentration, then you will need to choose three electives. You will still be required to do a minor.

Major required courses – 7 1/2 Courses

INCL 201 Introduction to Global Issues	4
INCL/SOC 243 Cultural Anthropology	4
INCL 310 Intercultural Competencies	4
INCL 311 Intercultural Experience	0-4
Conversation-level Language	3-4
INCL/SOC 395 ST: Culture Change	4
INCL/POLS 336 Governance and Politics in Developing Countries	4
INCL 482 Senior Capstone: Intercultural Seminar	2

Electives – 2 Courses

Any course listed in the concentrations or listed but not taken as part of the core.

Business and Economics Department

- BADM 313 International Business
- ECON 212 International Economics

Foreign Language Department

- Another 300+ level Foreign Language course

History and Political Science Department

- HIST 223 Latin American History
- HIST 249 African History
- HIST 251 East African History
- HIST 355 East Asia: History and Politics
- HIST 357 Russia and the USSR: History and Politics
- POLS 220 World Regional Geography
- POLS 240 Comparative Government

Music Department

- MHS 254 Music of World Cultures

Psychology and Sociology Department

- SOC 293 East African Cultures
- SOC 330 Culture, Ethnicity, and the Family
- SOC 338 The Sociology of Religion
- SOC 361 Majority & Minority

Social Science Methodology

- SOC 309 Statistics
- SOC 312 Social Science Research Methods

Optional International Development Concentration – 5 Courses

INCL/MISS 231 Global Relief and Development	Course 1
POLS 312 Social Science Research Methods	Course 2
INCL/POLS 320 Community Organization and Development	Course 3
Course in the Go ED program	Course 4
Course in the Go ED program	Course 5

Optional Islamic Studies Concentration – 5 Courses

This concentration aims at teaching students in three strategic locations: Houghton College, North Africa and London, England. Students doing this optional concentration in Islamic Studies will be required to take Arabic language studies in an approved off-campus Arabic context. Options include DMG in Fez, Morocco, and the MESP in Cairo, Egypt. In addition to Arabic, students will take 4 core courses and choose 1 further elective. One core and one elective will be taught in London, England, both as Mayterm courses.

Title	Teaching Location	Prof	credits
CORE			
INCL/MISS 240 Intro to Islamics	Houghton	BLH	3-4
INCL/MISS 241 Contextual Approaches to Islam	Houghton	BLH	3-4

INCL/MISS 322 History of Islamic theology and movements	London (Mayterm)	AB, MESP	3-4
INCL/POLS 333 War & Terrorism in the Middle East: History and Politics	Houghton	DB, MESP	3-4
Elective (choose 1)			
INCL/MISS 440 Unorthodox & Folk Islam	Houghton	PWS, BLH	3-4
INCL/MISS 441 Islam in North America	Houghton	PWS, BLH	3-4
INCL/MISS 442 Globalization & Islamization	London (Mayterm)	AB	3-4
Peoples and Culture of the Middle East	MESP	MESP	3-4

Optional Linguistics Concentration – 5 Courses

Basic Core: (4 Courses)

LING 220 Introduction to Linguistics	4
LING 322 Phonetics	4
LING 323 Phonology	4
LING 333 Grammar	4

Special Interests: (choose one)..... 4

EDUC/INCL 236 Language, Culture, and Human Development
LING 312 Sociolinguistics
LING 350 First and Second Language Acquisition
ENGL 355 Modern English Grammar in Historical Perspective
LING 355 Theory and Practice of Bilingual Education
LING 440 Theory and Practice of TESOL Methodologies

Optional Missions Concentration - 18 hours

Basic Core: (6 hours)

MISS 221 History of the Global Christian Movement	3
MISS 222 The Contemporary Church in Missions	3

Biblical/Religion Core: (6 hours)

Required:	3
MISS Missions in Biblical and Theological Perspective	

Bible/Missions/Theology/Religion	3
Any BIBL course, level 200 or above	
MISS 321 World Religions	
THEL 214 Cults and New Age	
THEL 215 Christian Apologetics	

Skills/Tools Core: (6 hours any two)

Ministry skill.....	3
Choice of courses in Educational Ministry or Religion that enhance personal or ministry skills:	
EDMN 325 Bible Study and Teaching Methods	
EDMN 422 Leadership in Ministry	
URMN 212 Urban Ministry	
MISS 395 Special Topics in Missions	
and other options available.	

Cross-cultural Depth	3
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Choice of courses to enhance cross-cultural abilities:

HIST 223 and other Regional Histories
MHS 254 Music of World Cultures
Linguistics or Language courses
relevant courses from Off-Campus Study programs
MISS 395 Special Topics in Missions and other options.

Optional Urban Studies Concentration – 18 hours

Urban Ministry Core: (6 hours)

URMN 212 Urban Ministry	3
URMN 250 Evang. and Social Action in the Urban Context	3

<u>Urban Studies Core:</u> (6 hours)	
SOC 295 Urban Policy	3
SOC 361 Race and Ethnicity (Majority Minority Relations)	3
<u>Skills/Tools Core:</u>.....6	
Similar to missions concentration. Through counsel and advisement, students are allowed to sharpen their skills in appropriate areas of ministry or interest from administration to ministry.	

Optional French Concentration - 18 hours

<u>Basic Core:</u> (9hrs)	
FREN 302 French Conversation & Reading	3
FREN 305 French Phonetics.....	3
FREN 350 Advanced French Grammar and Composition.....	3
<i>(FREN 305 or 351 may be taken in either order after FREN 302)</i>	
<u>Civilization/Culture:</u> (choose one)	3
FREN 421 French Civilization	
FREN 461 Advanced French Conversation	
<u>Literature:</u> (choose one of the following)	3
FREN 321 Survey of French Literature	
FREN 407 French Literature of the 20 th Century: Drama	
FREN 408 French Literature of the 20 th Century: Novel	
FREN 409 French Literature of the 19 th Century	
<u>Electives:</u> (choose one of the following or any of the above not yet selected).....	3
FREN 315 Paris: Capital of French Culture (Mayterm)	
FREN 391 Independent Study (by permission of the instructor)	
FREN 395 Special Topics (in the target language)	
Approved study abroad program:	

Optional Spanish Concentration - 18 hours

<u>Basic Core:</u>		9
SPAN 302 Spanish Conversation & Reading		
SPAN 305 Spanish Phonetics		
SPAN 350 Advanced grammar and Composition		
<u>Electives:</u>		9
One course in Latin American Civilization*		
One course in Spanish Civilization*		
One course in Latin American or Spanish Literature		

*(*a Mayterm course in Latin America or Spain may substitute for ONE of the civilization elective requirements)*

Optional TESOL Concentration - 5 courses

Choose one of the following two: (course 1)	
LING 220 Introduction to Linguistics	
LING 351 Linguistics for TESOL	
LING 322 Phonetics (course 2)	
LING 350 First and Second Language Acquisition (course 3)	
ENGL 355 Modern English Grammar in Historical Perspective (course 4)	
LING 440 Theory and Practice of TESOL Methodology (course 5)	

Minor in Intercultural Studies - 15 hours

INCL 201 Introduction to Global Issues.....	4
INCL/SOC 243 Cultural Anthropology	4
INCL 310 Intercultural Competencies.....	4
INCL 311 Intercultural Experience	0-4

Course Descriptions

INCL 201 Introduction to Global Issues (4, F, S)
Focuses on current global trends and issues. Students examine responsible alternatives seen from an interdisciplinary perspective based on biblical justice and mission. Topics include: poverty, disease, hunger, under-development, illiteracy, corruption, climate change, environmental degradation, religious and ethnic conflict. Students examine responses by global Christians both individually and collectively. This is the entry level course for the Intercultural Studies major.

INCL 211 Intercultural Transition and Adjustment (1, F, S, M)
Using the transition model for adjusting to another culture, the student is prepared to move into and adjust to another culture, and to gain a basic understanding of the culture. Cross-cultural communication, cross-cultural conflict, and cultural values are also examined as they relate to living and working in another culture. Required for Spanish and French majors (they may take the INCL 310 course) and encouraged for any student going on a study abroad experience. Is usually offered as a part of INCL 310 or may be offered as a course by itself in Mayterm.

INCL/MISS 231 Global Relief and Development (3-4, S)
Survey of the issues and principles involved in addressing the community level human crises in today's world - poverty, hunger, refugees, disease, and underdevelopment. Introduction to a theology of compassion, causes, principles, and case studies. Special attention given to preparing for role of listener, facilitator, and change-agent.

INCL/MISS 240: Introduction to Islamics (3-4, S)
Muhammad's life and writings are the foundations of Islam. The Islamic faith will be appraised through a historical and primary source approach where students will read through the entire Qur'an in chronological fashion and a significant portion of the Hadiths. The students' mastery of Muhammad's life, of Quranic vocabulary and a confident grasp of Quranic theology will give them a strategic appreciation of Islamic history and the present global Muslim community issues. This course is a prerequisite to the others.

INCL/MISS 241: Contextual Approaches to Islamics (3-4, S)
For over 1400 years, Islam and Christendom have frequently engaged in rival forms of civilization encounters and/or clashes: invasions, polemics, diplomacy, colonization, dialogue, commerce, academic research, and that according to the context of the era. Relying on comparative, historical and missiological methodologies, students will study the ever-changing yet often-repeated approaches to Muslims in chronological appearance and that from various Christian communities: the Oriental churches, the Byzantine Orthodox churches, the Roman Catholic Church and the Protestant churches, with a especially emphasis on the current Evangelical 'contextualized' approaches. Students will gain a strong confidence and learn wise diplomacy in sharing Jesus to Muslims in a wide variety of means.

INCL /SOC 243 Cultural Anthropology (3-4, F)
Cultural and social aspects of human behavior; comparison of cultures.

INCL 250 Culture and History of Ethiopia (3)
(See Off-Campus Programs - GO Ed for course description.)

INCL/INDS 310 Intercultural Competencies (3-4, F, S)
Explores the knowledge, attitudes, and skills for transitioning into, adapting to, working in, and functioning successfully in an intercultural context. Key topics include cultural values, intercultural communication, researching culture, being a change agent, dealing with conflict, and working with individuals from another culture. Prerequisite: Introduction to Global Issues and Cultural Anthropology, or permission of instructor. Required for INCL/INDS 311.

INCL 311 Intercultural Experience (0-4, OD)
A cross-cultural experience in an approved setting in an area of service related to student's concentration or field of interest. Preliminary studies and research, the dynamics of living and serving, ongoing mentorship, and periodic reflection will result in journaling and final summary synthesis research paper. This experience may be linked to formal study-abroad programs, official internship affiliation, or pre-approved individual arrangements. Prerequisite: INCL 310.

INCL/EDUC 318 Intercultural Literacy and Development in Zambia (M, 3)
This course will be an intense immersion experience in Zambia. There will be readings, lectures and discussions on historical background, the culture, social issues, the educational system, and faith-based development work. There will be visits and excursions to places of cultural interest. There will also be an opportunity for service learning. The primary service learning opportunity will be to provide literacy and numeracy tutoring to orphans and vulnerable children who have limited access to formal education.

INCL/POLS 320 Community Organization and Development (3-4, F)
A comparative study of how local communities organize themselves to manage natural resources and provide collective goods and sources. Considers issues related to decentralization and sustainable development. Emphasis in analytic approaches to problem-solving. Prereq: INCL 231.

INCL/MISS 322 History of Islamic Theology and Movements (3-4, M)

Following the death of Muhammad, issues of theological orthodoxy and governmental orthopraxy flourished in a context of conflict and growth. Students will appraise the historical developments of Muhammad's life and his revelations in the areas of theology, philosophy, jurisprudence, governance, literature, and culture. Relying on primary sources and historical disciplines, students will study the wide history of Islamic thought up until the OPEC crisis of 1973-74. Students will gain a confidence in grasping and discerning the many variants within the so-called unified Islamic ummah.

INCL 327/ESCI 202 Ecological Sustainability in Community Development (3)
(See Off-Campus Programs – GO Ed for course description.)**INCL/POLS 333 War & Terrorism in the Middle East: History and Politics** (3-4, F07, F09)

This course explores three phenomena: (1) war and terrorism in general and in the Middle East in particular; (2) the history & politics of this region (with forays into geography, religion, society, culture & economics) and (3) country-specific histories and politics. The course offers in-depth analyses concerning the religion and terrorism nexus, the Arab-Israeli conflicts and peacemaking, and the theory and practice of pacifism and just war. Liberal Arts Exploration - Social Science.

INCL/POLS 336 Governance and Politics in Developing Countries (3-4, OD)

A study of patterns of governance and politics typical of developing countries with an emphasis in relationships between governance and development. Prerequisite: INCL 231.

INCL 340 African Traditional Culture and Religion (3)

(See Off-Campus Programs – GO Ed for course description.)

INCL/MISS 440 Unorthodox and Folk Islam (3-4, TBA)

Classical Islam is very resistant to creative theological variants within the Islamic ummah and brands them as deviant heresies, and of which Folk Islam is the most common expression. Yet 'unorthodox' expressions, even so-called 'secular Islam', are far more prevalent forms of Islam among the youth and womenfolk than the orthodox interpretations and Houghton students and graduates are far more likely to encounter these unorthodox expressions. This requires our students to grasp the diverse roots of widespread Islamic heterodoxy, syncretism, occult expressions, spiritual warfare, and secularism.

INCL/MISS 441 Islam in North America (3-4, TBA)

The Islamic movements in North America are unique in being both very recent and limited to Afro-Americans and immigrants. That is changing given that international funding for a vibrant political Islam in America is among the strongest emerging religions. Students will explore the various sociological expressions, their political aspirations and their texts. Special attention will be given to various Christian ministries to Muslims in North America.

INCL/MISS 442 Globalization and Islamization (3-4, M)

Among the three most vibrant international movements in the emerging 21st century are Christianity, Islam and Globalization and the most contested nexus are in the techno-secularized cities of the world. Students will focus specifically on the post-colonial conflicts and integration efforts of Muslims in the global communities, and the impact of Globalization on Islamic societies. Attention will be given to recent international clashes between globalized secularism and Muslims, various political and Christian responses and the need for a Christ-centered confident response to both Globalization and Islamization.

INCL 345 Peacebuilding: Genocide and Religious Diversity (3)

(See Off-Campus Programs – GO Ed for course description.)

INCL 482 Senior Capstone: Intercultural Seminar (2, F)

Joint weekly discussion sessions of all senior majors aimed at reflection on critical broad principles and fine-tuning of abilities for intercultural service. Program faculty assumes team leadership and preparation of topics and format, and they each present a summary session on key issues for the entire seminar. Students each present an approved paper on area of interest stemming from studies and intercultural experience. Several weeks may be set aside for specific disciplines to meet separately for capstone discussions in their field.

INCL 291, 391, 491 Independent Studies (1-4, OD)**INCL 195, 295, 395, 495 Special Topics** (1-4, OD)

Topics offered according to interest and demand.

International Relations (major and minor)

Department of History and Political Science: Peter Meilaender, chair

Program Director: B. David Benedict

Faculty: B. David Benedict, Robert Black

Web site: campus.houghton.edu/orgs/history/dept_hist_poli.html

Phone: 585.567.9440

Major: (38-39 hours; 6 hours prerequisite)

Minor: (15 hours; 3 hours prerequisite)

General Information

This major is an interdisciplinary study of international relations from international politics, international economics, and world community perspectives.

Prerequisites:

ECON 210 Microeconomics*3

POLS 309 Statistics3

(*counts for first level Integrative Studies credit for social science choices)

The major consists of 38 hours.

Foundational Course:

POLS 230 Introduction to International Relations3

Skills Courses:

COMM 325 Intercultural Communication3

Foreign Language (Conversation and Readings)3

(Students must have language instruction or demonstrate ability at the conversation and reading level in one foreign language)

POLS 312 Social Science Research Methods3

INDS 310 Intercultural Competencies3

(is a prerequisite for the Intercultural Experience)

Core Courses: Students must complete six core courses.

Choose *two* International Politics courses:6

POLS 240 Comparative Government

POLS 395 International Relations Theory

POLS 395 International Law and Organization

POLS 316 American Foreign Policy

POLS 395 Governance and Politics in Developing Countries

Choose *two* International Economics/Business courses:6

ECON 212 International Economics

ECON 237 Comparative Economic Systems

ECON 211 Macroeconomics

BADM 313 International Business

Choose at least one (3 hours), but not more than two (6 hours), regional histories:

HIST 223, 224 Latin American History3, 3

HIST 249 African History3

HIST 251 East African History3

HIST 325,326 European History3, 3

POLS/INCL 333 War & Terrorism in the Middle East3 to 4

HIST/POLS 355 East Asia: History and Politics3

HIST/POLS 357 Russia and USSR: History and Politics3

HIST 430, 431 English History3, 3

Or a regional history taught during the Intercultural Experience3

If needed, choose a sixth course from the above Core Course offerings or an equivalent taught during the Intercultural Experience.

Capstone Courses:

INDS 311 Intercultural Experience (Internship)3 to 6

INCL 482 Senior Intercultural Seminar, **or**2

POLS 480 Senior Politics Seminar3

Total: 38-39 hours

Minor: (15 hours; 3 prerequisites)

Prerequisite:	
ECON 210 Microeconomics.....	3
Minor:	
POLS 230 Introduction to International Relations	3
International Politics.....	3
(choose one course from list of Int'l Politics courses in major)	
International Economics	3
(choose one course from list of Int'l Economics courses in major)	
And both these courses:	
INDS 310 Intercultural Competencies	3
INDS 311 Intercultural Experience	3

Course Descriptions**INDS 310 Intercultural Competencies** (3, F&S)

Transition model, cultural shock, cross-cultural conflict, and aspects of intercultural communication as influenced by value dissonance; to enable students to develop realistic, positive expectations about intercultural and interpersonal relationships. Required for students taking INDS 311.

INDS 311 Intercultural Experience (3-6, OD)

A cross-cultural experience in an approved setting in an area of service related to student's concentration or field of interest. Preliminary studies and research, the dynamics of living and serving, ongoing mentorship, and periodic reflection will result in journaling and final summary synthesis research paper. This experience may be linked to formal study-abroad programs, official internship affiliation, or pre-approved individual arrangements. Prerequisite: INDS 310.

Islamic Studies (minor)

Department of Intercultural Studies: Andrew Gallman, chair

Faculty: Andy Bannister, Marcus Dean, Benjamin Hegeman, Paul Shea,

Minor: (15-20 hours)*Minor (2 core + 2 elect)*

INCL/MISS 240 Intro to Islamics	Houghton	3-4
INCL/MISS 241 Contextual Approaches to Islam	Houghton	3-4

Minor Electives (2)

INCL/MISS 440 Unorthodox & Folk Islam	Houghton	3-4
INCL/MISS 441 Islam in North America	Houghton	3-4
INCL/MISS 442 Globalization & Islamization	London (Mayterm)	3-4

Course Descriptions

See Intercultural Studies

Latin (see Foreign Languages)

Linguistics (minor)

Department of Intercultural Studies: Andrew Gallman, chair

Faculty: Andrew Gallman, Sherry Gallman, Jon Arensen

Minor: (15 hours) This minor is taught in conjunction with the Summer Institute of Linguistics (Wycliffe Bible Translators). These linguistics courses are also offered as an optional concentration in the Intercultural Studies major.

Required courses:

LING 220 Introduction to Linguistics	3-4
LING 322 Phonetics	3-4
LING 323 Phonology I.....	3-4
LING 333 Grammar I.....	3-4

Linguistics courses are useful to anyone expecting to learn or work with languages; foreign language majors, English as a second language students, people interested in TESOL as a career, people interested in missions and international business, education majors facing multilingual classrooms, are a few examples. Philosophy and psychology students find the areas of semantics and phonology to overlap with their fields of interest. Math majors have found the analysis procedures of linguistics to require similar thinking skills to higher mathematics, and linguistics has provided them a real world application of mathematics training.

Course Descriptions**ENGL/LING 220 Introduction to Linguistics** (3-4, F, S)

An introduction to the basic elements of linguistics. Emphasis on phonology (the study of sounds), morphology (the study of word formation), syntax (phrase and sentence formation), and semantics (meaning in language). Liberal Arts Exploration-Humanities.

LING 312 Sociolinguistics (3-4, S)

Focuses on language use patterns in multilingual societies: language maintenance and death; language attitudes; language planning; Pidgins and Creoles.

LING 322 Phonetics (3-4, F)

An introduction to the theory and practice of articulatory phonetics; intensive drill in definition, recognition, production, and transcription of the whole range of sounds used in human speech.

LING 323 Phonology I (3-4, F)

The principles involved in the analysis of sound systems with extensive practice in the phonological analysis of material from a wide variety of languages. Prerequisite/co-requisite: LING 322 Phonetics.

LING 333 Grammar I (3-4, S)

Principles and techniques of the analysis of morphological and syntactic structures of language.

LING 350 First and Second Language Acquisition (3-4 Summer)

Linguistic, psychological, and sociocultural dimensions of language learning are explored, especially as they relate to acquisition of a second language and TESOL instruction. Current theories and research are reviewed and analyzed in light of the reality of the language learning experience. (Prerequisite/Corequisite: LING 220 or 351, or permission of instructor.)

EDUC/LING 351 Linguistics for TESOL (Teaching English to Speakers of Other Languages) (3-4, F)

This course will examine some of the unique challenges of English structure (phonological, morphological, syntactical, semantics and pragmatics) and the transfer problems that non-native speakers may have. There will also be an introduction to first and second language acquisition theories.

LING 355 Theory and Practice of Bilingual Education (3-4, OD)

Designed as an introduction to bilingual education and bilingualism. Study of the sociolinguistic and psycholinguistic issues that surround bilingualism and bilingual education. An attempt is made to balance the psychological and the sociological, the macro education issues and the micro classroom issues, the linguistic and the sociopolitical, and to balance discussion at the individual and societal levels. Recommended prereq: LING 220.

LING 360 Conversational Swahili (3-4, M)

This course is intended to prepare the student to carry on a conversation in simple Swahili. A basic grammar will be taught that will meet most conversational needs. The vocabulary will be limited to the kind of words that would commonly be used in rural village life in Tanzania. The focus in class will be on hearing and speaking Kiswahili.

LING 440 Theory and Practice of TESOL Methodology (3-4, Summer)

This course will explore TESOL methodology and classroom techniques, as well as the opportunity to put them into practice in a weekly practicum. (Prerequisite/Co-requisite: LING 220 or 351 and LING 350, or permission of instructor.)

LING 295, 395, 495 Special Topics (1-4, OD)

These offerings will take advantage of faculty expertise to focus on advanced linguistic topics of interest to the student body. The first offering will be during the Houghton in Tanzania program, focusing on African language structure. The course may be repeated for different topics. Prerequisites to be determined at the time of offering.

LING 291, -2; 391, -2; 491, -2 Independent Study (1, 2, 3 or 4)

Mathematics (major and minor)

Department of Mathematics and Computer Science: Richard Jacobson, chair

Faculty: Kristin Camenga, Wei Hu, Richard Jacobson, David Perkins

Web Site: campus.houghton.edu/orgs/mathematics/

Phone: 585.567.9280

Major: (28 hours)

Required courses

MATH 181, 182 Calculus I, II.....	8
MATH 261 Linear Algebra.....	4
MATH 482 Senior Capstone: Mathematics Seminar.....	3
Choose one course from:	3
MATH 462 Algebra I	
MATH 452 Topology	
Choose one course from:	3 or 4
MATH 321 Multivariate	
MATH 422 Real Analysis	
MATH 471 Complex Analysis	
MATH 295,395,495 Special Topics	
Choose one course from:	3
MATH 214 Discrete Math	
MATH 231 Probability	
MATH 232 Mathematical Statistics	
MATH 251 Modern Geometries	
Choose 3 or 4 hours from courses numbered 190 or above.....	3 or 4
It is highly recommended that teachers of math choose	
MATH 251 Modern Geometries	
MATH 462Algebra I	
MATH 281 History of Mathematics	

Very often, math majors will take more math courses than the preceding minimum requirement. This is especially true for those planning to go to graduate school.

Teaching Mathematics – Childhood (Elementary) or Adolescence (Secondary): See Education

Minor: (14 hours numbered 181 or above)

General Information

Many of our graduates enter the teaching profession. However, the math majors are also well prepared to pursue graduate work in engineering, computer science, law, theology, and the medical profession, as well as mathematics. Most of our students who complete a PhD program in mathematics are now college professors. Those who do not pursue an advanced degree find employment in a multitude of fields, ranging from the banking profession to Bible translators with Wycliffe. A number of our math majors find careers in the computer field.

Course Descriptions

MATH 115 College Mathematics (3, F&S)

A contemporary approach to the basic ideas of calculus, beginning with a discussion of topics that precede calculus, including linear, polynomial, and exponential functions. The calculus portion discusses velocity, tangent lines, and areas. Incorporates peer group work with a strong emphasis on graphing technology. With this course, students will become acquainted with calculus, the math that helped create the industrial revolution and is the driving force behind modern technology. Meets Liberal Arts Foundation - Mathematics as well as prepares students for calculus.

MATH 181 Calculus I (4, F&S)

Single variable calculus of algebraic and trigonometric functions. Applications involving maximum, minimum, and related rates. Intensive use of graphing calculators and computer software. Prerequisite: MATH 115 or equivalent proficiency. Liberal Arts Foundation or Exploration - Mathematics.

MATH 182 Calculus II (4, F&S)

Areas, volumes, centroids, integration techniques, calculus of transcendental functions, polar coordinates, parametric equations, infinite series. Prerequisite: MATH 181. Liberal Arts Foundation or Exploration - Mathematics.

MATH 190 Mathematical Applications and Issues (2, F07, F09)

A survey of various problems encountered in present day mathematics as well as vocational opportunities available to mathematicians. Pre-requisite: MATH 181 or permission.

MATH 214 Discrete Mathematics (3, S08, S10)

Topics include: sets, functions, relations (incl. Partial order), methods of propositional logic, introduction to predicate logic, counting, recurrence relations, asymptotic analysis, proof (incl. Induction), introduction to probability, graphs.

MATH 231 Probability (3, F07, F09)

Combinatorics, independence, conditional probability, discrete and continuous random variables, expected value and variance. Prerequisite: MATH 182.

MATH 232 Mathematical Statistics (3, F06, 08)

Probability theory, random variables, sampling, estimation, hypothesis testing and linear regression. This course emphasizes the mathematical rather than the applied features of statistics. Prerequisite: MATH 182.

MATH 241 Differential Equations (3, F)

Methods of solution and applications of principle types of differential equations. Prerequisite: MATH 182.

MATH 251 Modern Geometries (3, S)

A survey of geometry including advanced Euclidean geometry and an introduction to non-Euclidean geometries. Prerequisite: MATH 182.

MATH 261 Linear Algebra (4, S)

Linear algebra: vector spaces, linear mappings, inner products and matrices. Prerequisite: MATH 181. Liberal Arts Foundation - Mathematics.

MATH 281 History of Mathematics (3, M)

A contextual study of the history of mathematics and some of the classical problems. Prerequisite: MATH 182.

MATH 321 Multivariate Calculus (4, F)

Infinite series, space geometry, vectors, vector function, function of several variables, partial differentiation, multiple integration. Prerequisite: MATH 182.

MATH 331 Numerical Analysis (3, S08, S10)

Representation of numeric data. Error analysis, mathematical basis, and limitations of techniques relating to selection of method. Topics: linear and nonlinear systems, curve fitting, numerical calculus, programming in MatLab. Prerequisite: MATH 181, 182, 261, CSCI 211.

MATH 422 Real Analysis (3, F06, F08)

Structure of the real number system, theory of limit, continuity, differentiation, Riemann integration, and infinite series. Prerequisites: MATH 321 and MATH 261, or permission.

MATH 452 Point Set Topology (3, S08, S10)

Open and closed sets. Connected, compact, and metric topological spaces. Prerequisite: MATH 261.

MATH 462 Algebra I (3, S07, S09)

Groups, Sylow theorems, rings and fields. Prerequisite: MATH 261.

MATH 471 Complex Analysis (3, S07, S09)

Complex number system, limits, differentiation and integration in the complex plane, complex series. Prerequisites: MATH 321 and MATH 261, or permission.

MATH 482 Senior Capstone: Mathematics Seminar (3, S)

A capstone course which draws on many other courses. Emphases on formulating, solving, and explaining challenging problems in both verbal and written form. For seniors, except by permission.

MATH 391, -2; 491, -2 Independent Study (1, 2 or 3)

MATH 295, -6; 395, -6; 495 **Special Topics in Mathematics** (1, 2 or 3)
A survey of topics not covered in other mathematics classes, including graph theory, computation theory, infinite cardinalities, and Galois theory. Phi, pi, e and i; mathematical modeling; math and programming.

MATH 496 **Honors in Mathematics** (3)

Medical Technology - with a major in Biology (BS)
Department of Biology: James M. Wolfe, chair
Faculty: As determined by chair.
Adjunct Faculty: Joseph King, Brian Spezialetti
Web site: campus.houghton.edu/orgs/biology
Phone: 585.567.9280

The program in medical technology which leads to a BS in biology requires that the student complete 94 hours of course work at Houghton College and then transfer to Robert Packer Hospital (Sayre, PA) or another approved program to complete a major in biology and a minor in chemistry.

The following courses must be taken at Houghton:

All integrative studies requirements	
BIOL 151, 152 General Biology	.....8
BIOL 242 Microbiology	.....4
BIOL 251 Genetics	.....4
BIOL 281 Introduction to Research	.....1
BIOL 365 Immunology	.....4
CHEM 151, 152 General Chemistry	.....4, 4
CHEM 241 Organic Chemistry I	.....4
CHEM 277 Analytical Chemistry	.....4
MATH 115 College Mathematics	.....3
or	
MATH 181 Calculus I	.....4

If a student plans to attend a non-affiliated medical technology program, s/he must petition for approval of the program during his/her junior year. Enrollment in hospital programs is limited by small class size, and there is no guarantee of admission. Usually a cumulative grade point average of at least 3.0 is needed in order to be a successful applicant. Students who choose not to continue in the medical technology (clinical laboratory science) program or who are not admitted to the professional curriculum may complete a year in biology or general science during the senior year.

Following successful completion of the senior year in the hospital program, students are qualified to sit for the national certification exams. These are administered by the Board of Registry of Medical Technologists and the National Certification Agency for Medical Laboratory Personnel.

Ministry – See the following headings:

- Christian Ministries (AAS)**
- Educational Ministries (incl. Youth Concentration option)**
- Missions**
- Pastoral and Church Ministries Program (AAS), in Adult Learning Opportunities section**
- Religion (includes Ministerial Concentration option)**
- Sports Ministry**
- Urban Ministry**

Missions (minor, see also Intercultural Studies mission concentration)
Department of Intercultural Studies: Andrew Gallman, chair
Faculty: Ben Hegeman, Kristina LaCelle-Peterson, Paul Shea
Web site: campus.houghton.edu/orgs/rel-phil/
Phone: 585.567.9477
Minor: (12 hours) Most students who minor in missions will include the highly recommended Cross-Cultural Field Experience in addition to the 12 hours of regular course work.

Required courses:

MISS 221 History of the Global Christian Movement	.....3
MISS 222 The Contemporary Church in Missions	.....3
Minor elective credit chosen from:	.....6
MISS 231 Global Relief and Development	
MISS 311 Cross-Cultural Field Experience	
MISS/THEL 321 World Religions	
MISS 341 Missions in Biblical and Theological Perspective	
MISS 395 Special Topics in Missions	
THEL 214 The Cults and New Age	
COMM 325 Intercultural Communication	
LING 220 Introduction to Linguistics	
SOC 243 Cultural Anthropology	

Course Descriptions	
MISS 221 History of the Global Christian Movement	(3, F)
Missions from apostolic days to present. Changing concepts of missions. Contributions of outstanding leaders.	
MISS 222 The Contemporary Church in Missions	(3, S)
Survey the contemporary state of the global church and its mission; introduction to theology of missions, goals, and strategies; special attention to current trends, issues, and research.	
MISS 231 Global Relief and Development	(3, S)
A survey of the underlying theology, principles, and methods involved in addressing the human crises in today's world – poverty, hunger, disaster, disease, refugees, and underdevelopment. Focuses on Christians' responsibility as change-agents at the community level. An interdisciplinary approach incorporates theology, missiology, economics, and social sciences seeking to balance theory with concrete case studies and modest hands-on experience and debriefing.	
MISS 300 Christianity and Postmodernism	(3, F)
(See course description in Off-Campus Programs-Australia section.)	
MISS 311 Cross Cultural Field Experience	(3)
Introduction to mission work through pre-approved cross-cultural ministry either overseas or in North America. Guided readings and a project are required in consultation with the instructor. INDS 211 Intercultural Transition and Adjustment is recommended.	
MISS 321 World Religions	(3, S)
Background, major teachings of Eastern religious and philosophical thought. Emphases on understanding and evaluating non-Western ideas and practices.	
MISS 325 Life in the City	(3, F)
(See course description in Off-Campus Programs-Australia section.)	
MISS 341 Missions in Biblical and Theological Perspective	(S, 06)
An examination of the biblical foundations of missions. The course will explore the extensive Old Testament roots of missions and the New Testament and development. It will build a biblical view of culture, worldview, the nature and function of the church, and other relevant topics. Attention will be paid to the application of appropriate principles of biblical theology, exegesis, hermeneutics, and contextualization and to the development of a diachronic approach to scripture.	

MISS 395 Special Topics in Missions	(3, OD)
Topics offered according to interest and demand.	
MISS 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2 or 3 hours)

Music (undergraduate majors and minors)*

The Greatbatch School of Music: Ben. R. King, director

Faculty: Judy A. Congdon, Paul T. DeBoer, Robert J. Galloway, Mark D. Hijleh, Brandon P. Johnson, Ben R. King, Gregory A. Magie, William J. Newbrough, B. Jean Reigles, Gary M. Stith

Part-time & Adjunct: Amanda Young Cox, Ken Crane, Chisato Eda, Nan Gullo, Virginia Halberg, Kelley Hijleh, Lynn Hileman, Sharon Johnson, Paul Kroll, Donna Lorenzo, Anton Machleder, Jun Qian, Karla Ordonez, James Tiller, Rintaro Wada; others as appropriate from the Buffalo and Rochester Philharmonic orchestras

*See Graduate Bulletin for information regarding graduate curricula, faculty, and courses.

Web site: music@houghton.edu

E-mail: campus.houghton.edu/orgs/music/

Mission

Within a Christ-centered, challenging, liberal arts education, The Greatbatch School of Music, Houghton College endeavors to produce graduates who, through commitment to musical excellence and to intelligent articulation of the integration of faith and music in their lives, can be effective musical practitioners and advocates in the Christian community and in the broader world.

Accreditation

The Greatbatch School of Music is a full member of the National Association of Schools of Music, and its curricula conform to NASM published standards.

Majors: Music BA (38-39 hours); Performance BMus (hours variable); Music Education BMus (hours variable); Composition BMus (hours variable)

Minors: Performance and contract minors available (16 hours).

Liberal arts study in the Greatbatch School of Music, Houghton College

Liberal arts students may study privately on a credit basis, may elect major or minor concentrations in music, and may participate in music ensembles. No more than eight hours of applied music may count toward graduation for students who are not majoring or minoring in music.

Liberal Arts Music Major (BA)

Course requirements (listed in catalog order):

MAP LL10-25	Applied Music (6 hours at or above LL20)	.....6
MUS —	Ensembles (Each semester of residence, with or w/o credit)	.....0
MHS 231-334	Music History and Literature I-IV (any 2)	.....5-6
MLT 211	Music & Listening: an introduction	.....3
MUS 250	Music & Christian Perspective	.....2
MTH 227, 228, 327, 328	Aural Skills I-IV	.....4
MTH 225, 226, 325, 326	Theory I-IV	.....12
—	Electives in Music (211 or above)	.....6
	Total:	.....38-39

Senior Capstone Requirement

As a culminating experience in the music major, the degree candidate shall:

1. Prepare and successfully present a public performance of literature on the principal instrument, either as a solo half-recital or as a lecture-recital, with accompanying approved program notes, or
2. Prepare a paper or project examining some aspect of music, either alone or in relationship to another field of inquiry, or
3. Participate in an internship appropriate to the major or majors chosen.

The BA degree in music can be combined with other curricula in a double major. Business administration, communication, and psychology are combinations often selected. These combinations are valuable for those wishing to work in some aspect of the music industry. Suggested course sequences may be found in the Music Student Handbook. An audition is required to establish an appropriate performance course level.

For those interested in full-time Christian service with music as a component, a double major with either Bible or educational ministries (see those respective majors) is recommended. With this major, directed electives in church music should be chosen. An audition is required to establish an appropriate performance course level.

BA music majors must maintain membership in a major ensemble (see ensembles section) with or without credit. Choice of ensemble is made with the School of Music director's approval.

The recital attendance requirement is ten performances per semester for BA majors, for any four semesters of residence.

Bachelor of Music - Entrance requirements for music majors

Students planning to pursue bachelor of music curricula should request a special music application when applying for admission to the college. An entrance audition in the major performing area is required. A schedule of such auditions is available from The Greatbatch School of Music. A tape-recorded audition may be sent, by permission of the director, in cases where an in-person audition is not possible. All appropriate forms, guidelines, supplemental information, and scholarship information are available through the music office. Call 800.777.2556 or send an e-mail to request these.

Transfer students

Students transferring to Houghton and intending a bachelor of music curriculum should follow the entrance and application procedures outlined above. In addition, transfer students must complete at least four semester hours at Houghton in their major applied area, regardless of achievement or previous hours completed.

Integrative Studies Requirements - Bachelor of Music Curricula

As part of all bachelor of music curricula, students are required to have 30-36 hours of integrative studies credits, including the following:

FYI (First-Year Introduction)	.....1
Biblical Literature	.....3
Principles of Writing	.....3
Research requirement	.....0
Foreign Language (see note*)	.....3-12
Literature of the Western World	.....3
Western Civilization	.....4
Lifetime Wellness or Activity course	.....1
One advanced Bible course or Intro to Christianity	.....3

*The minimum requirement for Music Education-Instrumental (MEI) and Composition majors is three hours of beginning foreign language. The minimum requirement for Music Education-Voice (MEV) majors, and for Instrumental Performance majors, is six hours of foreign language, normally either German (preferred) or French. The minimum requirement for Vocal Performance majors is 12 hours of beginning language in French and German. Music majors may satisfy these requirements via placement exam, CLEP, or AP exam.

Music Education majors add:

Introduction to Psychology	.....3
Physics of Music	.....2

Add additional hours from liberal arts foundation or liberal arts exploration to equal 36 hours. (See Integrative Studies section.)

Bachelor of Music - Senior Capstone Experience

As a culminating experience in any bachelor of music curriculum, the degree candidate shall prepare and successfully present one or more public performances of literature on the principal instrument, either a solo half-recital (music education curricula), the junior-senior recital sequence MUS 385/485 (performance curricula), or a full senior composition recital (composition curriculum). For music education majors the successful completion of music student teaching and its attendant seminar (MED 405, 419) are also components of the capstone.

Bachelor of Music in Composition

The composition curricula provides a foundation for graduate degree study leading to college/conservatory teaching credentials in composition and theory, as well as professional and/or commercial compositional activity. Students explore a wide variety of musical styles with an emphasis on understanding compositional techniques which may be less familiar to them, such as those of 20th century art music. The

senior recital requirement may be met by either a full recital of original compositions, or by a half recital of original compositions plus an original work of significant length and form included in another performance. The composer must serve as a performer or conductor for at least one of the pieces on the senior recital.

Course requirements (listed in catalog order):

MAP CM40-45	Applied Composition.....	16
MAP LL20+	Applied Music (Required piano: min. 4 hours at or above PI20)	6-18
MAP 485	Senior Capstone: Senior Recital	0
MUS 229	Basic Conducting	2
MUS 329	Choral Conducting or	2
MUS 430	Instrumental Conducting	
MUS—	Ensembles (with or without credit-8 semesters)	0
MED 214	Woodwind Instruments	1
MED 215	String Instruments	1
MED 217	Brass Instruments.....	1
MED 218	Percussion Instruments	1
MHS 231-334	Music History and Literature I-IV	10
MUS 250	Music & Christian Perspective.....	2
MUS 356	Vocal Pedagogy (Voice concentration only)	(2)
MTH 227-328	Aural Skills I-IV	4
MTH 225-326	Theory I-IV	12
Advanced theory, chosen from:		6
MTH 458	Sixteenth Century Counterpoint (3) or	
MTH 475	Synthesizer Computer Applications (3) or	
MTH 463	Form and Analysis (3)	
Total:.....		76-78

Entering Composition majors are expected to have piano proficiency equivalent to completion of PN10, and LL20 in the major applied area. Required graduation levels are minimum 4 hrs of piano at or above PN20 and minimum 6 hrs at or above LL30 in the major applied area.

Music Education

Music education curricula prepare students for teaching music in grades K-12. Entrance levels and graduation requirements vary for the four curricula as outlined below. These curricula meet all teacher certification requirements of the Board of Regents of the University of the State of New York.

Bachelor of Music in Music Education—Instrumental emphasis (MEI)

Music Courses (listed in catalog order):		Hours
MAP LL20-45	Applied Concentration (min. 9 hrs at or above LL40)	19
MAP VO10	Voice	1
MAP 485	Senior Capstone: Senior Recital	0
MCHU 475	Service Playing, Piano (keyboard concentration only)	(1)
MUS 229	Basic Conducting	2
MUS 430	Instrumental Conducting	2
MED 214-218	WW, St, Br, Prc Instruments	4
MED 330	Keyboard Skills (Keyboard concentration only)	(2)
MUS —	Ensembles (7 sem., with or w/o credit)	0
MUS 223	Jazz Workshop.....	1
MKBD I-III	Practical Keyboard I-III (Instr. concentration only)	(0-3)
MHS 231-334	Music History and Literature I-IV.....	10
MUS 250	Music & Christian Perspective	2
MTH 225-326	Music Theory I-IV.....	12
MTH 227-328	Aural Skills/Ear Training I-IV	4
MTH 367	Elementary Composition and Orchestration.....	2
Total:		62
Professional Education:		Hours
EDUC 219	Educational Psychology	3
EDUC 217	History and Philosophy of Education or	3
EDUC 218	History & Philosophy of Secondary Education	
EDUC 235	Educating Exceptional Learners.....	3
MED 210	Field Experience in Music Education	2
MED 227-242	St, Br, Prc, WW Techniques	7

MED 351	Elementary School Methods	2
MED 354	Instrumental Methods.....	2
MED 405	Student Teaching	12
MED 419	Student Teaching Seminar	2
Total:		36

Bachelor of Music in Music Education—Vocal emphasis (MEV)

Music Courses:		Hours
MAP LL20-45	Applied Concentration (min. 9 hrs at or above LL40)	19
MAP VO 10	Voice (Keyboard concentration only).....	(2)
MAP 485	Senior Capstone: Senior Recital	0
MCHU 475	Service Playing, Piano (Keyboard concentration only).....	(1)
MUS 229	Basic Conducting	2
MUS 329	Choral Conducting	2
MED 214-218	WW, St, Br, Prc Instruments	4
MED 330	Keyboard Skills (Keyboard concentration only)	(2)
MUS —	Ensembles (7 sem, with or w/o credit)	0
MUS 353	Opera Theatre.....	1
MKBD I-VI	Practical Keyboard I-VI (Voice concentration only)	0-6
MHS 231-334	Music History and Literature I-IV.....	10
MUS 219-220	Foreign Language Diction (Voice concentration only).....	(2)
MUS 250	Music & Christian Perspective	2
MUS 356	Vocal Pedagogy (Voice concentration only).....	(2)
MTH 227-328	Aural Skills/Ear Training I-IV	4
MTH 225-326	Music Theory I-IV.....	12
MTH 367	Elementary Composition and Orchestration.....	2
Total:		63-68
Professional Education:		Hours
EDUC 219	Educational Psychology	3
EDUC 217	History and Philosophy of Education or	3
EDUC 218	History & Philosophy of Secondary Education	
EDUC 235	Educating Exceptional Learners.....	3
MED 210	Field Experience in Music Education	2
MED 351	Elementary School Methods	2
MED 352	Secondary School Methods	2
MED 405	Student Teaching	12
MED 419	Student Teaching Seminar	2
Total:		29

Bachelor of Music in Music Education—Alternate Applied Concentration in Composition (MEV-C or MEI-C)

An alternate curricular plan in music education (for students with either vocal or instrumental emphasis) with a concentration in composition is available for qualified students. The bachelor of music in music education curricula outlined above form the core, with the following changes:

Music Courses:		Hours
MAP	Applied Music (at or above LL 20).....	10
MAP CM40-45	Applied Composition.....	6
Advanced theory chosen from.....		3
MTH 458	Sixteenth Century Counterpoint (3) or	
MTH 475	Synthesizer Computer Applications (3) or	
MTH 463	Form and Analysis (3)	
MAP 485	Senior Capstone: Senior Recital (Composition)	0

Students pursuing this major must meet the entrance and graduation proficiency requirements cited under the BMus Composition major.

Performance curricula give initial preparation for careers as solo performers in concert, recording, or church fields; as accompanists, as private studio teachers; as professional ensemble members; as junior college or Bible school faculty, or college teachers (after advanced study). Practical experience in teaching is desirable during junior/senior years. Highest level of performance is expected. Course requirements are listed in catalog order:

Bachelor of Music in Performance—Instruments: Brass, Guitar, Strings, or Woodwinds

MAP LL30-45	Major Applied Studies (min. 16 hours at or above LL40)	30
MAP LL20+	Applied minor in major family	4
MAP CM40	Applied (private) composition or	
MTH 367	Elementary Composition and Orchestration	2
MAP PN10+	Piano(beyond MKBD IV)	3
MAP 385	Junior Recital	0
MAP 485	Senior Capstone: Senior Recital	0
MUS 229	Basic Conducting	2
MUS 430	Instrumental Conducting	2
MUS —	Ensembles (with or without credit -- 8 semesters)	0
MED 241	Brass Techniques (2) or	
MED 242	Woodwind Techniques (2) or	
MED 227	String Techniques (2)	2
MHS 231-334	Music History and Literature I-IV	10
MLT 450, 451, 452, or 453	Instrumental Literature	2
MUS 250	Music & Christian Perspective	2
MTH 227-328	Aural Skills I-IV	4
MTH 225-326	Theory I-IV	12
Advanced theory, chosen from:		6
MTH 458	Sixteenth Century Counterpoint (3)	
MTH 475	Synthesizer Computer Applications (3)	
MTH 463	Form and Analysis (3)	
Total:		81

Bachelor of Music in Performance—Organ

MAP OR30-45	Organ(min. 16 hours at or above OR40)	30
MAP PN20+	Piano (at or above PI20)	5
MAP CM40	Applied (private) composition or	
MTH 367	Elementary Composition and Orchestration	2
MAP 385	Junior Recital	0
MAP 485	Senior Capstone: Senior Recital	0
MCHU 476	Service Playing	2
MUS 229	Basic Conducting	2
MUS —	Ensembles (with or without credit -- 8 semesters)	0
MHS 231-334	Music History and Literature I-IV	10
MLT 470	Organ Literature	2
MUS 250	Music & Christian Perspective	2
MUS 470	Organ Pedagogy	2
MED 330	Keyboard Skills	2
MTH 227-328	Aural Skills I-IV	4
MTH 225-326	Theory I-IV	12
MTH 367	Elementary Composition and Orchestration	2
Advanced theory, chosen from:		6
MTH 458	Sixteenth Century Counterpoint (3)	
MTH 475	Synthesizer Computer Applications (3)	
MTH 463	Form and Analysis (3)	
Total:		81

Bachelor of Music in Performance—Piano

MAP PN30-45	Piano (min. 16 hours at or above PI40)	30
MAP —	Applied Minor (organ strongly recommended)	5
MAP CM40	Applied (private) composition or	
MTH 367	Elementary Composition and Orchestration	2
MAP 385	Junior Recital	0
MAP 485	Senior Capstone: Senior Recital	0
MCHU 475A	Service Playing	1
MUS 229	Basic Conducting	2
MED 330	Keyboard Skills	2
MUS —	Ensembles (with or without credit -- 8 semesters)	0
MHS 231-334	Music History and Literature I-IV	10
MLT 480	Piano Literature	2
MUS 250	Music & Christian Perspective	2
MUS 477	Piano Pedagogy I	2

MUS 478	Piano Pedagogy II	2
MTH 227-328	Aural Skills I-IV	4
MTH 225-326	Theory I-IV	12
MTH 367	Elementary Composition and Orchestration	2
Advanced theory, chosen from:		6
MTH 458	Sixteenth Century Counterpoint (3)	
MTH 475	Synthesizer Computer Applications (3)	
MTH 463	Form and Analysis (3)	
Total:		82

Bachelor of Music in Performance—Voice

MAP VO30-45	Voice (min. 16 hours at or above VO40)	28
MAP PN20+	Piano (beyond MKBD VI)	6
MAP CM40	Applied (private) composition or	
MTH 367	Elementary Composition and Orchestration	2
MAP 385	Junior Recital	0
MAP 485	Senior Capstone: Senior Recital	0
MCHU 416	Hymnology	2
MUS —	Ensembles (with or without credit -- 8 semesters)	0
MUS 229	Basic Conducting	2
MUS 329	Choral Conducting	2
MHS 231-334	Music History and Literature I-IV	10
MLT 460	Vocal Literature	2
MUS 219-220	Foreign Language Diction	2
MUS 250	Music and Christian Perspective	2
MUS 356	Vocal Pedagogy	2
MTH 227-328	Aural Skills I-IV	4
MTH 225-326	Theory I-IV	12
MTH 367	Elementary Composition and Orchestration	2
Advanced theory, chosen from:		6
MTH 458	Sixteenth Century Counterpoint (3) or	
MTH 475	Synthesizer Computer Applications (3) or	
MTH 463	Form and Analysis (3)	
Total:		82

Contract minor in music

A 16-hour contract minor as determined by arrangement with the director of The Greatbatch School of Music. A special course of study is developed to meet the student's specific goals and is signed prior to the taking of the courses. The signed course of study is placed on file in the Academic Records Office.

Performance minor

Sixteen hours in one specific performance area (eight hours at or above LL20 and one year in an appropriate ensemble). A hearing is required to establish an appropriate performance course level. Limited enrollment in some areas based on teacher load availability.

Instrumental
and Vocal: voice, violin, viola, violoncello, double bass, guitar,
trumpet, French horn, trombone, euphonium, tuba, flute, oboe,
clarinet, saxophone, bassoon, percussion
14 hours of applied music
2 hours of ensemble

Keyboard: 14 hours of piano (10 hours at or above PN30)
14 hours of organ (6 hours of piano at or above PN10 *and*,
10 hours of organ at or above OR20, *or* 14 hours of organ at or above
OR20)
2 hours of ensemble

Short Course in Organ

Students interested in developing an organ technique for modest church requirements may elect a number of hours in organ, taking a minimum of one hour of practice per day, five days a week, for one hour credit per semester, or six days practice a week for two hours credit. Four semesters of such study will ordinarily suffice, although further work is encouraged. (Regular or intensified study is also available in summer school.)

Summer School

Applied music lessons and composition may be taken for credit during summer school, depending on instructor availability.

Course Descriptions

Applied Study (private lesson fees charged, see Financial Information in this catalog)

Applied (private lesson) study is available only by permission of the appropriate studio faculty, and requires an audition. May be taken for major, minor, or elective credit. Each level number must be taken for a minimum of two credit hours before advancing to the next number. A minimum of two semesters at level (-10, -20, etc.) is required before advancing to the next level. Applied study does not carry Integrative Studies first-level credit.

Course Numbering in Applied Study (all performance areas; LL = instrument code):

MAP LL10, LL15 (1-4, F&S)
Normal level for introductory private study, non-majors. Permission of appropriate studio faculty. For voice: successful completion of MCLV II or permission. For piano: successful completion of MKBD IV or permission.

MAP LL20, LL25 (1-4, F&S)
Normal level for beginning private study, music education majors. Audition required, or prerequisite of LL15 and permission of studio faculty.

MAP LL30, LL35 (1-6, F&S)
Normal level for beginning private study, performance majors; intermediate private study, music education majors, minors, and elective study. Audition required, or LL20-25 as prerequisite. May be repeated for two additional semesters.
MAP LL40, LL45 (1-6, F&S)
Advanced private study for BMus. majors. Prerequisite: FH 30-35 and successful Sophomore Review, or permission of studio faculty. Repeatable as required.

Areas of Applied Study

Composition

MAP CM40, CM 45 **Composition** (1-4, F&S)
Original composition in various forms, genres, and styles.

Conducting

MAP CC40, CC45 **Advanced Conducting, Choral** (1-4, F&S)
Preparation of material for a major choral ensemble and actual experience directing the ensemble. Prerequisites: MUS 229,329, participation in ensemble, permission of ensemble director.

MAP CI40, CI 45 **Advanced Conducting, Instrumental** (1-4, F&S)
Preparation of material for a major instrumental ensemble and actual experience directing the ensemble. Prerequisites: MUS 229, 430, participation in ensemble, and permission of ensemble director.

Individual Performance Areas

Brass

MAP FH10-FH45 **French Horn**
MAP TR10-TR45 **Trumpet**
MAP EU10-EU45 **Euphonium**
MAP TN10-TN45 **Trombone**
MAP TB10-TB45 **Tuba**

HP10-HP45 **Harp**

Keyboard

MAP HC10-HC45 **Harpsichord**
MAP OR10-OR 45 **Organ**
MAP PN10-PN45 **Piano**
MAP PC10-PC45 **Percussion**

Voice

MAP VO10-VO45 **Voice**
MAP SP10-SP45 **Specialized Study**
MAP 385 **Junior Recital**
MAP 485 **Senior Capstone: Senior Recital**

(0, F&S)

Church Music

MCHU 301 **Church Music Administration** (2, F06)
Principles and administration of church music including resources, recruitment, children's choirs, handbell choirs, and working with pastoral staff and congregation.

MCHU 416 **Introduction to Hymnology** (2, OD)
An introductory history of hymnology from the early Christian church to the present. An investigation of hymnic poetic and musical styles. Stress upon familiarity with the hymnal. Liberal Arts Foundation - Fine Arts.

MCHU 451 **Music and Worship** (3, OD)
Music and liturgical practices in the history of the Christian Church, and consideration of issues in contemporary worship practice in light of church history and Christian theology. Liberal Arts Foundation - Fine Arts.

MCHU 475 **Service Playing, Piano** (1, S07)
Development of keyboard skills with special application to piano playing in church service: melody harmonization and reharmonization, hymn playing and transposition, accompanying (solo and choral), extemporization in various styles. Permission of instructor. Required of piano majors and piano & organ concentrations within music education curricula.

MCHU 476 **Service Playing, Organ** (2, S07)
Development of keyboard skills with special application to organ playing in church service: melody harmonization, bass realization, hymn playing and transposition, accompanying (solo and choral), extemporization in various styles. Permission of instructor.

Composition (see Applied Study above for private composition courses)

MTH 367 **Elementary Composition and Orchestration** (2, S07)
Composition and orchestration of smaller forms up to and including the sonata. Students progress in formal and technical skill by ability. Public performance encouraged. Prerequisite: MTH 326 or permission.

Conducting (see Applied Study above for advanced conducting courses)

MUS 229 **Basic Conducting** (2, F&S)
Basic conducting, rhythmic development, baton technique, three hours per week. Prereq: MTH 225.

MUS 329 **Choral Conducting** (2, S)
Elements of choral conducting; training of choirs; rehearsal techniques; preparation of choral scores. Three hours per week. Prerequisite: MUS 229.

MUS 430 **Instrumental Conducting** (2, S)
Conducting laboratory band or orchestra; methods of presenting band and orchestral materials. One and one-half hours with laboratory band or orchestra per week. Prerequisite: MUS 229.

Ensembles

For non-music majors

All college students are invited to participate in the various musical organizations. Credit is awarded non-music majors for the various available ensembles (normally one credit per semester), and an academic grade is recorded. By special permission of the conductor, a student may participate in a major ensemble without credit. Chamber ensembles are also formed according to demand, either with or without credit.

Non-music majors may satisfy the three-credit first-level integrative studies requirement in fine arts by several semesters' participation in a major ensemble. Ensembles which carry integrative studies credit include Men's Choir (MUS 144), Women's Choir (MUS 145), Symphonic Winds (MUS 137), Philharmonia (Orchestra) (MUS 143), and College Choir (MUS 149). Completion of the IS fine arts requirement normally requires two years' participation in a major ensemble. It is important that students desiring IS credit for ensemble participation enroll in the course numbers listed above and **not** in the 200- or 300-level numbers used by music majors and others not seeking IS credit for this experience.

Membership in major ensembles is on a yearly basis; students enrolled in the fall semester are also expected to participate in that ensemble in the spring semester. A director may occasionally grant an exception to the foregoing, or permit joining for only the second semester.

Non-music majors may participate in any music ensemble, by audition or permission of the director. However, ensembles other than the five major groups listed above (with 100-level course numbers) will count only as elective credit, and not for integrative studies credit.

For music majors

One major ensemble (MUS 244/344, 245/345, MUS 247/347, MUS 237/337, MUS 243/343, or MUS 249/349) is required of music majors during each semester of residence. The time spent in such experience is three or five hours per week per ensemble. Woodwind, brass, and percussion majors must be members of both orchestra and symphonic winds unless excused by the director of one of these ensembles with the concurrence of the associate dean for music.

Credit is allowed for membership in the second ensemble. Music education majors who elect the combined curriculum must participate in both instrumental and choral ensembles in the course of their four years. Those who elect the vocal curriculum are excused from participating in instrumental ensembles.

Major ensembles; † = course number for first-level integrative studies credit

Audition required. By permission of the director.

MUS 144 Men's Choir †	(1/1, F&S)
MUS 244 Men's Choir	(0/0, F&S)
MUS 344 Men's Choir	(1/1, F&S)
MUS 145 Women's Choir †	(1/1, F&S)
MUS 245 Women's Choir	(0/0, F&S)
MUS 345 Women's Choir	(1/1, F&S)
MUS 137 Symphonic Winds (Touring) †	(1/1, F&S)
MUS 237 Symphonic Winds (Touring)	(0/0, F&S)
MUS 337 Symphonic Winds (Touring)	(1/1, F&S)
MUS 143 Philharmonia (Orchestra) (Touring) †	(1/1, F&S)
MUS 243 Philharmonia (Orchestra) (Touring)	(0/0, F&S)
MUS 343 Philharmonia (Orchestra) (Touring)	(1/1, F&S)
MUS 149 College Choir (Touring) †	(1/1, F&S)
MUS 249 College Choir (Touring)	(0/0, F&S)
MUS 349 College Choir (Touring)	(1/1, F&S)

MUS 223 Jazz Workshop (Houghton Jazz) (0, 1, F&S)
Preparation and presentation of a variety of jazz repertoire, including swing, combo, and modern styles. Permission of director.

MUS 226 Flute Ensemble (0, 1, F&S)
Preparation and presentation of repertoire for flute ensemble. Permission of director.

MUS 255 Brass Ensemble (0, 1, F&S)
Preparation and presentation of repertoire for brass ensemble. Permission of director.

MUS 457C Handbell Choir (0, 1, F&S)
Preparation and presentation of repertoire for handbells. Permission of director.

MUS 353 Opera Theatre (1, S)
Preparation and presentation of operatic scenes and complete works from the standard repertoire. Some musical comedy. Study of techniques of stage movement and stagecraft. Three hours in rehearsal per week; some outside rehearsal. Permission of director.

MUS 447, 448 Piano Ensemble (1/1, F&S)
Performance of keyboard ensemble repertoire, Renaissance to 20th century. Duet and multi-piano literature. Emphasis on style and special ensemble problems. Fulfills ensemble requirement for junior and senior applied piano (performance) majors. Four hours outside practice.

MUS 455 Chamber Singers (1, F)
Practical experience singing in a small group of 12 to 16 performers. Three hours in rehearsal per week. Permission of director.

MUS 457 Chamber Ensembles (1/1, F&S)
Ensembles organized to include interested students. Small groups rehearse three hours per week. Standard literature for handbells, percussion, strings, woodwinds, brass, percussion, guitar, etc., is studied with a view toward public performance during the year. Permission of appropriate ensemble director.

Group Instruction: Practical Keyboard

Elementary and intermediate piano, taught in six semesters of Practical Keyboard. One hour class, six hours practice weekly. Emphases: technique, repertoire, and functional skills of sight-reading, transposition, improvisation, and accompaniment. Placement level determined by audition. Piano levels 222, 225, 226, 227 must be taken by all music education non-keyboard majors except instrumental majors, regardless of repertoire level at audition.

MKBD I Practical Keyboard I (1, F&S)
Basic technique, rhythm, tone conception, articulation, fingering. Pentachord patterns, sight reading, transposition. Tetrachord scales. Simple I-V harmonization. Grade 1 repertoire.

MKBD II Practical Keyboard II (1, F&S)
Basic work as in MKBD 110-111; pedaling and phrasing. Easier major scales, two rhythms, and arpeggios (hands separate). I-IV-V progressions and harmonization with simple accompaniments; IV7 by-ear chording. Grade 1 sight reading. Grade 2 repertoire.

MKBD III Practical Keyboard III (1, F&S)
Easier major scales, hands together, two rhythms; easier arpeggios and minor scales, hands separate. Major/minor primary triad patterns and harmonization, by-ear work with varied accompaniments. Grade 2 sight reading; simple improvisation; easy hymns. Grade 3 repertoire.

MKBD IV Practical Keyboard IV (1, F&S)
Major/minor scales, arpeggios, triads; hands together. Major/minor progressions, harmonization; by-ear work using secondary chords and expanded accompaniments. Grade 2-1/2 sight reading; grade 3 transposition, improvisation; hymns, songs. Repertoire such as Bach short preludes and easy sonatinas.

MKBD V Practical Keyboard V (1, F&S)
All major/minor scales and arpeggios, hands together, three rhythms. Progressions, harmonization; by-ear work using secondary chords and dominants in expanded patterns. Grade 3 sight reading; four-part transposition. Repertoire: easier Bach inventions, allegro sonatina movement.

MKBD VI Practical Keyboard VI (1, F&S)
All scales and arpeggios, four rhythms. Harmonization and by-ear work with advanced chords and accompaniments. Hymns and patriotic songs in pianist styles with transposition. Choral (including open vocal score) and art song accompaniment. Grade 4 sight reading. Repertoire such as Bach inventions and easy classic sonatas.

Group Instruction: Voice Class

MCLV I Class Voice I (1, F&S)
Study of posture, breath control, tone production, and diction. Textbook used. Includes both group and individual singing of simple vocalises and songs in English. Hearing required. Six hours practice.

MCLV II Class Voice II (1, F&S)
Continued study of basic vocal techniques. Emphasis on individual singing of vocalizes and songs in English. Introduction to Italian diction. Hearing required. Six hours practice.

Music Education

MED 203 Music in Therapy (3, OD)
Introduction to music therapy as a profession and to applying music as a therapeutic method. History and present state of music therapy; music's contribution to business, industry, schools. Expected: some skill at reading music and some skill at the piano.

MED 210 Field Experiences in Music Education (2, M)
Students participate in three weeks of field experiences in high-need school districts working as teachers' assistants and meet in a weekly seminar to discuss their experiences. Designed to fulfill the New York State field experience mandate; students earn 75-90 hours of field experience credit taken during freshmen or sophomore years. Students may opt to take EDUC 240, Teaching in Urban America, in lieu of this course. (See Greatbatch School of Music Handbook for detailed explanation of Field Experience and other Certification requirements.)

MED 214 Woodwind Instruments (1, F&S)
Basic techniques of playing flute, oboe, clarinet, saxophone, and bassoon; acoustical, historical, and practical understanding of these instruments. Two hours class, two hours practice per week.

MED 215 Stringed Instruments (1, F&S)
Basic techniques of playing violin, viola, 'cello, and double bass; acoustical, historical, and practical understanding of these instruments. Two hours class, two hours practice per week.

MED 217 Brass Instruments (1, S)
Class instruction in various brass instruments, to acquaint music education majors with basic problems and teaching techniques of the brasses. Includes study on at least three brass instruments. Two hours class, two hours individual practice per week.

MED 218 Percussion Instruments (1, S)
Snare drum, timpani basics, bass drum, mallet instruments, cymbals, smaller instruments of the battery; prepares music education majors to teach percussion instruments in public schools. Concentration on snare drum: coordination of hands; counting and playing rhythm. Two hours class, two hours individual practice per week.

MED 227 String Techniques (2, S)
Preparation for teaching violin, viola, 'cello, and double bass through the high school level. Development of playing and demonstration abilities. Survey of methods and materials. Two hours class, three hours practice. Prerequisite: MED 215.

MED 240 Percussion Techniques (1, S)
Preparation for teaching percussion instruments through high school level. Development of playing skills on timpani, mallet instruments, drums. Survey of percussion ensemble music and other materials. One class per week, three hours practice. Prerequisite: MED 218.

MED 241 Brass Techniques (2, F)
Preparation for teaching brass instruments through the high school level. Development of playing and demonstration abilities. Survey of methods and materials. Two hours class, three hours practice. Prerequisite: MED 217.

MED 242 Woodwind Techniques (2, S)
Preparation for teaching woodwind instruments through the high school level. Development of playing and demonstration abilities. Survey of methods and materials, two class hours, three hours of practice. Prerequisite: MED 214.

MED 330 Keyboard Skills (2, F or S)
Functional piano class required of piano and organ majors and concentrations within music education curricula. Emphases: sight reading, harmonization, transposition, accompaniment, score reading, improvisation. Jury exam. Six hours weekly practice. Prerequisite: Piano level 237.

MED 351 Elementary School Methods (2, F)
Preparation for teaching general music in kindergarten through sixth grades. Particular emphasis upon preparation to teach according to the New York State Learning Standards for the Arts.

MED 352 Secondary School Methods (2, S)
Preparation for directing secondary school (grades seven-12) choral ensembles, and for teaching secondary level general music and other non-performance music classes. Particular emphasis upon preparation to teach according to the New York State Learning Standards for the Arts.

MED 354 Instrumental Methods (2, S)
Instrumental music program in public schools. Organization and training of school orchestras, bands, and instrumental classes; pedagogical methods of the standard band and orchestra instruments. Particular emphasis on preparation to teach by the New York State Learning Standards for the Arts.

MED 405 Student Teaching in Music (12, F)
Practical experience teaching music in public schools. Two placements of approximately seven weeks each, one on the elementary level (grades K-six), and one on the secondary level (grades seven-12). Criteria for approval: Completion of required professional education coursework as per emphasis, cumulative GPA of at least 2.50, documentation of at least 100 hours of field experience, and approval by the student teaching committee.

MED 419 Student Teaching Seminar (2, F)
Seminar during and following student teaching, dealing with effective teaching practices including problems of motivation, group management, curriculum development, and musical education goals.

Music History and Literature
MHS 222 Introduction to Film Music (3, OD)
History and aesthetics of music written for Hollywood films. Exploration of the sociology, philosophy, psychology, and technique of film music. Review of the elements of musical style, with particular emphasis on their relation to the dramatic aspects of film. Written work emphasizing critical analysis of the use of music in various American film genres. Liberal Arts Foundation - Fine Arts.

MHS 231 Music History and Literature I (2, F)
Development of music from earliest times through the Renaissance. Principles of listening and style analysis. Literature and style of various schools. Listening, examination of scores, performance, research reports, lectures, discussion.

MHS 232 Music History and Literature II (2, S)
Continues MHS 231, from late Renaissance through Baroque (1750).

MHS 254 Music of World Cultures (3, OD)
Survey of Asian, Latin American, African, European music; listening experience, with research and analysis. Introduction to ethnomusicology, to broaden student's perspective. Recommended for those interested in mission field or intercultural relations. Liberal Arts Foundation - Fine Arts.

MHS 333 Music History and Literature III (3, F)
Development of early classic through romantic music styles in cultural context. Principles of listening and style analysis. Introduction to basic bibliography and research. Principles of a Christian aesthetic.

MHS 334 Music History and Literature IV (3, S)
From late romantic through 20th century styles. Emphasis on individual research, writing, and class presentations. Evaluation of musical-cultural trends from a Christian perspective.

MLT 113 Masterworks of Sight and Sound (3, OD)
Introduction of art and music from classic age to present; concert and gallery attendance included. Satisfies fine arts requirement. Liberal Arts Foundation - Fine Arts.

MLT 211 Music and Listening: An Introduction (3, F&S)
Introduction to the study and enjoyment of classical masterpieces in music: recordings, outside biographical readings, reports on current musical events. Liberal Arts Foundation - Fine Arts.

MLT 450, 451, 452, 453 Brass, Woodwind, String and Percussion Literature (2, OD)
Survey of standard chamber, solo, and orchestral excerpt repertoire from the Baroque to the present. Emphasis on stylistic and interpretive traits, pedagogical issues and repertoire selection, major composers and representative works.

MLT 460 Vocal Literature (2, F06)
Survey of standard vocal repertoire from the High Baroque to the present. Emphasis on stylistic and interpretive traits, pedagogical issues and repertoire selection, major composers and representative works.

MLT 470 Organ Literature (2, OD)
An examination of the history of the development of the organ and its literature from the middle ages to the present. Examination of style and structure and their impact on performance.

MLT 480 Piano Literature (2, OD)
An examination of the history of the development of the piano and its literature, including music written for early keyboard instruments which today is accepted as part of the piano repertoire. Emphasis on 18th, 19th, and 20th century repertory. Examination of style and structure and their impact on performance. Chamber music with piano, concerti, solo piano literature.

Music Pedagogy and Specialized Courses
MUS 219, 220 Foreign Language Diction (1/1, F&S)
Basic diction facility in English, Italian, German, French. Required of voice majors and concentrations (any curriculum); elective for others. Two class meetings per week.

MUS 250 Music and Christian Perspective: An Introduction (2, F)
Introduction to music studies in the context of Christian worldview. Examination of Biblical, philosophical, and scientific bases for human creativity. Discussion of music's role in society and in the liberal arts context. Orientation to college-level work in music, including diagnostic examination of background knowledge.

MUS 330 Keyboard Skills (2, F or S)
Functional piano class required of piano and organ majors and concentrations within music education curricula. Emphases: sight reading, harmonization, transposition, accompaniment, score reading, improvisation. Jury exam. Six hours weekly practice. Prerequisite: Piano level 237.

MUS 356 Voice Pedagogy (2, S07)
Methods of voice production and development as preparation for teaching; emphases on teaching and evaluation. Attention to proper selection of music. Two class hours per week; junior and senior year.

MUS 477 Piano Pedagogy I (2, F06)
Preparation for teaching beginning piano students. Study of beginning piano methods and literature, including adult and preschool materials. Projects in relevant teaching methods such as Suzuki, Kindermusik, Orff, and Dalcroze. Guidelines for development and maintenance of private piano studio and to assist in the purchase and maintenance of a piano. Observation of studio and group teaching.

MUS 478 Piano Pedagogy II (2, S07)
Practicum for teaching community students, with presentation of a public recital for children and a masterclass for adults at end of the semester. Practical Keyboard Practicum. Study of intermediate piano methods and repertoire, a survey of professional organizations and publications for the private piano teacher, and a study of the writings and teaching ideals of great piano pedagogues. Prerequisite: Piano Pedagogy I.

MUS 470 Organ Pedagogy (2, OD)
Examination of teaching methods, materials, and technical approaches for the organ. Guided teaching in private and class settings. Required for organ performance majors.

MUS 191, 192; 291, 292; 391, 392; 491, 492 Independent Study (1, 2, or 3)

MUS 395 Special Topics (1-3, OD)

Music Theory
MTH 225 Theory I (3, F)
Basic materials of tonal music. Correlated keyboard, musical analysis and original composition. Corequisite: MTH 227 or permission of instructor.

MTH 226 Theory II (3, S)
Continuation of tonal musical materials. Correlated keyboard, musical analysis and original composition. Prerequisite MTH 225; Corequisite: MTH 228, or permission of instructor.

MTH 227 Aural Skills I (1, F)
Beginning work in sight singing, ear training, and dictation. Two hours class per week, plus independent computer- and tutor-assisted instruction. Corequisite MTH 225 or permission.

MTH 228 Aural Skills II (1, S)
Continued work in diatonic sight singing, ear training, and dictation. Two hours per week, plus independent computer- and tutorial-assisted instruction. Prerequisite: MTH 227; corequisite: MTH 226, or permission.

MTH 325 Theory III (3, F)
Analysis and composition of eighteenth-century counterpoint. Harmonic materials of the nineteenth century. Analysis of literature to Debussy. Form study and original composition. Prerequisite: MTH 226; co-requisite: MTH 327, or permission of instructor.

MTH 326 Theory IV (3, S)
Art music of the 20th century, integrating basic materials and processes of selected western vernacular and non-western musics. Prerequisite: MTH 325; co-requisite: MTH 328, or permission of instructor.

MTH 327 Aural Skills III (1, F)
Chromatic sight singing, ear training and musical dictation. Two hours per week, plus independent computer- and tutor-assisted instruction. Prereq: MTH 228; Coreq: MTH 325, or permission.

MTH 328 Aural Skills IV (1, S)
Advanced sight singing, ear-training and dictation using modal, 20th century, American vernacular, and world music materials. Two hours per week, plus independent tutor-assisted instruction. Prerequisite: MTH 327; corequisite: MTH 326, or permission of instructor.

MTH 367 Elementary Composition and Orchestration (2, F&S)
Composition and orchestration of smaller forms up to and including the sonata. Students progress in formal and technical skill by ability. Public performance encouraged. Prerequisite: MTH 326 or permission.

MTH 458 Sixteenth Century Counterpoint (3, OD)
A study of the principles of counterpoint in western music, with an emphasis on models from 16th century vocal polyphony. Analysis of repertoire, original compositions. Prerequisite: MTH 326 or permission.

MTH 463 Form and Analysis (3, F06)
Structural and harmonic analysis of musical form through simple and compound song form, variation, rondo, sonata forms. Contrapuntal forms of the invention, chorale prelude, fugue, canon. Study of the analysis techniques of Schenker, La Rue, and others.

MTH 475 Synthesizer/Computer Applications (3, OD)
Introduction to electronic musical aesthetics, synthesis, and MIDI techniques. Hands-on composition projects utilizing computers and synthesizers. Prerequisite: MTH 367, Elementary Composition and Orchestration (see Composition heading for course description), or permission of instructor.

Pastoral & Church Ministries Program (AAS)

(See Adult Learning Opportunities section)

Pastoral Ministry

(see Religion, Ministerial Concentration)

Philosophy (major and minor)

Department of Religion and Philosophy: J. Michael Walters, chair;
W. Christopher Stewart, program coordinator

Faculty: Carlton Fisher, Benjamin Lipscomb, W. Christopher Stewart

Web site: *campus.houghton.edu/orgs/rel-phil*

Phone: 585.567.9440

Major: (24 hours)

The major must include:

PHIL 241, 242 History of Philosophy I, II.....	8
PHIL 223 or 224 Critical Thinking or Formal Logic.....	2
400 level courses in PHIL.....	6
PHIL 495 Senior Capstone: Philosophy Colloquium.....	1
Additional hours in philosophy above 202	7

General Information

To philosophize is to think deeply about a variety of fundamental questions posed by human experience. Though the answers to these questions are interconnected, they can be divided into three areas of investigation: epistemology (the nature of truth and knowledge), metaphysics (the nature of reality — persons, the world, and God), and axiology or ethics (the values or ends involved in morality, politics, and aesthetics — the nature of the good). It is the task of finding answers to these sorts of questions rather than some specific set of answers to these questions that constitutes philosophy. A person's most basic philosophical commitments shape his or her overall perspective or point of reference intellectually.

In addition to improving one's understanding of the fundamental intellectual commitments at the core of a person's worldview, a philosophy major significantly enhances one's basic intellectual skills. For these reasons, a philosophy major is excellent pre-professional training. Philosophy students pursue careers in a wide range of fields, including law, education, ministry, medicine, business, public administration, and writing.

Minor: The minor consists of 12 hours of course work in philosophy (above 202), and must include at least four hours of history of philosophy (either PHIL 241 or 242).

Course Descriptions

PHIL 200 Knowledge and Reality (2)
Overview of the contours of a world and life view coupled with more detailed critical analysis of perennial and foundational issues in epistemology (the nature of truth and knowledge) and metaphysics (the nature of reality: persons, the world, and God), such as our capacity to know, perform free actions, or survive death. Liberal Arts Foundation - Philosophical Foundation.

PHIL 201 Ethics (2)
Critical analysis of alternative theoretical frameworks of historical significance in terms of which humans have struggled to understand the nature of goodness and the process of ethical decision making, with close attention to the nature and sources of character (personal excellence: virtue and vice) and the foundations of morality. Liberal Arts Foundation - Philosophical Foundation.

PHIL 202 Metaphysics, Morality, and Mind (4, F, S)
Critical analysis of the contours of a world and life view coupled with more detailed critical analysis of perennial and foundational issues in epistemology (the nature of truth and knowledge), metaphysics (the nature of reality: persons, the world, and God), and ethics (the nature of goodness and the process of ethical decision making, with close attention to character—virtue and vice—and the foundations of morality).

Liberal Arts Foundation - Philosophical Foundation.
PHIL 210 **Community, Ideology, and the Environment** (3)
(See description under Off-Campus Programs-Adirondack section.) Liberal Arts Foundation - Philosophical Foundation.

PHIL 223 **Critical Thinking** (2, F)
Introduction to basic argument analysis and informal fallacies, with special emphasis on how to recognize, analyze, and evaluate arguments expressed in everyday, ordinary language.

PHIL 224 **Formal Logic** (2, F)
Introduction to deductive inference via the formal languages of modern philosophical logic. Will include truth functional propositional logic and quantified predicate calculus, with perhaps some modal logic.

PHIL 241 **History of Philosophy I: Ancient and Medieval** (4, F)
Survey of intellectual history from early Greek through late Medieval thought. Includes Pre-Socratics, Plato, Aristotle, Epicureans, Stoics, Augustine, Aquinas, Scotus, and Ockham. Readings include both primary and secondary sources. If combined with PHIL 242, meets both Liberal Arts Foundation - Philosophical Foundations and Liberal Arts Exploration - Humanities.

PHIL 242 **History of Philosophy II: Modern and Contemporary** (4, S)
Survey of intellectual history from early modern through twentieth century and postmodern thought. Includes Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant, as well as major figures and movements from the 19th and 20th centuries. Readings include both primary and secondary sources. If combined with PHIL 241, meets both Liberal Arts Foundation - Philosophical Foundations and Liberal Arts Exploration - Humanities.

PHIL 250 **Aesthetics** (2-3, OD)
A philosophical study of art and aesthetic experience. The nature of beauty, the nature of art, the interpretation and aesthetic evaluation of art, and art in its ethical dimension are topics covered via readings drawn from historical and contemporary sources. Though the visual arts of painting and sculpture will be the focus, other art forms, such as music, dance and drama, are examined as well.

PHIL 260 **Introduction to Political Thought** (3, F)
Introduces students to Western political thought from the ancient to the modern world through a close reading of important thinkers. By considering problems of community, obligation, order, justice, liberty, and freedom, the course equips students for careful normative reflection on public life.

PHIL 300 **Christianity and Postmodernism** (3, F)
(See course description in Off-Campus Programs-Australia section.)

PHIL 306 **Varieties of Postmodernism** (3, M)
Interdisciplinary analysis of the many-faceted cultural phenomenon known as “postmodernism.” Moves from an initial starting point considering postmodernism as a reaction to various philosophical claims associated with modernity to the meaning and significance of postmodern ideas as they have been transposed into a variety of other contexts in the analytic humanities, literature, arts and sciences.

PHIL 315 **Theory of Knowledge** (4, S07)
Examination of contemporary perspectives on the nature and limits of human knowledge, as well as the concept of truth.

PHIL 326 **Ethical Theory** (4)
Analysis of traditional normative theories (formalism, consequentialism, and virtue ethics) through the reading of primary sources. Also explores developments in contemporary moral theory.

PHIL 350 **Reason and Religious Belief** (2, F)
Analytic approach to philosophic thought regarding some of the concepts and beliefs of Christian theism. Attention given to arguments for the existence of God, the problem of evil, and the roles of faith and reason in religious belief.

PHIL 360 **History and Philosophy of Science** (4, F06)
Survey of the rise of western science from its origins in antiquity to the present, addressing both the content and methods of science in each major period. Major figures considered include Aristotle, Galen, Copernicus, Kepler, Galileo, Descartes, Boyle, Newton, Lavoisier, Darwin, and Einstein. A wide range of science fields will be surveyed and specific attention is given throughout to the interrelationships between science and other disciplines, the relationship between science and culture, and the interaction of science and religion.

PHIL 290, 390, 490 **Special Topics** (2, 3, or 4, OD)
Examination of specific movements or particular problems in philosophy, or themes in the history of ideas.

PHIL 414 **Major Figures** (2, 3, or 4, OD)
In-depth study of the thought of one or more figures with emphases on critical analysis and evaluation of primary source material.

PHIL 191, -2; 291, -2; 391, -2; 491, -2 **Independent Study** (1, 2 or 3)

PHIL 495 **Senior Capstone: Philosophy Colloquium** (1, F, S)
A required capstone course for philosophy majors normally completed in one of the final two semesters of the student’s college experience. Prerequisite: A minimum of 18 hours in philosophy.

PHIL 496 **Honors in Philosophy** (3, S)

Physical Education (majors and minors)
Department of Physical Education/Exercise Studies & Recreation/Leisure: Thomas R. Kettelkamp, chair
Faculty: Andrea Boon, Deanna Hand, Sandra Johnson, Thomas R. Kettelkamp, David Lewis, Christopher Nafziger, Jaynie Nafziger, Trini Rangel, William R. Swanson, Matthew Webb, Brad Zarges
Web site: campus.houghton.edu/orgs/physical_education/
Phone: 585.567.9645

Majors: Physical Education (teaching K-12: 38 hours in the major; 29 in education; 12 hours in pre/co-requisites),
Physical Education (non-teaching: 27 hours; 8 hours in pre/co-requisite)
Physical Education (physical fitness: 35 hours; 18 hours in pre/co-requisites;
internship 4-12 hours)

Physical Education majors meet the PHED 101 taxonomy by taking PHED 237 and 330.

Minor: Physical Education (18 hours)
Physical Education with focus on athletic training (15 hours)

Teaching Option
For admission to the **teacher education program**, a student must:
1. Complete an application (available from the education department office),
2. Successfully complete the writing sample assessment,
3. Present a cumulative grade point average of at least 2.5, and
4. Receive formal approval from Teacher education Committee.

The physical education major leading to New York state teacher certification requires 38 hours in physical education courses and 30 in education block courses. Nine of these hours shall be earned in activity laboratories (AL).

Pre/Co-requisites	
BIOL 103 Fundamentals of Biology.....	4
BIOL 217, 218 Human Anatomy and Physiology	8
Total:	12

Core Requirements	
PHED 212 Foundations of Physical Education.....	2
PHED 237 Holistic Health	3
PHED 239 Principles & Practices of Coaching	2
PHED 246 Care, Prevention and Management of Athletic Injuries.....	3
PHED 248 Adaptive Phys. Education and Fitness.....	2
PHED 276 Motor Development and Learning	3
PHED 315 Psychosocial Aspects of Phys Educ & Sports	2
PHED 320 Measurement and Eval in Phys Education	3
PHED 330 Physiology of Exercise	3
PHED 341 Kinesiology	3
PHED 401 Organization and Mgmt of Phys Education	3
Total:	29

Activities

Two of these three:

PHED 253 Teaching Track & Field.....	1
PHED 261, 262 Teaching Team Sports.....	2

And all of these:

PHED xxx Swimming (PHED 102, 228, 244, or 265).....	1
PHED 221 Educational Gymnastics	1
PHED 226A Movement & Rhythmic Fundamentals	3

An Outdoor Component (one credit hour) chosen from the following:

REC 102A Initiatives.....	1
REC 109 Highlander Adventure Program	2
REC 227 Outdoor Leadership Training	3
REC 240 Administration of Organized Camps.....	3
REC 266 Outdoor Living Skills	2
REC 330 Methods/Mat'ls of Outdoor Educ	3
*PHED 220 Adventure Sports	3

<u>And</u> PHED 251 or 252 Teaching Lifetime Sports.....	1 or
PHED 220 Adventure Sports.....	3
Total:	9

*Can be taken as Activity or Outdoor Component. If taken as Outdoor Component, must also take PHED 251 or 252.

Education Requirements

EDUC 217 History and Philosophy of Education.....	3
(or EDUC 218 History and Philosophy of Secondary Education...3)	
EDUC 240 Teaching in Urban America	3
EDUC 313 Language & Literacy in the Content Area	3
(or EDUC 328 Foundations of Language and Literacy...3)	
PHED 225 Teaching Elementary Physical Education.....	3
PHED 302 Teaching Secondary Physical Education	3
PHED 411 Senior Capstone: Issues Seminar In Physical Education....	2
PHED 405 and 407 Student Teaching.....	12
Total:.....	29

Physical Education Non-teaching Option

The physical education non-teaching major requires 24 hours in physical education courses. Six of these hours shall be earned in activity laboratories.

Pre/Co-requisites

BIOL 103 Fundamentals of Biology.....	4
BIOL 217 Human Anatomy & Physiology	4
Total:	8

Major Requirements

PHED 212 Foundations of Physical Education.....	2
PHED 226 Teaching Elementary Physical Education	3
PHED 237 Holistic Health	3
PHED 302 Teaching Secondary Physical Education.....	3
PHED 491 Independent Study (capstone).....	3
(Plus 7 hours from any of the courses listed under "core requirements" for the physical education teaching option)	7
Total:	21

Activities	6
Six hours are required from any of the courses listed under "activities" for the physical education teaching option.	

Physical Education Minor: The physical education minor (18 hours) consists of the following:

Pre/Co-requisites

PHED 101 Lifetime Wellness.....	1
PHED 102 Physical Education	1
PHED 237 Holistic Health	3
PHED 212 Foundations of Physical Education.....	2
Plus 11 hours from courses numbered above 200*	11

(*Not less than two of these 11, or more than five, may be in activity laboratories. Fundamentals of Biology [BIOL 103] is highly recommended.)
Total: 18

Athletic Training Minor: The physical education minor with a focus in athletic training (15 hours) is comprised of the courses listed below. This minor is designed to enhance the student's skills in preventing, evaluating, and treating various athletic injuries.

Required classes

PHED 242 Techniques of Taping and Bracing	1
PHED 246 Care, Prevention, and Management of Athletic Injuries.....	3
PHED 247 Recognition and Evaluation of Athletic Injuries	3
6 hours from the following courses:	6
PHED 348 Therapeutic Exercise Mgmt. of Injuries (3)	
PHED 330 Physiology of Exercise (3)	
PHED 341 Kinesiology (3)	
Choose 2 hours of electives from any Physical Education theory course 211 or above	2
Total:	15

Sports Ministry Minor: (18 hours, interdisciplinary) – See Sports Ministry entry.

Physical Fitness

The physical fitness option is a non-teaching option requiring 33 credits in physical education plus two hours in outdoor living skills. One of the credits shall be earned in activity laboratories (AL). Also included is a four - to 12-credit internship.

Pre/Co-requisites

BIOL 103 Fundamentals of Biology.....	4
BIOL 217, 218 Human Anatomy and Physiology	8
CHEM 187 Introduction to Nutrition	3
PSY 111 Introduction to Psychology.....	3
Total:	18

Core Requirements

PHED 212 Foundations of Physical Education.....	2
PHED 225 Teaching Elementary P.E.....	3
At least 2 hours from	2
PHED 226 Movement and Rhythmic Fundamentals.....	3
PHED 251 Teaching Lifetime Sports I.....	1
PHED 252 Teaching Lifetime Sports II.....	1
PHED 253 Teaching Track & Field.....	1
PHED 302 Teaching Secondary Physical Education	3
All of the following:	
PHED 237 Holistic Health	3
PHED 246 Care, Prevention, and Management of Athletic Injuries.....	3
PHED 248 Adaptive P.E. and Fitness Programs	2
PHED 276 Motor Development and Learning	3
PHED 320 Measurement and Evaluation in Phys. Ed.....	3
PHED 330 Physiology of Exercise	3
PHED 341 Kinesiology	3
PHED 350 Health and Physical Fitness for Senior Adults.....	2
PHED 401 Organization & Mgmt of Phys Ed & Athletics	3
PHED xxx Swimming (PHED 102, 228, 244, or 265).....	1
REC 266 Outdoor Living Skills	2
Total:	35

Senior Capstone

PHED 420 Internship.....	4-12
or PHED 423.....	1
and PHED 424.....	1
and PHED 426.....	2

Competencies in CPR and first aid

Coaching Registration

Completion of the teaching certification option meets all requirements for New York registration for coaching interscholastic sports in the public schools. Students in other majors/minors interested in coaching registration should take:

PHED 239 Principles and Practices of Coaching.....	2
PHED 246 Care, Prevention, and Management of Athletic Injuries.....	3
PHED 276 Motor Development and Learning	3
PHED 330 Physiology of Exercise	3
PHED 341 Kinesiology	3
Activity lab:	
PHED xxx Teaching Team Sports or	
Teaching Lifetime Sports.....	1
Total:	15

Course Descriptions

PHED 101 Lifetime Wellness (integrative studies) (1, F&S)
Health-related physical fitness, self-evaluation, and individualized exercise programs. Liberal Arts Foundation - Lifetime Wellness.

PHED 102 Physical Education (integrative studies) (1, or .5 for non-PE majors F&S)
Physical coordination and conditioning; basic skills; appreciation for physical activity and lifetime fitness in Christian life. Note: several REC courses may be used in lieu of this for integrative studies credit. Liberal Arts Foundation - PE Activity.

PHED 103 Adaptive Physical Education (integrative studies) (1/1, F&S)
For those who have some physical handicap or are limited by lack of coordination and basic training. Prerequisite: PHED 101 or 101M. Course objectives same as PHED 102. Remedial work included. Two hours applied. Liberal Arts Foundation - PE Activity.

PHED 108 First Aid/CPR/AED (.5, F&S)
Basic understanding of lifesaving techniques relative to first aid and cardiopulmonary resuscitation. The course is taught via instructional videos and by the practice of several emergency procedures on human subjects and manikins per standards established by the American Red Cross. Does not meet PHED 102 requirements.

PHED 212 Foundations of Physical Education (2, S)
Basic philosophical principles, history, scientific foundation, and contemporary significance of physical education; educational aims and objectives; physical education in the modern school curriculum.

PHED 220 Adventure Sports (Activity Lab) (3, OD)
Experiential learning of a variety of adventure sports (backpacking, climbing, mountain biking, kayaking/rafting) in canyons and of the Adirondack or Rocky Mountain regions; teaching experience and leadership development; fitness training for lifetime benefits; personal and spiritual growth; environmental stewardship; principles of aerobic conditioning; developing training programs. (Meets PHED 102 requirement.) Liberal Arts Foundation - PE Activity.

PHED 221 Educational Gymnastics I (Activity Lab) (1, F06)
Introduction to teaching gymnastics in a K-12 curriculum; floor exercise, tumbling, basic skills for limited apparatus; routine development; movement education concepts; teaching methods; safety and spotting. Three hours of field experience required.

PHED 222 Traditional Gymnastics II (Activity Lab) (1, OD)
Olympic style progressions for floor exercise and all apparatus, enhance performance base established in Educational Gymnastics; develop confidence and proficiency with techniques; professional involvement. Permission from instructor.

PHED 225 Teaching Elementary Physical Education (3, F)
Student development and learning styles, teaching methods, analysis of one's own teaching, classroom management, evaluation of students' performance, and preparation of curriculum, unit, and lesson plans for the elementary level. Fifteen hours of field experience required.

PHED 226 Movement and Rhythmic Fundamentals (3, S)
A conceptual approach to human movement; techniques for dealing with force, time and space, and flow as they relate to movement; stunts and gymnastics; the use of lead-up experiences, skills, and rhythms in games and teaching methods. Three hours lecture and applied.

PHED 227 Sports Ministry: The Integration of Faith and Sport (3, F)
Students will develop an understanding of the sports culture and how the gospel can be effectively communicated within this context. They will consider sociological factors, historic developments and the Biblical text in order to build a theological foundation for the practice of sports ministry. Church and para-

church organizations will be examined as well as evangelism and discipleship methodologies. Students will practice communication skills within sports ministry settings.

PHED 228 Lifeguarding (Activity Lab) (1, S)
Preventive lifeguarding, basic skills, emergency plans, search and recovery techniques, legal responsibilities, pool operations, and record keeping. Prerequisites: 15 years of age or older, 500 yds continuous swim, strong swimming skills.

PHED 237 Holistic Health (3, S)
Lifetime health and well-being, interpersonal relationships, and current issues. Topics include stress, human sexuality, mental health, substance use and abuse, death and dying, personal safety, and fitness and nutrition.

PHED 239 Principles and Practices of Coaching (2, S)
Principles and techniques of coaching, systems used in coaching, and the development of a coaching system. An in-depth study of the athlete, the coach, and the team as a group.

PHED 242 Techniques of Taping and Bracing (1, F)
Practical learning of techniques and philosophies of taping, wrapping, padding and bracing for prevention, management, and treatment of athletic injuries of the extremities and trunk.

PHED 244 Instructor's Course in Red Cross Water Safety (2, S)
Review and refinement of swimming strokes, diving form, and water safety skills to a level adequate to obtain swimming instruction certification. Exploration of methods of instruction for swimmers of all ages and abilities. Prepare lesson plans and teach community swim lessons. Prerequisite: lifeguarding certification or swimming level strong enough to pass lifeguarding (lifeguarding certification may be obtained during the semester if necessary). (Meets PHED 102) Liberal Arts Foundation - PE Activity.

PHED 246 Care, Prevention, and Management of Athletic Injuries (3, F)
Introduction to the principles of prevention of athletic injuries and managing injuries when they occur. Students will develop an understanding of common injuries, illness, and disorders of the head, trunk, and extremities. American Red Cross CPR and First Aid included within this course.

PHED 247 Recognition and Evaluation of Athletic Injuries (3, S)
Pathology and evaluation of most common injuries/conditions found in the lower and upper extremities (i.e., ankle, knee, shoulder). History; observation; palpation; active and passive range of motion; muscle, neurological, and functional testing; and postural assessment. Prerequisite: PHED 246 or permission of the instructor.

PHED 248 Adaptive PE and Fitness (Activity Lab) (2, S07)
Physical and psychological aspects of illness and disabilities within context of physical activity. Evaluation of the individual and prescription of appropriate activity. Survey of legal aspects. Ten hours of field experience required. Prerequisites: BIOL 103 and 218; PHED 212.

PHED 251 Teaching Lifetime Sports I (Activity Lab) (1, F06)
Basic understanding of skills and teaching methods for selected lifetime sports including golf, racquetball and tennis. Students will examine preparatory activities, drills, mechanical analysis of skills, and unit and lesson planning; principles of aerobic conditioning; developing training programs.

PHED 252 Teaching Lifetime Sports II (Activity Lab) (1, S07)
Basic understanding of skills and teaching methods for selected lifetime sports including downhill and cross-country skiing, canoeing. Students will examine preparatory activities, drills, mechanical analysis of skills, and unit and lesson planning; principles of aerobic conditioning; developing training programs.

PHED 253 Teaching Track and Field (1, M)
Basic understanding of skills and teaching methods for selected track and field events including high jump, long jump, triple jump, sprint mechanics, hurdling, sprint starts, relays, shot-put, and discus. Students will examine preparatory activities, drills, mechanical analysis of skills and unit and lesson planning; principles of aerobic conditioning; and developing training programs. Students will also help organize and run a local track and field event.

PHED 261 Teaching Team Sports I (Activity Lab) (1, F07)
Basic understanding of skills and teaching methods for selected team sports including soccer, volleyball and flag football. Students will examine preparatory activities, drills, mechanical analysis of skills, and unit and lesson planning. Two hours of field experience required.

PHED 262 Teaching Team Sports II (Activity Lab) (1, S08)
Understanding of skills and teaching methods for selected team sports including basketball, softball and team handball. Students will examine preparatory activities, drills, mechanical analysis of skills, and unit and lesson planning. Two hours of field experience required.

PHED 265 Lifeguard Instructor (Activity Lab) (1, S)
American Red Cross lifeguarding course taught by ARC certified instructor. Successful completion certifies individual to teach ARC lifeguarding classes. Two hours applied. Must be 17 years old with current lifeguard training and CPR certification. Prereq: PHED 228 or equivalent.

PHED 276 Motor Development and Learning (3, F)
Introductory study of nature, scope, process of human movement. Emphases: motor development, motor patterns, movement exploration; relationships of genetics and the environment to the learning process and overall well being.

PHED 281 Pre-Physical Therapy Field Experience I (2, F)
Mastery of competencies in injury prevention, recognition, and assessment; taping, and bracing techniques; understanding of the lower extremity; and medical documentation. *Requires 25 hours of observation in each of three settings: orthopedics, pediatrics, and geriatrics, with an additional 25 hours assisting with rehabilitation in the Houghton College training room. (Hours logged prior to taking this class may count with instructor's pre-approval.) Pre-PT majors only. Pre-/Co-Req: PHED 247.*

PHED 290 Sociology of Sport (3, S)
Sport as a social institution and microcosm of society. Topics: socialization into and via sport; social stratifications; sport and gender, race, economics, politics, religion, social change, education.

PHED 302 Teaching Secondary Physical Education (3, F)
Student development and learning styles, teaching methods, analysis of one's own teaching, classroom management, evaluation of students' performance, and preparation of curriculum, unit and lesson plans for the secondary level. Fifteen hours of field experience required.

PHED 305 Sports Ministry Field Practicum (3, S/M)
A supervised field experience in a sports ministry setting: church, camp, mission organization or para-church sports ministry. The student will relate theory to practice through a cooperative learning relationship between the ministry organization, student and advisor.

PHED 315 Psychosocial Aspects of Physical Education and Sport (2, S08)
Behavioral and cognitive development, learning theories, and the effects of motivation and cultural/societal factors on performance in physical education and athletics.

PHED 320 Measurement and Evaluation in Physical Education (3, F07)
Modern theories and practices in evaluation of knowledge, attitudes, and skills. Construction of both written and practical tests to measure the various aspects included in physical education. Use of descriptive and inferential statistics.

PHED 330 Physiology of Exercise (3, S)
The analysis of the physiological changes that occur in the body: during exercise, after exercise, and during a training period. Prerequisites: BIOL 103 and BIOL 217, 218.

PHED 341 Kinesiology (3, F)
The analysis of the musculoskeletal system and its interrelationship with human movement. Prerequisites: BIOL 103 and BIOL 217, 218.

PHED 348 Therapeutic Exercise Management of Injuries (3, S07)
Mechanisms, signs, symptoms, immediate and long-term rehabilitation procedures for injuries affecting extremities and axial skeleton. Rehabilitation procedures focus on range of motion activities, joint mobilization, open vs. closed kinetic chain activities, therapeutic exercises and equipment.

PHED 350 Health and Physical Fitness for Senior Adults (2, S08)
Holistic health and wellness of adults 55 years and older. Emphases: physical fitness, program planning, development, evaluation; principles and practices of leadership.

PHED 381 Pre-Physical Therapy Field Experience II (2, S)
Mastery of competencies in injury prevention, recognition, and assessment; taping, and bracing techniques; understanding of the back, and upper extremity; and developing rehabilitation programs. *Requires 25 hours*

of observation in each of three settings: orthopedics, cardiac, and neural rehabilitation with an additional 25 hours assisting with rehabilitation in the Houghton College training room. (Hours logged prior to taking this class may count with instructor's pre-approval.) Pre-PT majors only. Pre-/Co-Requisite: PHED 348.

PHED 401 Org. & Mgmt. of Physical Education and Athletics (3, S)
Theories, philosophy, and systems of management; program development, finance, purchasing and care of equipment, public relations, facility and personnel management, and legal liability.

PHED 405 Student Teaching in Physical Education K-6 (6, F&S)

PHED 407 Student Teaching in Physical Education 7-12 (6, F&S)
Observation and teaching in elementary and secondary programs. Off-campus assignment under the direction of skilled teachers. Senior year. Student must register for PHED 411 concurrently. **Note: see Educ. Dept. policy on "Employment and Activities While Student Teaching."** Student must have overall GPA of 2.7.

SENIOR CAPSTONE for TEACHING OPTION
PHED 411 Issues Seminar in Physical Education (2 F&S)
Critical analysis and synthesis of student teaching experience and of crucial issues in education.

SENIOR CAPSTONE for PHYSICAL FITNESS OPTION
Either four hours of PHED 420 **or** four hours of PHED 423 and 424 and 426.

PHED 420 Internship: Physical Fitness (4-12, F&S)
Observation and practical experience in a public or private agency. Off-campus assignment under the direction of skilled professionals. NOTE: Students choosing this option must complete a total of four hours in PHED 420, or a total of four hours from PHED 423, 424, and 426. The four hours in PHED 420 includes one hour of topics in current issues. Overall GPA of 2.5 required.

PHED 423 Physical Fitness Practicum I (1, F&S)
Directed observation in off-campus fitness center programs with hands-on practical experience. Requires at least 50 observation hours from two or more agencies, sites to be negotiated. Overall GPA of 2.5 required.

PHED 424 Physical Fitness Practicum II (1, F&S)
Directed observation in off-campus rehabilitation programs with hands-on practical experience. Requires at least 50 observation hours from two or more agencies; sites to be negotiated. Overall GPA of 2.5 required.

PHED 426 Issues Seminar/Fitness Testing and Prescription (2, F&S)
Critical analysis and synthesis of critical issues in the area of health and physical fitness. On-campus fitness testing; prescriptions and follow-ups will be conducted by the student. Prerequisites: PHED 423 and 424.

PHED 191, -2; 291, -2; 391, -2; 491, -2 Independent Study (1, 2, or 3)

PHED 295, 395, 495 Special Topics (1, 2, or 3)
Depending on interest, demand and faculty availability and expertise courses will be offered to allow students to consider issues and aspects of physical education not covered in other courses.

PHED 496 Honors in Physical Education (3, OD)

Physics BA, BS (majors and minor)
Department of Physics and Earth Science: Mark E. Yuly, chair
Faculty: Mark Yuly, Brandon Hoffman
Web site: campus.houghton.edu/orgs/physics
Phone: 585.567.9280

Physics Major: BS (31 hours in major; 16 in prerequisites; 11 in co-requisites)
Physics Minor: (12 hours of credit in physics courses numbered 211 or above)

General Information

The BS physics major provides a broad variety of experiences with the theoretical basis of physics, its applications, experimental and mathematical techniques, and its study using computer programming and simulations. It serves as an excellent preparation for graduate work in physics or related fields, such as engineering, astrophysics, biophysics, physical oceanography, geophysics, and meteorology. Students

may also use the physics major as preparation for attending professional school in fields such as medicine, dentistry, and law.

The requirements for the BS in physics are as follows:

Prerequisites (16):		
PHYS 151, 152	General Physics I, II	8
MATH 181, 182	Calculus I, II	8
Required (31) which must include:		
PHYS 275, 276	Experimental Physics Lab	2
PHYS 251	Mechanics I	3
PHYS 352	Mechanics II	3
PHYS 212	Modern Physics	3
PHYS 353	Electricity and Magnetism I	3
PHYS 354	Electricity and Magnetism II	3
PHYS 355	Thermal Physics	3
PHYS 356	Quantum Mechanics	3
PHYS 471,472	Physics Project Lab	2
PHYS 482	Senior Capstone: Physics Seminar	1
An additional 5 hours in PHYS courses above 200 level		
Co-requisites (11):		
MATH 241	Differential Equations	3
MATH 321	Multivariate Calculus	4
CHEM 151	General Chemistry I +Lab	4
Additional recommended supporting courses include:		
MATH 261	Linear Algebra	3
CHEM 152	General Chemistry II + Lab	4
CSCI 211	Programming I	3
CSCI 236	Data Structures and Algorithms	3
PHIL 360	History and Philosophy of Science	4

Computational Physics Major: BS (30 hours in major; 16 in prerequisites; 11 in co-requisites)

General Information

Computational physics involves the use of computers in modeling and analyzing complex systems. This major is available to those students interested in studying physics with an emphasis on the use of computers. It provides students with highly sought-after computer and problem solving skills in a growing area of interdisciplinary study. **(See Computational Physics)**

Applied Physics Major - Engineering Emphasis: BS (31 hours in major; 17 in prerequisites, 14 in co-requisites)

General Information

This major is for students interested in the engineering applications of physics and is preparation for an engineering-related career or graduate school in engineering or physics. **(See Engineering)**

Physics Major: BA (24 hours in major; 16 in prerequisites; 7 in co-requisites)

The BA major is particularly appropriate for students interested in a double major with another field, or for students completing a concentration in secondary education.

The requirements for the BA in physics are as follows:

Prerequisites (16):		
PHYS 151, 152	General Physics I, II	8
MATH 181, 182	Calculus I, II	8
Required (24) which must include:		
PHYS 275, 276	Experimental Physics Lab	2
PHYS 251	Mechanics I	3
PHYS 212	Modern Physics	3
PHYS 353	Electricity and Magnetism I	3
PHYS 355	Thermal Physics	3
PHYS 482	Senior Capstone: Physics Seminar	1
An additional 9 hours in PHYS courses above 200 level		

Co-requisites (7):

MATH 241	Differential Equations	3
MATH 321	Multivariate Calculus	4
Additional recommended supporting courses include:		
CHEM 151, 152	General Chemistry	4
CSCI 211	Programming I	3
PHIL 360	History and Philosophy of Science	4

Course Descriptions

PHYS 140 Physics of Music

(2, May, 08)

This course will focus on the physics of various phenomena associated with music. A quantitative, mathematical approach will be used and students will apply the methods of science to gain a greater understanding of music. Topics will include harmonics, frequency and tone, overtones, spectral analysis and the physics of scales.

PHYS 151, 152 General Physics

(4/4, F/S)

An introduction to the study of physics focusing on central concepts and problem solving. Topics include mechanics, energy and waves (PHYS 151) and thermodynamics, electricity, magnetism, optics and modern physics (PHYS 152). Three lecture and three laboratory hours each week. Prerequisite: MATH 181 (or evidence of adequate math preparation) for PHYS 151, and PHYS 151 for PHYS 152. Liberal Arts Foundation - Lab Science, PHYS 151, only.

PHYS 170 Introduction to Engineering

(1, S07)

An introduction to the theory and practice of engineering. By participating in a design project, students will be introduced to topics such as technical drawing using CAD software, MATLAB, and machine shop skills. The course will also address the branches of engineering, requirements of the engineering professions, and moral and ethical dimensions of engineering as a field of study and as a profession. This course is required for dual-degree engineering students.

PHYS 212 Modern Physics

(3, F06)

An introduction to the basic ideas of relativity and quantum theory. The implications of Special Relativity will be explored using the Lorentz transformation. General Relativity will be conceptually introduced. Elementary quantum mechanics using the Schrödinger equation will be applied to atoms, molecules, solids, nuclei, and elementary particles. Prerequisite: PHYS 152.

PHYS 215 Engineering Mechanics: Statics

(3, F07)

A study of basic mechanics as it relates to the static stability of structures and other objects using methods of multidimensional vector analysis and virtual work. Topics to be covered include the equilibrium of a particle and a rigid body, structural analysis, friction, center of gravity, and moment of inertia. Prerequisite: PHYS 151.

PHYS 250 Engineering Mechanics: Dynamics

(3, F06)

Methods of vector calculus are applied to investigate the multidimensional kinematics and dynamics of particles and rigid bodies. Both translating and rotating systems are explored using such principles as force, torque, work, energy, impulse, and momentum (linear and angular). Prerequisites: PHYS 152 and MATH 182. Pre/corequisite: MATH 241 are recommended.

PHYS 251 Mechanics I

(3, F06)

A development of classical mechanics beyond the introductory physics level. The course will focus on the dynamics of particles and rigid bodies in one, two, and three dimensions. Topics covered will include central forces, collisions, and non-inertial frames of reference. Analytical and numerical methods of solution will be included. Prerequisites: PHYS 152 and MATH 182; pre/corequisite: MATH 241.

PHYS 258 Analog Electronics

(4, F06)

A study of analog circuits comprised of resistors, capacitors, inductors, op-amps and DC and AC voltage and current sources. Methods of analyses include Kirchoff's Laws, node/mesh, network theorems, bode plots, Laplace transforms, and two-port networks. Some software tools will also be explored. Includes a three-hour weekly laboratory. Prerequisite: PHYS 152; pre/coreq: MATH 241.

PHYS 259 Digital Electronics

(4, S07)

An introduction to digital circuits including Boolean algebra, logic gates, Karnaugh maps, decoders, flip-flops, registers, microcomputers, and interface devices. Characteristics and operation of digital integrated circuits will be covered. Some software tools will also be explored. Includes a three-hour weekly laboratory. Prerequisite: PHYS 152.

PHYS 260 Optics (4, OD)
An introduction to the study of light. The course includes topics from geometrical optics, such as optical system analysis and aberration theory, and topics from physical optics, including interference, diffraction, and Fourier optics. Special topics from quantum optics will also be included. Prerequisites: PHYS 152 and MATH 182. Pre/co-requisite: MATH 241. Three lecture and three laboratory hours each week.

PHYS 275, 276 Experimental Physics Laboratory (1, 1 F06&S07)
Selected experiments in mechanics, electricity and magnetism, and modern physics.

PHYS 352 Mechanics II (3, S07)
Newton's Laws and conservation laws will be reviewed, followed by an examination of Hamilton's Principle and the Lagrangian formulation of mechanics. Using these tools, topics such as central force motion, dynamics of systems of particles and rigid bodies, and coupled oscillations and normal modes will be explored. Prerequisite: PHYS 250 or 251. MATH 261 recommended pre/co-requisite.

PHYS 353 Electricity and Magnetism I (3, F07)
An introduction, with applications, to the classical theory of electric and magnetic fields. The course will begin with an overview of vector calculus for electromagnetic theory and will develop Maxwell's equations. Pre/corequisites: PHYS 152, MATH 321.

PHYS 354 Electricity and Magnetism II (3, S08)
An examination of the important role of special relativity in electromagnetic phenomena. Maxwell's equations are introduced in a relativistic manner, and used to investigate the properties of electromagnetic waves. Also included are mathematical techniques for solving the equations of Laplace and Poisson in electrostatics. Prerequisite: PHYS 353; pre/corequisite: MATH 261 recommended.

PHYS 355 Thermal Physics (3, S08)
Analysis of laws of thermodynamic equilibria in solid, liquid, and gaseous phases; introduction to statistical mechanics in terms of the microcanonical, canonical and grand canonical ensembles. Prerequisites: PHYS 152, MATH 241.

PHYS 356 Quantum Mechanics (3, S07)
Modern quantum mechanics with an emphasis on matrix methods. Topics to be covered include time evolution of wave functions, harmonic oscillators, angular momentum, central potentials, the hydrogen atom and perturbation theory. Prerequisites: PHYS 212, MATH 241; pre/corequisites: MATH 261 recommended.

PHYS 471, 472 Physics Project Laboratory (1/1, F/S)
Participation with a faculty member in an individual research project. May be repeated for credit.

PHYS 482 Senior Capstone: Physics Seminar (1, S)
Written and oral presentation of work completed in PHYS 471/472 (for Physics BS) or on a topic of current interest in physics journals (for Physics BA).

PHYS 295, 395, 495 Special Topics in Physics (1, 2, 3 or 4)
Introduction to areas of physics not treated in other courses.

PHYS 391, 392, 491, 492 Independent Study (1, 2, or 3)

PHYS 480 General Science Seminar (1, S)
Written thesis and oral presentation on a topic selected for interdisciplinary breadth describing current scientific research in the area of the student's concentration, based on a thorough review of scientific literature.

PHYS 496 Honors in Physics (3, OD)

Political Science (major and minor)

Department of History and Political Science: Peter Meilaender, chair

Faculty: B. David Benedict, Peter Meilaender, Ronald Oakerson

Web site: campus.houghton.edu/orgs/history/dept_hist_poli.html

Phone: 585.567.9440

Major: (27 hours, 6 hours co-requisites)

Minor: (12 hours of POLS courses above the 210 level)

Political Science Major: The political science discipline concentrates on government institutions and processes at the local, national, and international levels that result in legislation, policies, norms, and actions. In addition to supporting responsible citizenship, the major is important to students contemplating careers in teaching, government, law, diplomacy, international service, business, and journalism.

The major consists of 27 hours.

15 hours of core requirements above POLS 101:

POLS222 The American Political System 3

POLS230 Introduction to International Relations 3

POLS260 Introduction to Political Thought..... 3

POLS312 Social Science Research Methods 3

POLS480 Senior Capstone: Politics Seminar..... 3

Political science electives above the 210 level..... 12

(Majors may fulfill up to six of these 12 hours by participating in an internship in local, state, or national domestic politics or in an international intercultural setting.)

Co-requisites:

POLS 101 Introduction to Politics..... 3

POLS 309 Statistics..... 3

Students will be encouraged to complete a broad liberal arts education, especially including exposure to the other social sciences (economics, sociology, psychology, and cultural anthropology) as well as history, philosophy, ethics, logic, and critical thinking.

Course Descriptions

POLS 101 Introduction to Politics (3, F, S)

Considers nature, goals, and processes of politics in theory and practice; surveys major forms of government; explores key issues of world politics. Satisfies the integrative studies level I requirement in social science. Co-requisite to major. Liberal Arts Foundation - Social Science.

POLS 220 World Regional Geography (3, M)

Study of location and character of major world regions and nation-states. The concept of the *region* in geography is examined, followed by detailed analysis of nine regions, focusing on political and economic issues and cultural diversity.

POLS 222 The American Political System (3, S)

The foundation course in American politics. Focus is on the basic design of the American political system, including constitutionalism, federalism, and the separation of powers. Includes discussion of political parties, elections, Congress and the President, bureaucracy, and the judiciary.

POLS 224 States, Cities, and Communities: Grassroots Politics (3, TBA)

A view of American politics from the "bottom-up," focusing on state and local governments, with special attention to New York. Considers urban, suburban, and rural patterns of governance in the framework of American federalism. Includes a focus on judicial process as practiced in state and local courts.

POLS 230 Introduction to International Relations (3, F)

Development of the international system of nation-states; effects of system structure and intrastate elements on international relations; concepts such as power, balance of power, sovereignty, interdependence, and issues such as foreign policy decision making, causes of war, and nuclear arms control.

POLS 240 Comparative Government (3)

Comparative basis for understanding similarities and differences in political systems around the world,

focusing on Europe and Asia. Typical issues: historical development, ideology, political parties, interest groups, government, and domestic and foreign policies.

POLS 260 Introduction to Political Thought (3, F)
Introduces students to Western political thought from the ancient to the modern world through a close reading of important thinkers. By considering problems of community, obligation, order, justice, liberty, and freedom, the course equips students for careful normative reflection on public life.

POLS 295 Special Topics (3, OD)
(See course description in Off-Campus Programs - Houghton in Adirondack Park.)

POLS 309 Statistics (3, F, S)
Study of descriptive as well as inferential statistics, including analysis of variance and measures of correlation; application to political, social, and psychological data. Recommended for sophomore year. Prerequisite for POLS 312 Social Science Research Methods; co-requisite for major. Does *not* count for major or minor credit.

POLS 312 Social Science Research Methods (3, S)
Basic scientific method, application to social phenomena; procedures (and methodological problems in various types of social research; methods of data analysis. Recommended for junior year after completion of POLS 309.

POLS 316 American Foreign Policy (3, TBA)
Formulation and execution of U.S. foreign policy, especially since World War II. Special attention to foreign policy strategies in light of different conceptions of vital interests, threats to these interests, and appropriate responses.

POLS 320 Community Organization and Development (3, TBA)
A comparative study of how local communities organize themselves to manage natural resources and provide collective goods and sources. Considers issues related to decentralization and sustainable development. Emphasis on analytic approaches to problem-solving.

POLS 321 Public Organization (3, TBA)
Focuses on public administration and delivery of public goods and services at all levels of government. Discussion includes bureaucracy, management, intergovernmental relations, citizen participation, and service delivery. Explores issues of responsiveness, accountability, effectiveness, efficiency, and equity.

POLS 323 Public Policy Analysis (3, TBA)
Examines specific policy problems and the methods used to analyze such problems. Focus is on American domestic policies. Specific issues vary, ranging from national to local and from urban to rural.

POLS 326 American Democracy I: Representation (3, TBA)
Explores patterns and issues of representation in American democracy. Examines voting, elections, political parties, interest groups, and reform movements. Prerequisite: POLS 222.

POLS 327 American Democracy II: Governance (3, TBA)
Explores institutions and processes of governance, focusing on Congress and the President, in the context of a federal system. Considers perennial issues, such as the separation of powers, budgetary process, and the rule of law. Prerequisite: POLS 222.

INCL/POLS 333 War & Terrorism in the Middle East: History and Politics (3-4, F07, F09)
This course explores three phenomena: (1) war and terrorism in general and in the Middle East in particular; (2) the history & politics of this region (with forays into geography, religion, society, culture & economics) and (3) country-specific histories and politics. The course offers in-depth analyses concerning the religion and terrorism nexus, the Arab-Israeli conflicts and peacemaking, and the theory and practice of pacifism and just war. Liberal Arts Exploration - Social Science.

POLS 336 Governance and Politics in Developing Countries (3, TBA)
A study of patterns of governance and politics typical of developing countries with an emphasis in relationships between governance and development.

POLS 355 East Asia: History and Politics (3, F)
Introduction to history and politics of East Asia from ancient time to the present, with focus on China and Japan. Emphasis on historical and political developments in 19th and 20th centuries leading to founding of Communist China and the new Japan.

POLS 357 Russia and the USSR: History and Politics (3, S)
Introduction to Russian and Soviet history and politics from first records to present, with focus on government, institutions, culture, and society of Imperial and Soviet periods.
POLS 393 Field Experience (Internship) (1-3, OD)
Supervised participation in executive, legislative, judicial, or legal offices in local, state, or federal government when deemed suitable for academic credit and approved by the political science advisor and the chair of the Department of History and Political Science. Usually three hours of credit may be counted toward the major or minor. May be combined with an additional three hours of credit for POLS 391 Independent Study.

POLS 295, 395, 495 Special Topics in Political Science (3, OD)
According to demand and interest, courses will be offered on the Middle East, International Law and Organization, International Relations Theory, Political Economy, and Issues of War and Peace.

POLS 427 American Constitutional Law (3, TBA)
Development of the Constitution through practice and leading court decisions from 1787 to the present. Emphasis on case studies.

POLS 480 Senior Capstone: Politics Seminar (3, S)
Capstone course of the major in which students integrate concepts, knowledge, skills, methods, approaches, and practical experience in politics and government. Will improve research, writing, analytical, and communications skills by researching, writing, and defending a first-year-graduate-school-quality paper based on original research in both primary and secondary sources.

POLS 191, -2; 292, -2; 391, -2; 491, -2 Independent Study (1, 2, or 3)

POLS 496 Honors in Political Science (3)

Pre-health Professions

Faculty Advisors: Jacqueline Crisman, Aaron Sullivan

At Houghton the curriculum in the sciences is excellent preparation for medical, dental, nursing and podiatry schools, as well as pre-physician's assistants training. Students who desire to attend one of these types of training programs usually major in biology or chemistry. However, these schools do admit students who have majored in other fields of study. All pre-health students should consult with either Dr. JM Crisman (pre-medical, pre-osteopathy, pre-dental, pre-optometry, pre-chiropractic) or Dr. Aaron Sullivan (pre-veterinary, pre-physical therapy, pre-physician's assistant) about particular requirements for these fields. **Students also should pay considerable attention to the admission requirements for school to which they intend to apply.**

Much of the coursework needed to apply for studies in the allied health professions is from the sciences. For more information on required courses for pre-health professions, please refer to the course descriptions for the Department of Biology, Chemistry and Physics.

Pre-medical Training:

Dr J.M. Crisman, Director of Premedical Education, can supply more information about premedical training, as well as pre-podiatry, pre-optometry, pre-dental and pre-chiropractic training.

Allopathic (awarding an M.D.) or Osteopathic (awarding a D.O.) medical schools require a strong score in the Medical School Application Test (MCAT). The MCAT is usually taken during their junior year to support medical admission in the fall after their senior year. Thus, those who intend to follow this timeline of application to medical school must have completed the courses required for taking the MCAT by the end of their junior year (i.e. 1 year of General Biology, 1 year of General Chemistry followed by 1 year of Organic Chemistry, 1 semester of Calculus followed by 1 year of Physics). Those who are not planning on a Biology or Chemistry major must carefully plan their course schedules with this in mind. In addition, some medical schools also require English, Microbiology and, increasingly, Biochemistry.

Medical schools also look for well-rounded students with tangible experiences in the medical professions. Houghton provides a course in disease pathogenesis that not only gives students such experiences, but also provides them with practical training in the study of disease process. Students spend 2 weeks in lecture learning about diseases and then choose from a variety of domestic or international medical missions experiences. During this time, they also integrate faith and medical missions by Bible study.

Most of these medical schools receive far more applications than the limited number of openings so that strong natural ability and outstanding scholastic achievement on the undergraduate level are vital if an applicant is to receive serious consideration.

Pre-veterinary medicine: Houghton provides a broad, pre-professional education, while offering those courses specified by veterinary medical colleges for admission. Veterinary colleges stress the desirability of a well-rounded post-secondary education. They accept students without regard to their pre-professional major and sometimes after three years or 90 hours of credit. However, most applicants major in biology or chemistry and, on the average, have more than 100 hours of pre-professional training.

Because there are relatively few veterinary colleges, the number of students accepted each year into veterinary curricula is small. Therefore, excellence of academic achievement and personal character, as well as familiarity with the profession, are necessary for admission. Contact Professor Aaron Sullivan, pre-veterinary advisor, for further information.

Pre-law

Faculty Advisors: Christopher Stewart, Peter Meilaender

Students who plan to attend law school after graduation from Houghton may choose majors and minors from a wide selection of academic offerings. No particular majors or minors are required. The program for pre-law students is flexible and emphasizes the development of critical analytical thinking, habits of thoroughness, intellectual curiosity, and scholarship, and the ability to organize data and communicate the results. Therefore, a balanced selection of courses in several disciplines is advised, including: critical thinking, logic and ethics; communication, public speaking, and argumentation and debate; algebra, topology, and accounting; research and writing; as well as philosophy, history, politics, and other social sciences. While some law courses are offered (constitutional, business, and international law), they do not constitute the program's core. In all of these areas, Houghton's pre-law program directly reflects law school admissions expectations and requirements.

While at Houghton, each student has a curriculum advisor from the major area. In addition, each student works with one of the pre-law advisors to develop an individualized program. Internships for juniors and seniors in local law offices are available and encouraged. Moreover, students also should consider the senior-in-absentia program described elsewhere in this catalog. (See Index for page.) Most law schools receive far more applications than they have openings. Strong natural ability combined with outstanding academic achievement and high scoring on the Law School Aptitude Test (LSAT) is imperative if an application is to receive serious consideration.

Pre-physical Therapy (biology BA major)

Department of Biology: James M. Wolfe, chair

Faculty: Sandra Johnson, Aaron Sullivan

Web site: campus.houghton.edu/orgs/biology/

Phone: 585.567.9280

A pre-physical therapy track is available for students who are interested in pursuing graduate studies in physical therapy. A number of courses in Physical Education/Athletic Training are required for this track.

Pre-Physical Therapy Emphasis: Biology BA (26 hours in major; 8 in prerequisites; 20 in co-requisites)

Following eight hours of General Biology (prerequisite), the Pre-Physical Therapy program consists of 26 hours in biology and physical education that must include the following:

BIOL 217,218	Human Anatomy and Physiology	8
BIOL 251	Genetics	4
BIOL 281	Introduction to Research	1
BIOL 482	Senior Capstone: Seminar	1
PHED 330	Physiology of Exercise	3
PHED 341	Kinesiology	3
BIOL XXX	Electives.....	6

Plus an additional 20 hours of co-requisites:

CHEM 141, 152	General Chemistry	8
PHYS 151, 152	General Physics	8
MATH 181	Calculus I	4

Minor: (13 hours) This Pre-Physical Therapy/Athletic Training minor must be taken with the Pre-Physical Therapy program.

Required classes

PHED 246	Care, Prevention & Management of Athletic Injuries	3
PHED 247	Recognition and Evaluation of Athletic Injuries	3
PHED 348	Therapeutic Exercise Mgmt. of Injuries.....	3
PHED 281	Pre-PT Field Experience I.....	2
PHED 381	Pre-PT Field Experience II.....	2
Total:.....		13

Course Descriptions

PHED 281 Pre-Physical Therapy Field Experience I (2, F)

Mastery of competencies in injury prevention, recognition, and assessment; taping, and bracing techniques; understanding of the lower extremity; and medical documentation. *Requires 25 hours of observation in each of three settings: orthopedics, pediatrics, and geriatrics, with an additional 25 hours assisting with rehabilitation in the Houghton College training room. (Hours logged prior to taking this class may count with instructor's pre-approval.) Pre-PT majors only. Pre-/Co-Req: PHED 247.*

PHED 381 Pre-Physical Therapy Field Experience II (2, S)

Mastery of competencies in injury prevention, recognition, and assessment; taping, and bracing techniques; understanding of the back, and upper extremity; and developing rehabilitation programs. *Requires 25 hours of observation in each of three settings: orthopedics, cardiac, and neural rehabilitation with an additional 25 hours assisting with rehabilitation in the Houghton College training room. (Hours logged prior to taking this class may count with instructor's pre-approval.) Pre-PT majors only. Pre-/Co-Requisite: PHED 348.*

(For other descriptions, see the appropriate section: Biology, Physical Education, etc.)

Pre-seminary

(Consult the chair of the Department of Religion and Philosophy, Dr. J. Michael Walters)

For those who expect to attend seminary after college, The Association of Theological Schools offers the following guidelines:

- Students should develop to a satisfactory degree their ability to think independently, to communicate effectively, and to do research.
- Students should possess a general knowledge of past and present culture through study in the humanities and the natural and social sciences.
- The biblical languages are useful tools to acquire in the pre-seminary period. Latin may be helpful, especially in some traditions. Modern languages such as German, French, and Spanish are also valuable.
- The study of religion is appropriate within a liberal arts education. Students should not, however, anticipate to any considerable extent at the undergraduate level, work that will form part of their seminary program. Such anticipation may narrow the base on which later theological reflection will rest and may also create problems in planning an integrated program in the theological school.

Psychology (major and minor)

Department of Psychology and Sociology: Daryl H. Stevenson, chair

Faculty: Richard Stegen, Daryl Stevenson, Cynthia Symons, John Van Wicklin, Paul Young

Web site: campus.houghton.edu/orgs/psychology/psynsochp.htm

Phone: 585.567.9440

Major: 33 hours in the major; 4 in pre/co-requisites

General Information

The psychology faculty conducts a systematic inquiry into the nature of animal and human behavior, including cognitive and emotional processes. Our commitment is to prepare students to understand events from a psychological perspective and the belief that truth is unified. Our task is to appreciate the contributions of modern psychological theory and practice, and at the same time to view these critically in light of Christian faith and the inspired Biblical record. We address fundamental issues confronting psychology and faith to help students develop a holistic Christian view of the nature of persons, recognizing that legitimate differences exist within Christian evangelical theology.

Graduates often take further training to pursue such professional careers as clinical and counseling psychology, student and personnel development, school psychology, social work, and human services in general. Others have taken appointments in academic departments. Even without further training, knowledge of psychological functioning within individuals and in group settings is a valuable asset in professions such as law, business, education, therapeutic recreation, and ministry.

Major Information

Introduction to Psychology (PSY 111) is prerequisite to all additional coursework in the discipline. The major requires 33 hours (of which at least three must be 400 level PSY) beyond that course. Psychology majors complete nine hours of core requirements and then at least one course from each of the five secondary core areas listed below. Finally, at least three other elective courses are selected from the department's offerings. If a student takes more than one course from a secondary core area it may be used as elective credit.

Statistics (PSY 309) and Experimental Methods (PSY 310) should be taken in fairly close sequence during the sophomore and junior years. Students desiring to participate in the optional senior fall semester internship in Buffalo should plan to work closely with their advisor to complete the appropriate series of courses prior to placement: Experimental Methods, Abnormal Psychology, Psychological Assessment, and Counseling and Psychotherapy. Three of the six internship hours may count toward the minimum 33 hours for the major.

Co-requisite with the major is four hours of laboratory biology.

Students with a double major may take a minimum of 27 hours of psychology coursework, meeting all the major's regular requirements and reducing electives to three hours.

Primary Core Requirements

PSY 309 Statistics.....	3
PSY 310 Experimental Methods.....	3
PSY 480 Senior Capstone Seminar.....	3

Secondary Core Areas (minimum of one course from each area)

I. Developmental.....	3
PSY 214 Child Psychology, or	
PSY 215 Adolescent Psychology, or	
PSY 230 Lifespan Development of the Family	
II. Social/Personality.....	3
PSY 218 Social Psychology or	
PSY 301 Psychology of Personality	
III. Learning/Physiological.....	3 or 4
PSY 335 Drugs and Behavior, or	
PSY 337 Social Cognition, or	
PSY 403 Physiological Psychology, or	
PSY 451 Learning and Memory	
IV. Clinical.....	3
PSY 305 Abnormal Psychology, or	
PSY 315 Psychological Assessment, or	
PSY 402 Counseling and Psychotherapy	
V. Integrative Issues.....	3
PSY 302 Psychology and Christianity, or	
PSY 306 Psychology of Religion, or	
PSY 401 History and Systems of Psychology	
PSY xxx Psychology electives	9
Total:	33

Minor: A minor in psychology consists of any 12 semester hours above PSY 111, excluding Statistics (PSY 309).

Course Descriptions

PSY 111 Introduction to Psychology (3, F&S)
Scientific study of human behavior. Fundamental facts, theories, issues, concepts, and principles of psychology. **Note: PSY 111 is prerequisite to all other psychology courses.** May include research participation requirements. Liberal Arts Foundation or Liberal Arts Exploration – Social Science.

PSY 214 Child Psychology (3, F&S)
Concepts, principles, theories, and research concerning the biological and environmental influences on the behavioral and psychological development of the child from conception to puberty.

PSY 215 Adolescent Psychology (3, F06)
Examines physical, cognitive, social, moral, and religious development from pubescence to early adulthood with attention to various forms of disturbance and self-destructive behavior.

PSY 218 Social Psychology (3, F)
Introduction to social behavior from a psychological perspective. Individual behavior as it affects/is affected by the behavior of others. Topics: prejudice, group processes, leadership, conformity, attitudes, change.

PSY 230 Lifespan Development of the Family (3, S)
A consideration of developmental theory and research related to family composition throughout the lifespan. Attention will be given to nontraditional families as well as to events that affect family development including divorce, abuse, alcoholism, mobility, poverty, and death.

PSY 252 Exceptional Child (3, F&S)
Introduction to special education; special needs of gifted, learning and emotionally disabled, and culturally disadvantaged children.

PSY 301 Psychology of Personality (3, F&S)
Description, development, dynamics, and determinants of the normal personality. Emphasis on contemporary theories. Prerequisite: six hours in psychology.

PSY 302 Psychology and Christianity (3, S)
Evaluation of works attempting to integrate psychology and biblical/theological understanding. Discussion of integration models and a conceptual framework for integration. Prerequisite: six hours in psychology.

PSY 305 Abnormal Psychology (3, F&S)
Etiology, dynamics, and treatment of abnormal behavior. Prerequisites: six hours in psychology.

PSY 306 Psychology of Religion (3, F)
Study of religious and spiritual experience and behavior from a psychological perspective. Covers such topics as conversion, faith, mysticism, spiritual development, etc. and examines the origin and nature of religion according to great psychological and theological thinkers such as Kierkegaard, Freud, Jung, Maslow, Tillich, and Frankl.

PSY 309 Statistics (3, F&S)
Study of descriptive and inferential statistics, including analysis of variance and measures of correlation. Focus on applications to social and psychological data. (Also listed in BADM, SOC, POLS)

PSY 310 Experimental Methods (3, F&S)
Experimental and other quantitative methods used in the study of behavior. Applied statistical analysis, laboratory experiences, and research writing. Prerequisite: PSY 309.

PSY 315 Psychological Assessment (3, S)
Principles of construction, validation, and use applied to a variety of ability and personality tests. Selected tests administered with guided interpretation. Prerequisite: PSY 309.

PSY 324 Life in the City (3, F)
(See Off-Campus Programs – Houghton in Australia for description.)

PSY 325 Human Sexuality (3, F)
Examines sexuality as a component of our personalities, an aspect of our behavior, and an element in our environment. Considers how elements of sexuality interact with other aspects of our thought and behavior, and the role of sexuality in normal and abnormal development across the lifespan.

PSY 326 Introduction to Family Systems (3, F)
An introduction to the family systems perspective through an overview of various schools of family systems theory. This course is intended to introduce students to the epistemological underpinnings of the family therapy field, but not to teach clinical skills.

PSY 330 Conflict Management (3, F)
An introduction to conflict management that balances coverage of major theories with practice in communication skills and conflict intervention techniques (e.g. assertiveness training, mediation, negotiation). Focus on experiential learning, with heavy emphasis on written analysis that includes analytical journaling and analysis of scientific journal articles.

PSY 335 Drugs and Behavior (3, F)
Principles of action and categorical analysis of psychoactive drugs; their physiological, psychological, and societal effects; patterns and causes of their use and abuse in individuals and societies; and systems of drug education.

PSY 337 Social Cognition (3, S)
Social cognition is a sub-discipline of social psychology that focuses on how people think about the world and make sense of complex social environments. Course covers social behavior from a cognitive perspective with stereotyping, social perception, affect, and the self.

PSY 401 History and Systems of Psychology (3, OD)
Antecedents and evolution of psychological systems and concepts, including the life and works of historically eminent psychologists. Prerequisite: 15 hours in psychology.

PSY 402 Counseling and Psychotherapy (3, PS)
An introduction to major systems of psychological intervention and their rationale. Emphasis on theory rather than practice. Prerequisite: PSY 305.

PSY 403 Physiological Psychology (4, F07)
Physiology of nervous and glandular systems as they relate to behavior, including sensation, emotion, aggression, learning, and mental disorders. Prerequisite: four hours of biology, WRIT 306.

PSY 410 Practicum in Psychology (1, 2, 3, F&S)
Introduction to professional work in psychology through field experiences near the main campus in such settings as school psychology, personnel, continuing treatment programs, alcohol and drug abuse treatment centers, and developmental disability centers. Prerequisite: senior status and permission of the department. Contact: Dr. Stevenson.

PSY 415 Internship in Psychology (West Seneca Campus only) (6, F)
An optional supervised experience in a psychological setting integrating theory with professional practice. By application only through the department. Contact: Dr. Stevenson.

PSY 451 Learning and Memory (3, S)
Critical examination of the main psychological theories of learning, memory and information processing, with applications in teaching, research, and therapy. Prerequisite: six hours in psychology.

PSY 480 Senior Capstone Seminar (3, F&S)
Informed discussion of significant and contemporary concepts and issues. Includes development of an individual research or group project on some aspect of the discipline. Required of all senior majors. Prerequisites: PSY 309, PSY 310, and 21 hours of psychology.

PSY 211, 311, 411 Special Topics in Psychology (1, 2, 3, or 4, OD)
According to interest and demand, courses will be offered in Adult Development and Aging, Childhood Psychopathology, Cross-cultural Psychology, and other topics. Prerequisites vary with the course.

PSY 191, -2; 291, -2; 391, -2; 491, -2 Independent Study (1, 2 or 3)

PSY 496 Honors in Psychology (3, S)

Recreation & Leisure Studies (major and minor)

Department of Physical Education/Exercise Studies & Recreation/Leisure:

Thomas R. Kettelkamp, chair

Faculty: Andrea Boon, Sharon Hibbard, Thomas R. Kettelkamp, Chris Nafziger, Jaynie Nafziger, Robert Smalley, Jo-Anne Young

Web site: campus.houghton.edu/webs/employees/tkettelkamp/tk_academics.htm

Phone: 585.567.9645

Major: This major in recreation and leisure studies provides three option areas: Therapeutic, Outdoor Education/Camp Administration, and Equestrian Studies. All students will take the core requirements listed below, except the Equestrian Option requires REC 248 Foundations of Therapeutic Recreation in place of the elective.

Core Requirements

REC 220 Recreation, Leisure and Society	3
REC 221 Intro of Leisure Service Delivery Systems.....	3
REC 300 Program Planning and Evaluation	3
REC 406 Capstone Recreation Internship.....	3
REC xxx (elective)	3
Total:	15

Recreation/Leisure Therapeutic Option - 31 hours; 11 hours in pre/co-requisites

All students will take the above core. The internship experience provides opportunity for applying theory and practicing professionally related activities.

(Students wishing to be certified with the National Council of Therapeutic Recreation Certification should design their coursework directly with the department chair.)

Co-requisites

PSY 111 Introduction of Psychology.....	3
BIOL 103 Introduction to Biology	4
BIOL 217 Anatomy and Physiology	4
Total:	11

Theory Requirements

REC 248 Foundations of Therapeutic Recreation.....	3
REC 303 Methods and Materials of Therapeutic Rec	3
REC 409 Senior Capstone: Issues in Therapeutic Recreation	3
Applied labs (as approved by dept. chair).....	7
Core requirements	15
Total:	31

Recreation/Leisure (Outdoor Education/Camp Administration Option - 31 hours; 8 hours in pre/co-requisites)

Co-requisites

BIOL 215 Local Flora and Vegetation.....	3
REC 102B Backpacking	1
XXX xxx (4-hr. science course with environmental emphasis)	4
Total:	8

Theory Requirements

REC 301 Methods & Mat'ls for Camps & Outdoor Educ.....	3
REC 240 Administration of Organized Camps.....	3
REC 227 Outdoor Leadership Training	3
REC 266 Outdoor Living Skills	2
REC 401 Natural Resources Management.....	3
REC 411 Senior Capstone: Seminar in Recreation and Leisure	2
Core requirements	15
Total:	31

Recreation/Leisure (Equestrian Option - 33 hours; 12 hours in pre/co-requisites)

Prerequisite

PSY 111Intro to Psychology	3
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Co-requisites

ACCT 211 Financial Accounting.....	3
BADM 212 Principles of Management.....	3
EDUC 219 Educational Psychology	3
Total:	12

Theory Requirements

HRSM 223 Foundations of Equestrian Studies.....	3
HRSM 224 CHA Riding Instructor Certification	3
HRSM 276 Dressage	2
HRSM 325 Jumping I	2
HRSM 323 Eventing.....	2
HRSM 324 Breaking & Training.....	1
HRSM 328 Horse Show Jumping	3
HRSM xxx Horsemanship elective (from following)	2
HRSM 326 Jumping II	
HRSM 327 Mini Prix Equitation	

HRSM xxx Independent Study	
HRSM xxx Special Topics	
Total:	18

Minor: 14 hours

Courses numbered 200 or above, including REC 220 and REC 221. The remaining eight hours may be selected from any REC courses, with at least two hours but not more than five in activity labs.

Course Descriptions

REC 103 Initiatives (Activity Lab) (1, F&S)
Problem-solving activities in which group dynamics and team building will be emphasized through group discussions and participation in facilitated ropes course, initiative, values clarification and “new games” activities (also meets PHED 102 requirement). Liberal Arts Foundation - PE Activity.

REC 104 Backpacking (Activity Lab) (1, F&S)
Develop skills and knowledge in backpacking and provide the opportunity for students to enjoy the outdoors. Two weekend, overnight backpacking trips will take place throughout the semester (also meets PHED 102 requirement.) Liberal Arts Foundation - PE Activity.

REC 105 Outdoor Pursuits: Canoeing and Backpacking (1, F)
(See course description in Off-Campus Programs-Adirondack section.) Liberal Arts Foundation - PE Activity.

REC 109 Highlander Adventure Program (Activity Lab) (IS alternative) (2, Special)
Two to three days on the initiatives course and a seven-day trip into the wilderness. Develop skills in canoeing, rock climbing, rappelling, backpacking. Open only to incoming first-year and transfer students. Offered 10 days before fall semester validation (may be used to meet PHED102 requirement). Liberal Arts Foundation - PE Activity.

REC 211 Eco-tour in Honduras (4, M)
Students will have a third-world experience including a service-learning project. Visits are made to national parks and Mayan Indian ruins. Activities include hiking, snorkeling, and attending cross-cultural classes. (Meets PHED 102 requirement.) Liberal Arts Foundation - PE Activity.

REC 212 Eco-tourism in Africa (3, S)
Students will learn to be stewards of the environment in the African context. Hikes, camping, visits to game parks and preserves, and service projects will be combined with lectures on the interaction with the environment, management of resources, economic impacts of tourism on the local community infrastructure and other issues related to God and His creation. (Meets PHED 102 requirement.) Liberal Arts Foundation - PE Activity.

REC 218 Winter Ski Outing (Activity Lab) (1, OD)
Downhill and recreational skiing skills developed at a major resort area. Techniques equal to one’s ability will be taught. Offered during break, before spring semester. Liberal Arts Foundation - PE Activity.

REC 220 Recreation, Leisure, and Society (3, F)
History, philosophy, and practice of leisure in contemporary society. Theories of leisure, recreation, and play. Students will develop a personal philosophy of leisure.

REC 221 Introduction of Leisure Service Delivery Systems (3, S)
History of parks and recreation movement in the U.S.; agencies which provide recreation opportunities, and their roles in recreation and leisure in society; planning and managing programs and resources from a client-oriented perspective.

REC 227 Outdoor Leadership Training (Activity Lab) (3, F&S)
Outdoor leadership, in activities such as initiatives, ropes course, rock climbing, and environmental awareness, using skills in judgment, decision-making, problem solving, and basic rescue techniques.

REC 228 Trip Experience (1 to 3, M)
As arranged. (May be used to meet PHED 102 requirement.) Liberal Arts Foundation - PE Activity.

INTS/REC 235 Interpreting the Environment: Trail Development (2, 3, or 4)
Principles, processes, and techniques used to interpret the environment and develop interpretive materials, centers, and trails. Through service-learning, students will develop interpretive, recreational, meditative, exercise, or other trails to complement their major program or integrative studies. One hour lecture/3, 4.5, or 6 hours applied

(depending on credit hours chosen-3 applied hours for 2 credits, 4.5 for 3 credits, and 6 for 4 credits). Applied hours include research and preparation of interpretive presentations as well as trail development, as appropriate.

REC 240 Administration of Organized Camps (3, F06)
Principles and techniques used in organized camp administration; the role of camping in the development of personality. Staff and program development.

REC 248 Foundations of Therapeutic Recreation (3, F06)
Conditions which characterize and produce atypical individuals; diagnosis of strengths and weaknesses of the individual; prescription of procedures for appropriate activities. Prerequisite recommended: BIOL 103, 217.

REC 252 Teaching Lifetime Sports (Activity Lab) (1, S07)
Skills and methods of teaching. Student notebooks including methods, mechanical analysis of skill for each sport: skiing, canoeing, archery.

REC 266 Outdoor Living Skills (Activity Lab) (2, S)
Skills in using the environment for outdoor living; ropecraft, firecraft, cooking; using gear, shelters, maps, compass, campsite; selecting foods; health and safety practices (one lecture; one 2-hour lab).

REC 300 Program Planning and Evaluation (3, F)
Preparation for leadership in recreation programming; leadership styles and theory; principles and methods of program development; using fundamental leisure philosophy and theory to assess needs, plan, develop, implement, and evaluate recreational programs.

REC 301 Methods & Materials for Camps & Outdoor Education (Activity Lab) (3, F07)
Outdoor education. Field experience in lesson planning; development of organized camp programs, activities, structured programs (cabin, campfire, work, etc.).

REC 302 Principles of Church Recreation (3, S)
Overview of all aspects of church recreation. Bases for recreation in local church; methods, philosophies, populations served, rationale and designs for implementation of comprehensive church recreation programs.

REC 303 Methods & Materials in Therapeutic Recreation (3, S07)
Pre-practicum experience. Participation in observation, needs assessment, program planning, and leadership of special population groups in appropriate therapeutic recreation settings.

REC 311 Special Topics (OD)
According to interest and demand, courses will be taught relative to various therapeutic approaches to special populations: substance abuse, deviant and antisocial behavior disorders, youth at risk, etc. Prerequisites: REC 220.

REC 401 Natural Resource Management (3, S)
Investigating Christian environmental ethics; identifying and protecting biologically sensitive areas; rehabilitating damaged areas and resources; sound ecological practices; controlling user behavior; site problems; resource management plans.

REC 406 Recreation Internship (3 to 6, OD)
Professional field experience in the area of emphasis; the student will relate theory to practice in a cooperative effort between agency, student, and advisor. Permission of instructor required.

REC 409 Senior Capstone: Issues in Therapeutic Recreation (3, F07)
Leisure behavior as it affects therapeutic recreation services. Issues: T.R. certification, accessibility, therapeutic models for special populations; special attention to geriatric and psychiatric persons. Permission of instructor required.

REC 411 Senior Capstone: Seminar in Issues in Recreation and Leisure (2, S)
Leisure behavior as it affects the natural resources and environment. Solutions to current problems; back-country ethics; organizations working to preserve wilderness areas and open spaces; issues in outdoor recreation as they deal with special populations. Permission of instructor required.

REC 191, -2; 292, -2; 391, -2; 491, -2 Independent Study (1, 2 or 3)

REC 496 Honors in Recreation and Leisure Studies (1, 2, or 3, OD)

Religion (*major; major with ministerial concentration; minor*)
Department of Religion and Philosophy: J. Michael Walters, chair
Faculty: John Brittain, Jonathan Case, Richard Eckley, Carlton Fisher, Kelvin Friebe, Kristina LaCelle-Peterson, Benjamin Lipscomb, Terence Paige, Carl Schultz, Paul Shea, W. Christopher Stewart, Külli Töniste, John Tyson, J. Michael Walters
Web site: *campus.houghton.edu/orgs/rel-phil/*
Phone: 585.567.9440

Major: BA (40 hours)

General Information

The **comprehensive major in religion** is provided for those who want a liberal arts degree with a maximum of Biblical and theological studies. This curriculum is generally accepted for entrance into seminary or other graduate institution, and is satisfactory for students going into missionary work that requires a liberal arts degree.

The **religion major with ministerial concentration** curriculum is a four-year terminal program designed to prepare students for pastoral ministry service. This curriculum is so structured that all academic requirements for ministerial ordination in The Wesleyan Church can be fulfilled. Students interested in Wesleyan ordination should consult the religion department chair, or the director of ministerial education, for particular course requirements. This program will also contribute to the ordination requirements of other denominations. A student in this program will complete 40 hours in a specified core of religion courses and 16 hours in the ministerial concentration.

Specific requirements are: (34 hours)

BIBL xxx Bible	12
BIBL 221 Biblical Interpretation	3
MISS 321 World Religions	3
THEL 351, 352 Biblical Theology	6
THEL 453, 454 History of Christianity	6
PHIL 350 Reason and Religious Belief	2
REL 482 Senior Capstone: Seminar in Religion	2

3 hours from the following three-hour courses:

THEL 315 Wesleyan Tradition (required for Wesleyan ordination)
MISS 222 The Contemporary Church in Missions (required for Wesleyan ordination)
THEL 214 The Cults and New Age
URMN 212 Urban Ministry
THEL 334 Studies in Theology

3 hours from the following:

SOC 338 Sociology of Religion
PSY 306 Psychology of Religion
PHIL xxx Philosophy course
THEL xxx Theology course
EDMN 231 Foundations of Educational Ministry (required for Wesleyan ordination)

Students electing the comprehensive major in religion must satisfy all normal integrative studies requirements, except that to satisfy the language requirement the student must take either Beginning Greek and New Testament Greek, or one year of Greek plus one year of Hebrew (see Foreign Languages). A curriculum plan for this major is available through the Department of Religion and Philosophy.

Major with Ministerial Concentration (BA): This combines the above major in religion (38 hours) with a 16-hour ministerial concentration. Students who choose the ministerial curriculum must satisfy all normal integrative studies requirements, except that to satisfy the language requirement the student must take either Beginning Greek and New Testament Greek, or one year of Greek plus one year of Hebrew (see Foreign Languages). A curriculum plan for this program is available through the Department of Religion and Philosophy. The concentration curriculum is as follows:

MIN 316 Worship in the Church	3
MIN 317 Leadership in the Church	3
MIN 324 Principles of Expository Preaching	4

MIN 410 Ministerial Field Education	3
URMN 250 Evang & Social Action in the Urban Context	3

Minor: (12 hours)

Required courses:

THEL 321 World Religions
PHIL 350 Reason and Religious Belief

Select additional courses from the following:

THEL 215 Christian Apologetics
THEL 313 Systematic Theology
THEL 351 Biblical Theology: Old Testament
THEL 352 Biblical Theology: New Testament
THEL 453, 454 History of Christianity

Other courses in Philosophy or Theology may be substituted for any of the above with the approval of the department chair.

Course Descriptions

GREK 101, 102 Beginning Greek Level 1, Level 2 (3/3, F/S)
 Elements of the Koine Greek language. Stress on facility in reading selections from New Testament and Hellenistic literature. Cultural backgrounds in Greek civilization. This course or its equivalent is a prerequisite for all other Greek courses.

HEBR 101, 102 Beginning Hebrew Level 1, Level 2 (3/3, F/S)
 Elements of Biblical Hebrew. Reading from Old Testament.

MIN 210 Introduction to Christian Ministries (3, F07 and alternate years)
 Investigation of the Biblical, historical, and practical foundations for ministry as essential components of Christian vocation. Lay and professional aspects of ministry are explored in the context of the vocational call. A broad overview of ministry-related fields will be presented, including parish, educational, cross-cultural, and para-church ministries. This course is recommended for anyone who is interested in any form of full-time ministry.

MIN 316 Worship in the Church (3, F06 & alternate years)
 An exploration of the Biblical and theological foundations of the pastoral office. Special emphasis is given to the pastoral role in the worship of the church and the challenges of leading a worshiping community. Examines ministerial duties related to the sacraments and the rituals of the church as well as issues of pastoral ethics.

MIN 317 Leadership in the Church (3, S07 & alternate years)
 Study of the pastoral office as it relates to the roles of counselor and administrator. Theories and techniques of pastoral counseling are considered. The administrative duties of the pastor are emphasized, with particular focus on church management, Parliamentary Law, and *The Discipline of The Wesleyan Church*.

MIN 324 Principles of Expository Preaching (4, S)
 Focus is given to the preparation and delivery of sermons. Combines the theory of organizational structure along with the tools and techniques for biblically-based preaching. Includes practice in preparing and preaching various types of expository sermons. Prereq: Public Speaking or permission.

MIN 325 Life in the City (3, F)
 (See course description in Off-Campus Programs – Houghton in Australia section.)

MIN 410 Ministerial Field Education (3, summer)
 Professional field experience in a local church, during a summer internship. Combines theory and practice of ministry through seminars and on-site supervision; focuses upon pastor as worship leader and pastor as shepherd.

URMN 250 Evangelism and Social Action in the Urban Context (3, May)
 Examination of the biblical basis of evangelism and social justice. Through biblical, historical, and sociological/anthropological analyses and personal observation projects, students will assess ways in which evangelism and social action are related, and will have an opportunity to develop their own theology and strategy of outreach. Taught in West Seneca.

REL 482 Senior Capstone: Seminar in Religion (2, F)
 A senior capstone colloquium required of all students with a major in religion or educational ministries.

Sociology (major and minor)

Department of Psychology and Sociology: Daryl H. Stevenson, chair

Faculty: Jonathan E. Arensen, Karen O. Daugherty, Jayne E. Maugans

Web site: campus.houghton.edu/orgs/psychology/psynsotchp.htm

Phone: 585.567.9440

Major: (24 hours in the major)

General Information

Human conduct cannot be adequately understood without recognizing various social forces constantly shaping it. Sociology seeks to draw analytical links between individuals and the structural and cultural contexts in which they live. The major in sociology therefore develops analytical skills that are basic to a liberal arts education. These skills are useful to students wishing to develop an intellectual awareness of who they are and others around them as a result of studying the social system surrounding them. In particular, sociology is excellent preparation for students anticipating careers in criminology, politics, law, health services, management, ministry and missions, social work, urban planning and related areas.

Principles of Sociology (SOC 101) is not required for upper level sociology or anthropology coursework.

Required courses:

SOC 282 Sociological Theory.....	3
SOC 309 Statistics.....	3
SOC 312 Social Science Research Methods.....	3
SOC 480 Senior Capstone: Sociology Seminar.....	3
Elective sociology courses	12

Minor: 12 hours above SOC 210, except SOC 309 Statistics, including at least three hours numbered 300 or above.

Course Descriptions

SOC 101 Principles of Sociology (3, F&S)
Introduction to the sociological perspective; development and systematic use of concepts. Satisfies integrative studies requirement in the social sciences. Liberal Arts Foundation - Social Science.

SOC 222 Social Problems (3, S)
Survey of contemporary social problems in American society. Analyses based on conflict and labeling theories, emphasizing ideological origins whereby certain behaviors are defined as problems.

SOC 231 Criminology (3, OD)
Consideration of elements in criminal justice system. Discussion of dilemma of promoting social order while protecting individual rights.

SOC 237 Introduction to Marriage and Family Studies (CDRP, see Foreign Languages) (3, F)
The changing structure and functions of marriage and the family in modern society; emphasis on dating patterns, marriage selection, sex roles, childbearing patterns, and family life cycles.

SOC 243 Cultural Anthropology (CDRP, see Foreign Languages) (3, S)
Cultural and social aspects of human behavior; comparison of cultures. Liberal Arts Foundation - Social Science.

SOC 275 The Criminal Justice System (3, F)
This course will examine the dilemma involved in the relationship between "law and order" within liberal societies like the United States. In democratic "free" societies, there is a constant tension between the need for social order (and police efficiency in suppressing crime) and procedural law involving Constitutionally protected rights. We will examine the police, courts, prisons, probation and parole systems in light of this tension.

SOC 282 Sociological Theory (3, F)
Consideration of the major 19th century contributors to sociological theory of the 20th century; sociological perspectives they helped to form: functionalism, conflict theory, symbolic interaction.

SOC 293 East African Cultures (3 or 4, S)
(See course description in Off-Campus Programs — Tanzania section.)

SOC 295 Special Topics in Sociology (3, OD)
Topics offered according to interest and demand.

SOC 296 Special Topics in Anthropology (3, OD)
Topics offered according to interest and demand.

SOC 297 Special Topics in Family Studies (3, OD)
Topics offered according to interest and demand.

SOC 309 Statistics (3, F&S)
Study of descriptive and inferential statistics, including analysis of variance and measures of correlation. Focus on application to social and psychological data. Recommended for sophomore year.
SOC 312 Social Science Research Methods (3, S)
Basic scientific method, application to social phenomena; procedures and methodological problems in various types of social research; methods of data analysis. Recommended for junior year, after completion of SOC 309.

SOC 322 Social Stratification (3, S)
Major theories and evidence relating to the origin, nature, and social consequences of stratification systems of social inequality in contemporary United States.

SOC 325 Life in the City (3, F)
(See Off-Campus Programs — Houghton in Australia.)

SOC 330 Culture and Family (CDRP, see Foreign Languages) (3, S)
A multicultural and cross-cultural exploration of family environments, history, processes, and structures in various types of societies throughout the world, relying on sociological and anthropological principles.

SOC 338 Sociology of Religion (3, F)
Study of collective religious behavior from social scientific perspective; examine social factors related to secularization, rise of new religious groups, patterns of contemporary belief and practice.

SOC 345 Sociology of Aging (3, OD)
Examines the aging in America as an interdisciplinary topic. Analysis of the socio-historical and socio-political dimensions of aging. Multicultural perspectives included.

SOC 351 The Individual and Society (3, S)
Examines the major dilemmas that profoundly affect life in post-industrial Western society: dilemmas between individual freedom and social equality, and between rational organization and community. (Recommended for students planning to attend graduate school.)

SOC 361 Majority-Minority Relations (3, S)
Examines relationships between dominant (majority) and subordinate groups (minority), covering racial, ethnic, and religious conflicts in the U.S. and around the world. Analyzed are forms and causes of prejudice and how to reduce it, the origins of inequality, the effects of colonialism and modernization, and current trends in majority-minority relations.

SOC 362 Gender Relations (3, F)
Introduction to gender relations; focus on gender roles over life cycle. Includes multicultural perspectives on gender relations.

SOC 390 Practicum in Family Studies (1, 2, 3, F&S)
Supervised experience in a family services setting integrating theory with professional practice. Requires junior or senior standing and the completion of at least nine hours in the Family Studies minor and permission of the department. Contact: Dr. Maugans.

SOC 394 Internship in Family Studies (6, F&S)
An optional supervised experience in a family studies setting integrating theory with professional practice. By application only through the department. Contact: Dr. Maugans.

SOC 410 Practicum in Sociology (1, 2, 3, F&S)
Supervised experience in a sociological setting integrating theory with professional practice. Requires permission of the department. Contact: Dr. Maugans.

SOC 415 Internship in Sociology (6, F&S)
An optional supervised experience in a sociological setting integrating theory with professional practice. By application only through the department. Contact: Dr. Maugans.

SOC 480 Senior Capstone: Sociology Seminar	(3, S)
Capstone course of the major which will include readings, informed discussions of contemporary concepts and issues, and a paper with accompanying PowerPoint presentation on some topic in the discipline.	
SOC 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2 or 3)
SOC 496 Honors in Sociology	(3, S)

Spanish (see Foreign Languages)

Sports Ministry (minor)
Department of Physical Education/Exercise Studies & Recreation/Leisure Religion/Philosophy Department
Faculty: Thomas R. Kettelkamp, David Lewis, William R. Swanson, Matthew Webb
Web site: campus.houghton.edu/orgs/physical_education/
Phone: 585.567.9645

- Sports Ministry Minor:** (18 hours, interdisciplinary)
 Required (15 hours)
 EDMN 351 Theological Explorations in Youth Cultures and Ministry
 EDMN 325 Bible Study and Teaching Methods
 THEL Systematic Theology
 PHED 227 Sports Ministry: The Integration of Faith and Sport
 PHED 305 Sports Ministry Field Practicum
 Select one of the following (3 hours)
 REC 227 Outdoor Leadership Training
 REC 240 Administration of Organized Camps
 PHED 290 Sociology of Sport
 INCL/MISS 231 Global Relief and Development
 (See course descriptions under appropriate heading.)

Tesol (Teaching English to Speakers of Other Languages) (minor)
Department of Intercultural Studies: Andrew Gallman, chair
Faculty: Charles Bressler, Marcus Dean, Andrew Gallman

Minor: (15-20 hours)

Without a doubt, the role of the English language has been transformed in recent years. Its use in international politics and business, in science and technology, and in the media and higher education has earned it special status in over 70 countries worldwide. Nearly a quarter of the world’s population speaks this language, and it is the most widely taught foreign language in the world. Consequently, there is a great demand for competent English teachers in almost every nation in the world, including the United States.

A minor in TESOL trains students to serve the international population around the world and within the United States, offering opportunities for cross-cultural service, even in countries that are closed to receiving missionaries. This is a practical key for opening the doors to our 21st century world.

- Choose 1 of the following two:3-4
 LING 220: Introduction to Linguistics
 LING 351: Linguistics for TESOL
 Choose 1 of the following two:3-4
 COMM 325 Intercultural Communications
 INCL 310 Intercultural Competencies
 LING 350 First and Second Language Acquisition.....3-4
 ENGL 355 Modern English Grammar in Historical Perspective3-4
 LING 440 Theory and Practice of TESOL Methodology3-4

(See Course Descriptions under appropriate heading)

ENGL/LING 220 **Introduction to Linguistics** (3-4, F, S)
 An introduction to the basic elements of linguistics. Emphasis on phonology (the study of sounds), morphology (the study of word formation), syntax (phrase and sentence formation), and semantics (meaning in language). Liberal Arts Exploration-Humanities.

INCL/INDS 310 **Intercultural Competencies** (3-4, F, S)
 Explores the knowledge, attitudes, and skills for transitioning into, adapting to, working in, and functioning successfully in and intercultural context. Key topics include cultural values, intercultural communication, researching culture, being a change agent, dealing with conflict, and working with individuals from another culture. Prerequisite: Introduction to Global Issues and Cultural Anthropology, or permission of instructor.

COMM 325 **Intercultural Communication** (3, F)
 Explores theory and practice of communicating interculturally. Recommended for those with an interest in international vocations, or working with ethnic or cultural groups within the United States.

LING 350 **First and Second Language Acquisition** (3-4, Summer)
 Linguistic, psychological, and sociocultural dimensions of language learning are explored, especially as they relate to acquisition of a second language and TESOL instruction. Current theories and research are reviewed and analyzed in light of the reality of the language learning experience. (Prerequisite/Corequisite: LING 220 or 351, or permission of instructor.)

EDUC/LING 351 **Linguistics for TESOL** (3-4, F)
 This course will examine some of the unique challenges of English structure (phonological, morphological, syntactical, semantics and pragmatics) and the transfer problems that non-native speakers may have. There will also be an introduction to first and second language acquisition theories.

ENGL 355: **Modern English Grammar in Historical Perspective** (3, S)
 This course focuses on traditional English grammar and the historical principles upon which grammatical analysis is based. Emphasis placed on understanding the language system of grammar, its historical origins and development, grammatical theory, and the conventions of American English usage.

LING 440 **Theory and Practice of TESOL Methodology** (3-4, Summer)
 This course will explore TESOL methodology and classroom techniques, as well as the opportunity to put them into practice in a weekly practicum. (Prerequisite/Co-requisite: LING 220 or 351 and LING 350, or permission of instructor.)

Theology (minor)
Department of Religion and Philosophy: J. Michael Walters, chair
Faculty: John N. Brittain, Jonathan P. Case, Richard K. Eckley, Kristina LaCelle-Peterson, John R. Tyson, J. Michael Walters
Web site: campus.houghton.edu/orgs/rel-phil/
Phone: 585.567.9440

- Minor:** (12 hours)
 The theology minor provides concentrated study in Christian doctrine, apologetics, and church history.
 Minor required courses:
 THEL 313 Systematic Theology3
 Remaining hours9
 (selected from the following list except THEL 209)

Course Descriptions

THEL 209 **Introduction to Christianity** (3, F, S)
 An introductory survey of the main beliefs and practices that constitute the Christian tradition. Christianity will be approached in a way that overcomes the traditional division between doctrine and practice. The Biblical, theological, historical, ethical, and spiritually formative aspects of Christian faith will be explored. The course aims to enable the student to develop a personal theology and life perspective that is informed by Christian faith and Christian spirituality. Prerequisite: BIBL 101 Liberal Arts Foundation - Christian Theology.

THEL 214 The Cults and New Age	(3, May)
Definition and classification of Christian cults and the New Age Movement, including the Occult. Origins and doctrines of, plus practices and trends in, some of the current Christian cults and New Age groups (e.g. Mormons, Jehovah's Witnesses, Transcendental Meditation).	
THEL 215 Christian Apologetics	(3, S08 and alternate years)
The course seeks to "give reason for the faith that is written within us" by making theological reply to those questions raised when Christian faith collides with contemporary situations. Classical and contemporary questions and methodologies will be considered.	
THEL 300 Christianity and Postmodernism	(3, F)
(See course description in Off-Campus Programs — Houghton in Australia.)	
THEL 313 Systematic Theology	(3, F)
Survey of the main tenets of the Christian faith. Doctrines examined in light of Biblical basis and constructive formulations. Introduces the student to Christian theology and equips the student to develop a personal theology.	
THEL 315 Wesleyan Tradition	(3, S)
Study of the Wesleyan movement from the Wesleys to the present. Emphases on the history of The Wesleyan Church and the doctrine of holiness.	
THEL 320 Spiritual Formation	(3, F)
Examines the nature and process of spiritual growth and maturation in the life of the Christian. As an academic course of study, this class arises out of ascetical theology and thus emphasizes the writings of early, medieval, and later Christians. Primary emphasis is given to the role of the classical spiritual disciplines in the formation of character. Prerequisites: THEL 209.	
THEL 321 World Religions	(3, S)
Background, major teachings of Eastern religious and philosophical thought. Emphases on understanding and evaluating non-Western ideas, practices.	
THEL 333 Major Figures in Theology	(3, OD)
In-depth study of one or more figures in Christian theology, with an emphasis upon primary source material for examining the theologians in the context of their lives and times.	
THEL 334 Studies in Theology	(3, OD)
Topics of current theological interest. Specific schools of theology, doctrines, or theological trends will be considered.	
THEL 337 Theological Foundations of the Family	(3, OD)
Study of major conceptual designs for family. Will emphasize a comparative analysis of religious models and the relationships between these influential systems and family practices. Introduces students to the role of the family in ethical value formation.	
THEL 351, 352 Biblical Theology	(3/3, F06/S07 and alternate years)
Examination of the teaching of the Old and New Testaments, developed from the distinctive perspective of Biblical theology. Major themes and methods of inquiry. Fall: Old Testament; spring: New Testament.	
THEL 368 The Reformation	(3, OD)
(Alternative number for history major credit: HIST 368) A survey of the continental, English, and Roman Catholic reformation of the sixteenth century.	
THEL 453, 454 History of Christianity	(3/3, F/S)
Ancient, medieval, modern development of Christianity in historical context; doctrines, prominent lives, institutions of each era. Fall: ancient to medieval; spring: reformation through modern. (Integrative Studies credit)	
THEL 191, -2; 291, -2; 391, -2; 491, -2 Independent Study	(1, 2 or 3 hours)
THEL 496 Honors in Theology	(3, S)

(see also Intercultural Studies urban ministry concentration)
Department of Religion and Philosophy: J. Michael Walters, chair
Faculty: Richard Eckley, Paul Shea
Web site: *campus.houghton.edu/orgs/rel-phil/*
Phone: 585.567.9440

Minor: (15 hours)
 It includes the four courses listed below and Foundations of Educational Ministry (EDMN 231), or Introduction to Christian Ministries (MIN 210, see Religion).

Course Descriptions
 URMN 212 **Urban Ministry** (3, OD)
 What is the ministry of the church and individual Christians within diverse, complex metropolitan areas? Introduction to the Bible and to research in behavioral sciences on the city, with field trips and projects in the community.

URMN 250 **Evangelism and Social Action in the Urban Context** (3, May)
 Examination of the Biblical basis of evangelism and social justice. Through Biblical, historical, and sociological/anthropological analyses and personal observation projects, students will assess ways in which evangelism and social action are related, and will have an opportunity to develop their own theology and strategy of outreach. Taught in West Seneca.

URMN 300 **Urban Ministry Field Experience and Seminar** (3, OD)
 Supervised field experience in a core-city church or para-church organization. Seminar with weekly cluster meeting of participating students to synthesize academic and field experience as a group. Requires 120 hours of field work. Prerequisites: URMN 212 and declaration of minor.

URMN 325 **Life in the City** (3, F)
 (See course description in Off-Campus Programs--Houghton in Australia.)

URMN 350 **The City in Biblical and Theological Perspective** (3, OD)
 In-depth survey of the Scriptures from Genesis to Revelation examining the city as symbol and social reality. Analysis of various theological perspectives (Augustine, Ellul, Cox, Mouw, and others). Prereq: URMN 212, and declaration of minor.

Writing (*major and minor*)
Department of English and Communication: Linda Mills Woolsey, chair
Faculty: Charles E. Bressler, Laurie A. Dashnau, Douglas Gaerte, Lori Huth, John R. Leax, Susan Bruxvoort Lipscomb, James A. Zoller
Web site: *campus.houghton.edu/orgs/English/*
Phone: 585.567.9451

Major: (30 hours in the major; 6 of those hours may be taken outside the department)
General Information
 The writing major provides students with a strong liberal arts preparation for a variety of careers including journalism, publishing, law, advertising, public relations, and business. The major is designed to help students develop their skills in recording and communicating information as well as their ability to use writing as a tool for thinking, forming ideas, and solving problems.

Required courses9
 WRIT 212 Advanced Composition: Formal Essay
 WRIT 401, 402 Senior Capstone: Writer's Workshop

The remaining 21 hours of the major are contracted with an advisor from the writing department. This contract is filed with the Records Office when a student declares a writing major. Students are not permitted to count more than two writing courses a semester toward their major.

Urban Ministry (minor)	(3, May)
(see also Intercultural Studies urban ministry concentration)	
Department of Religion and Philosophy: J. Michael Walters, chair	
Faculty: Richard Eckley, Paul Shea	
Web site: <i>campus.houghton.edu/orgs/rel-phil/</i>	
Phone: 585.567.9440	

Minor: (15 hours)
 It includes the four courses listed below and Foundations of Educational Ministry (EDMN 231), or Introduction to Christian Ministries (MIN 210, see Religion).

Course Descriptions
 URMN 212 **Urban Ministry** (3, OD)
 What is the ministry of the church and individual Christians within diverse, complex metropolitan areas? Introduction to the Bible and to research in behavioral sciences on the city, with field trips and projects in the community.

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 Examination of the Biblical basis of evangelism and social justice. Through Biblical, historical, and sociological/anthropological analyses and personal observation projects, students will assess ways in which evangelism and social action are related, and will have an opportunity to develop their own theology and strategy of outreach. Taught in West Seneca.

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 Supervised field experience in a core-city church or para-church organization. Seminar with weekly cluster meeting of participating students to synthesize academic and field experience as a group. Requires 120 hours of field work. Prerequisites: URMN 212 and declaration of minor.

URMN 325 **Life in the City** (3, F)
 (See course description in Off-Campus Programs--Houghton in Australia.)

URMN 350 **The City in Biblical and Theological Perspective** (3, OD)
 In-depth survey of the Scriptures from Genesis to Revelation examining the city as symbol and social reality. Analysis of various theological perspectives (Augustine, Ellul, Cox, Mouw, and others). Prereq: URMN 212, and declaration of minor.

Writing (*major and minor*)
Department of English and Communication: Linda Mills Woolsey, chair
Faculty: Charles E. Bressler, Laurie A. Dashnau, Douglas Gaerte, Lori Huth, John R. Leax, Susan Bruxvoort Lipscomb, James A. Zoller
Web site: *campus.houghton.edu/orgs/English/*
Phone: 585.567.9451

Major: (30 hours in the major; 6 of those hours may be taken outside the department)

General Information
 The writing major provides students with a strong liberal arts preparation for a variety of careers including journalism, publishing, law, advertising, public relations, and business. The major is designed to help students develop their skills in recording and communicating information as well as their ability to use writing as a tool for thinking, forming ideas, and solving problems.

Required courses9
 WRIT 212 Advanced Composition: Formal Essay
 WRIT 401, 402 Senior Capstone: Writer's Workshop

The remaining 21 hours of the major are contracted with an advisor from the writing department. This contract is filed with the Records Office when a student declares a writing major. Students are not permitted to count more than two writing courses a semester toward their major.

Minor: (12 hours)

Course Descriptions

WRIT 211 Advanced Composition: Narrative and Personal Essay (3, F,S)
A course in the informal essay based on personal experience. Emphases on descriptive and narrative techniques, craftsmanship, style.

WRIT 212 Advanced Composition: Formal Essay (3, F,S)
A course in formal expository and persuasive writing in patterns such as process analysis, definition, comparison and contrast, cause and effect. Includes library research. Liberal Arts Foundation - Writing.

WRIT 213 Advanced Composition: Writing about Literature (3, F&S)
A course in writing literary criticism on the four major genres and in typical formats such as character analysis, poetry explication, annotated bibliography. Development of critical vocabulary in the field. Liberal Arts Foundation - Writing.

WRIT 301 Writing of Fiction (3, F)
Techniques of the traditional short story.

WRIT 302 Writing of Poetry (3, S)
Techniques of open and closed verse.

WRIT 303 Periodical Writing (3, S)
Advanced techniques of magazine features and article writing. Study of free-lance periodical markets.

WRIT 306 Creative Nonfiction: Writing about Nature, Landscape, and the Environment (3, F07)
Keeping a writer's field journal, the experience in nature essay, and feature articles. Survey of environmental journals and internet resources.

WRIT 307 Creative Nonfiction: Writing about Spiritual Experience (3, F)
Keeping a spiritual journal, writing and evangelism, the meditative essay, devotional writing. Survey of the religious marketplace.

WRIT 308 Creative Nonfiction: Writing about Cultural Issues (3, S)
Identifying issues from all areas of contemporary life. Identifying approaches to these issues. Writing columns and editorials. Writing for specific audiences.

WRIT 320 Special Topics in Writing (3, OD)
Opportunity for study of issues and problems of writing not covered elsewhere in the curriculum.

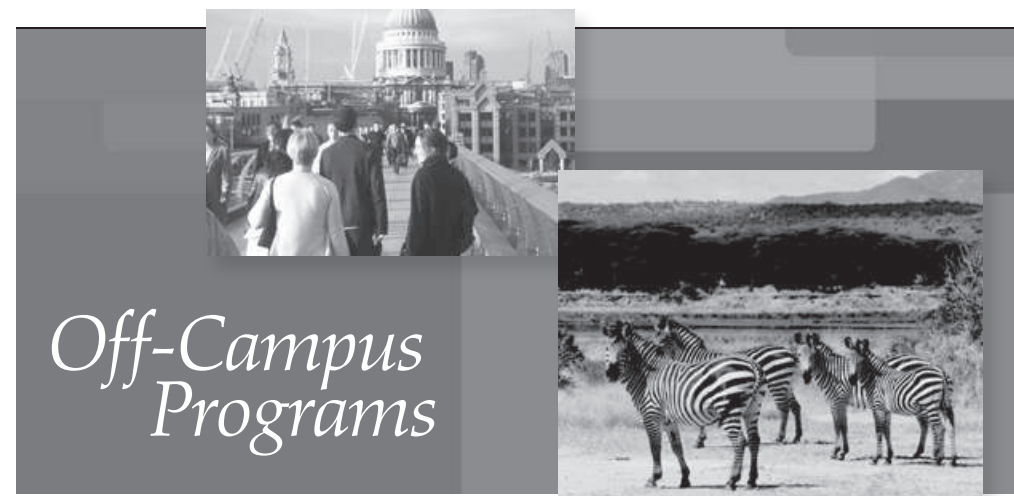
WRIT 401, 402 Senior Capstone: Writer's Workshop (3, 3, F&S)
Workshop-based, project-centered, portfolio development, writing community experience for senior majors and minors. Intensive writing in genres selected by students. Integration of faith and creativity. Three hours writing studio, one hour workshop/lab each semester. 401 devoted to early drafting and consultation with instructor; 402 to revision, polishing, portfolio development and class workshop. 401 must be taken first. Students enrolled in Writer's Workshop should also enroll in the discussion section.

WRIT 412 Literary Criticism (3, F)
Theoretical and practical study of the principles of criticism. Emphasis on contemporary critical schools. Brief historical survey. Prerequisite: six hours of literature above ENGL 210.

WRIT 291, -2; 391, -2; 491, -2 Independent Study (1, 2, or 3)

WRIT 496 Honors in Writing (3, S)

Youth Ministry *(see Educational Ministries, Youth Concentration)*



Office Director: Dr. Marcus Dean

Houghton College students have access to several unique programs, as outlined in the academic information section earlier in the catalog. Some are operated entirely by Houghton College, others in cooperation with the Council for Christian Colleges and Universities or the Christian College Consortium. Houghton's own programs are under the general direction of the academic dean and are staffed by faculty of various academic departments, as per the needs of each program. More detailed information is available through the Off-Campus Programs Office located in the Chamberlain Center, Room 213.

Participating in an off-campus program is an academic privilege that can enhance the student's education. Because of the additional demands faced in the off-campus setting, students are required to have a 2.5 or higher GPA to participate in any off-campus program. Several of Houghton's programs require a 2.75 GPA, and the First Year Honor's and East Meets West Honor's programs are by academic invitation.

HOUGHTON PROGRAMS:

First-Year Honors Programs

This course of study occurs in the spring semester for selected first-year students. The selection process is by invitation to qualified applicants. There are two options in the program: London, England; and Eastern Europe, "East meets West".

London - Program director/associate: Drs. Cameron Airhart and Chris Stewart

This course of study in the spring semester merges a traditional humanities curriculum with the opportunity to study in London. Combining history, literature, philosophy and the fine arts, this curriculum is a connected narrative of western ideas and culture from the ancient Greeks through the 20th century. London's museums, galleries, architecture and theater provide a rich and dynamic learning environment affording students a thorough preparation for more advanced study. Meets IS foundation: Western Culture, Philosophical Foundation, Literature, and Fine Arts.

East Meets West - Program Director: Dr. Meic Pearse.

This course of study in the spring semester and Mayterm focuses on the relationship between the "East" (Eastern Europe), the "Middle East," and the "West". The student will take 12 hours on-campus (with the option to take another course), and three hours will be taken during Mayterm in Eastern Europe. Dr. Pearse will be assisted in the teaching of the course by one member of the Political Science department and two members of the English department. Meets IS foundation: Western Culture, Literature, Christian Theology, and Social Science.

Houghton in London - Program director/associate: Drs. Cameron Airhart and Chris Stewart

In this fall semester program, upper-class students take 15 hours of credit in five courses. Although intentionally unique, the courses are designed to meet Houghton integrative studies requirements. The employment of British Christian professors, living and studying together in a global, metropolitan community, London's rich historical and cultural resources, and opportunities for travel greatly enhance this semester. (Course list follows.)

Houghton in Tanzania - Program director: Dr. Jon Arensen

An intensive spring semester experience, Houghton in Tanzania offers the unique opportunity to study anthropology, history, animal ethology, linguistics, intercultural studies and ecotourism in East Africa. Students

will visit the Wahehe, Masaai and other tribes, observe dozens of animal species in natural habitat, and soak up the history, language and culture of East Africa.

During the semester in Tanzania, a student may earn between 12 to 18 hours. (Course list follows.)

Houghton in Australia - Program directors: Drs. J. Michael Walters and Paul Young

In close collaboration with Kingsley College in Melbourne, Houghton has established a one-semester (15 to 16 credits) exploration of faith and life in Australia. The 13-week academic program, designed as an accessible cross-cultural experience, runs from mid-August to late November. (Course list follows.)

Houghton in Adirondack Park - Program director: Dr. James Wolfe

The Houghton in Adirondack Park program is a fall semester of an integrated seamless curriculum consisting of 16 or 17 credits in natural history, writers in nature, artists in nature, recreation, political science and ethics. The semester begins in mid-August and ends before Thanksgiving and is located at the Houghton Star Lake campus. The program emphasizes field study using the Adirondack Park as the living laboratory for observation, analysis and reflection. One Houghton faculty member in residence will be joined by other Houghton faculty and guest speakers who will guide 25 students through reading assignments and field trips.

Successful completion of this program is an alternate route for fulfilling the Environmental Stewardship minor. (Course list follows.)

COURSE LISTINGS

FIRST-YEAR HONORS

INTS 152 Honors Study in London (15, S)

Combines a traditional humanities curriculum with the opportunity to study in London. Integrates the disciplines of history, literature, philosophy and the fine arts, this course surveys the birth and maturation of western culture from the ancient Greeks through the 20th century. London's museums, galleries, architecture and theater provide a rich and dynamic learning environment.

INTS 153 East Meets West (15, S & M)

Combines a traditional humanities curriculum with the opportunity to study the interaction of Eastern and Western culture. Integrating the disciplines of culture, literature, religion and politics, this course surveys the birth and maturation of Western culture from the ancient Greeks through the 20th century. The Mayterm trip to the Balkans provides a unique learning experience.

HOUGHTON IN LONDON

ART 230 Art in Europe Since the Renaissance (3)

This course is an overview of the major phases of painting, sculpture and architecture in Europe from 1300 to the present day. The course is structured around a series of classroom lectures with slides and/or videos which are related to set texts, and to class visits to selected major London art collections. The purpose of the course is not only to impart historical knowledge but also to develop visual skills in analyzing how and why individual works of art look the way they do. Integral to the course, therefore, is also a series of sessions dealing with how works of art are made, e.g. materials, composition, and use of light, shade and color. Course assessment is through class-based written analysis of one or more works of art (shown on slides) and essays based on lectures and individual research. Liberal Arts Foundation: Fine Arts; or Liberal Arts Exploration: Humanities.

BIBL 395 Special Topics in Bible: Luke's Two Volumes (3)

This course undertakes a close examination of the Gospel of Luke and Acts focusing on their narrative flow and unity, but also examining parts of the text for literary/historical detail and tracing various themes. The sessions will mainly be discussions around focus questions on texts, but there will be occasional lectures covering background. Liberal Arts Exploration: Advanced Bible.

ENGL 390 Special Topics in Literature: Dramatic Lines (3)

This course uses current dramatic productions in London as a resource for discussing connections between British drama present and past, Continental drama and British drama, and colonial and post-colonial drama. Liberal Arts Exploration: Humanities.

HIST 319 The History of Islam (3)

This course will provide a survey of Islamic history between approximately AD 570-1979, representing Islam's inception with the birth of Muhammad and concluding with the Iranian revolution. It will cover major personalities, dynasties and themes. These will include the life of Muhammad, the Umayyad, Ottoman, Mughal and other great Islamic empires. Also addressed will be competing ideologies which have been most prominent throughout Islamic history, such as the debate between scholastic theology and textual literalism, and the rise

of Islamic modernism in the early 20th century. The course will also consider the geographical diversity of Islamic history, covering Southeast Asia, the Indian subcontinent and the Middle East. Liberal Arts Exploration: Humanities.

HOUGHTON IN TANZANIA

Core courses

HIST 251 East African History (3)

East African history in context – from prehistoric rock painting and early migrations to the enchanting era of explorers; from the colonial period to the turbulent days of nationalism, independence and issues and challenges of today. Field trips and sight visits are a regular part of the course. [History, Intercultural Studies, International Relations, elective credit.]

SOC 293 East African Cultures (3)

Intensive study of East African ethnic groups – their beliefs, behaviors, work, societies. Lectures, which include foundational anthropological theory as well as ethnic descriptions, are augmented by observations and home stays amongst the Massai, Kelenjin, Murle, Hehe or other peoples. [Sociology, Intercultural Studies, International Relations, elective credit.]

BIOL 207 Wildlife Behavior in East Africa (3)

Ethnology of East African wildlife including the principles of feeding and social behavior, mate selection, migrations and communication. Lectures and two weeks of field observations at the Tanzania Field Station. Liberal Arts Exploration: Natural Science; or elective credit.

These three courses are required. Other coursework is elective. Each student must take a minimum of 12 credits but is limited to a maximum of 18 credits.

Optional courses

BIOL 212 Advanced Wildlife Biology (Biology majors only) (4)

Core work similar to BIOL 207, with additional wildlife studies and field lab work. Special emphasis on ornithology in southern mountain forests of Tanzania. Daily field notes and journal are required. [Prerequisite: General Biology and Biology Major.]

INCL/INDS 311 Intercultural Experience (4)

Must submit written proposal for prior approval. Experiential credit based on everyday life in Tanzania culture, village stays, site visits, interviews, observations and extensive prior readings. Students will complete cultural profile, journal and summary paper on the experience. [International Relations and Intercultural Studies credit] (Prerequisite: INDS 211, Intercultural Transition and Adjustment.)

ENG 390 ST: African Folk Lore (3)

Africa has a rich heritage of oral literature. In recent years much of this has been recorded, translated and published. This course is primarily a reading course while in the African setting. Students will examine stories from many ethnic groups in genres such as etiological stories, trickster tales, myths and morality tales. The students will write short papers on each genre with a longer comprehensive term paper at the end of the course. Liberal Arts Exploration: Humanities.

MISS 395 ST: Missions in Africa (3)

The Gospel in East Africa. Exploration of the receptivity of the Gospel from first hand encounter with African Christians and church leaders. Analysis of traditions, practice, forms and experiences. Also, an examination of strategies for furthering the Gospel including varieties of missionary methods. First hand contact with numerous missionary efforts. Clear view of the impact of Christianity and the ongoing challenges in East Africa. [Missions, Intercultural Studies and elective credits.] (Prerequisite: previous course work in missions or permission of instructor.)

HRSM 113 Horsemanship I (1)

Fundamental skills in riding with lab time on horseback. Liberal Arts Foundation: Physical Education Activity. EXTRA \$100 Fee.

HRSM 223 Horsemanship II (2)

Principles of horse management and other areas related to equestrian studies. Hunt-seat equitation, basic dressage, cross-country riding. [elective credit] EXTRA \$100 Fee.

REC 228 Trip Experience (1)

Basic management and leadership in trekking in excellent African game-park sites. Liberal Arts Foundation: Physical Education Activity.

Other **Special Topic** and **Independent Study** credits may be available on given years or on demand.

HOUGHTON IN AUSTRALIA

Required Core Courses (seven hours)

HIST/THEL 306 **Australian History** (3)
Surveys Australian history from the Dreamtime to the present, examining the roles of the Christian church, people, events and issues in shaping Australia. Liberal Arts Exploration: Humanities and History major/minor and Theology minor credit.

MIN/MISS/PSY/SOC/URMN 345 **Life in the City** (3)
What is life in a large, cosmopolitan Australian city? Study social problems of urban life, analyze ministry options and investigate effective responses. Liberal Arts Exploration: Social Science, Psychology, and Sociology major/minor credit, Mission and Urban Ministry minor credit.

INTS 301 **Engaging Australian Culture** (1)
Weekly exploration of Australian culture outside the classroom through travel, cultural events and talking with Australians. [elective]

AND either of the following:

PHIL/THEL/MISS 300 **Christianity and Postmodernism** (3)
How does postmodern philosophy relate to Christian faith? How should Christians live in a postmodern culture, which Australia exemplifies? Liberal Arts Exploration: Humanities, Philosophy major/minor, and Theology and Missions minor credit.

ENGL 308 **Australian Literature** (3)
Studies the diversity of Australian literary traditions and texts in light of Australian critical approaches, such as post-colonial theory and other cultural study models. Liberal Arts Exploration: Humanities and English major credit.

BIBL An advanced **Bible** course. (3)
The Bible option is offered on a three year rotation: Doctrinal Epistles-Romans, Galatians, and Hebrews; Major Prophets; and Poetic Books. Check with program directors for which course is in rotation. Liberal Arts Exploration: Advanced Bible and Bible major/minor credit.

Other selected credits may be offered in given years and on demand.

HOUGHTON IN ADIRONDACK PARK

BIOL 105/295 **Conservation Biology** (4)
Principles of conservation biology including history of conservation, structure of aquatic and terrestrial ecosystems, endangered species and extinction, management, and Christian stewardship. Labs emphasize analysis of aquatic and terrestrial ecosystems. Liberal Arts Foundation: Lab Science.

BIOL 213 (3 credits, for non-majors) **Natural History of the Adirondacks** (3)

BIOL 225 (4 credits, for major/minor credit) **Natural History of the Adirondacks** (4)
An introductory study of the physical and biological characteristics of the terrestrial and aquatic ecosystems of the Adirondack Park. Topics include field identification of local flora and fauna, old growth forest characteristics, human disturbance, atmospheric deposition and environmental stewardship. Extensive field trips in the northern Adirondack Park are included. BIOL 225 may be used for biology major or minor credit and has a pre-requisite of BIOL 151 and 152. Liberal Arts Exploration: Natural Science.

REC 105 **Outdoor Pursuits: Canoeing and Backpacking** (1)
Appreciation and stewardship of God's creation through outdoor recreation in the Adirondack Park. Emphases are placed on physical fitness, trip planning, skills and philosophies with canoeing, and backpacking. Liberal Arts Foundation: Physical Education Activity.

POLS 295B **Special Topics: Introduction to Environmental Politics** (3)
Focuses on the special relationship of conservation and regulation that has characterized the unique experiment known as the Adirondack Park. Places Adirondack governance and politics in the context of the global community and conservation efforts. Liberal Arts Exploration: Social Science.

PHIL 210 **Community, Ideology, and the Environment** (3)
Engages the two fields to explore contemporary theoretical perspectives in environmental ethics (biocentrism, ecocentrism and deep ecology) and political philosophy (liberalism and communitarianism). Includes the indigenous American tradition in political philosophy known as agrarian decentralism.

BIOL 320 **Limnology** (4)
Introduction to freshwater aquatic ecosystems with emphasis on lakes. Includes the study of physical, chemical and biological factors which influence ecosystem function and health. Lake management and conservation included.

GO ED (FOOD FOR THE HUNGRY)

Go ED is a semester abroad program in East Africa sponsored by Food for the Hungry (FHI), a non-profit international Christian relief and development organization. Taught from a Christian perspective, students learn about the complexities of their discipline in a real world context while guided by FHI experts who are academically, professionally and spiritually qualified. Learning format includes lectures, field trips, field work, and a two-week home stay with an African family. Experience in applying theory to real problems is emphasized. Houghton College is an accrediting institution for this program which is offered both fall and spring semesters. All courses receive Houghton credit. Dr. Ronald Oakerson is the campus contact. Visit the program's website at www.go-ed.net.

Course Descriptions

ECON 240 **Development Economics** (3)
This course is meant to acquaint students with the basics of development economics. It is concerned with the application of economics to the problems of developing countries. Students will be introduced to economic concepts as applied to developing economies particularly in Africa and specifically the East African region.

ENGL 206 **Post-Colonial African Literature** (3)
Students will journey not only to the African continent, but also into the hearts, minds and souls of the African people by reading novels, short stories, poetry, drama and oral tradition of postcolonial sub-Saharan Africa. Through reading literature written by people of the African continent, you will broaden and deepen your conceptual base for understanding what you see and hear during your semester in Africa. Students' worldview will be challenged hearing new voices expressing the African perspective on issues of race, gender, history, Western hegemony and the challenges Africa faces in shaping its own future in a rapidly changing world. To better understand African discourse in response to the incursion of Europe and the West, selections from European writers on Africa will provide a representation of the "native" in the imperialist ideology.

ESCI 202/INCL 327 **Ecological Sustainability in Community Development** (3)
In this course we look at how the environment shapes human communities. We will learn from pastoral nomads about the ecology of semi-arid Northern Kenya and consider how limited resources impact community development, poverty and wealth. Students will investigate the many unique coping skills of peoples living under harsh environmental stress and consider whether the adaptive technologies are sustainable or not. The fieldwork and discussions will be integrated with questions of worldview. Prerequisite (for INCL 327); INCL 320.

INCL 250 **Culture and History of Ethiopia** (3)
This course will survey the culture and history of Northern Ethiopia. Emphasis will be placed on the role of Christianity and Middle Eastern cultures in the development of Ethiopian civilization past and present. The course will focus on the Axumite Empire (200 BC) to the arrival of the Portuguese in the 1600's. A two-week field trip will expose the student to the pertinent historical and cultural sites in Northern Ethiopia. The course will also help the student understand cultural and historical background to Ethiopia's current efforts for development.

INCL 340 **African Traditional Culture and Religion** (3)
This course deals with an overview of African traditional cultures and religion (ATR) as well as the challenges African cultures pose to Christians in Africa. Topics to be covered will include: the concept of culture, social groupings, ATR, characteristics of ATR, sources of ATR, African world view, basic values, religious leaders, mystical forces, African religious experience, ethics, ethics and morality, death and hereafter. Attention will also be focused on some specific societies. The changes currently taking place today will also be considered.

INCL 345 **Peacebuilding: Genocide and Religious Diversity** (3)
Students will study the ethnic conflicts of Rwanda as a means of learning issues in the healing of trauma (both personal and social), the processes of building peace and establishing reconciliation. The history of Rwanda is important in understanding the basis of genocide. As students learn about the reconstruction process, they will discover the roles played by the state, church and nongovernmental organizations. Students will also consider the current social challenges brought on by the increasing presence of Islam in Rwanda and discuss the role of

the international community both during the genocide and during the rebuilding process. Students will have the opportunity to interact with individuals who have experienced these human tragedies.

COUNCIL-SPONSORED PROGRAMS:

Opportunities in the CCCU

Because Houghton is a member of the Council for Christian Colleges & Universities, an association of more than 100 private liberal arts Christian colleges, a number of off-campus learning opportunities (and some course descriptions) are listed below:

AMERICAN STUDIES PROGRAM

The American Studies Program, designed for juniors and seniors, serves as the “Washington, D.C., campus” of Council member colleges. Based on the principle of integrating faith, learning and living, students spend a semester in D.C. earning academic credit by serving as interns and participating in a contemporary, issue-oriented seminar program. Available internships may include Federal Government Agencies, the Arts, Business and Economics, Communication and Journalism, Education, Environment and Science, History, International Affairs, Law and Criminal Justice, Public Interest and Research Groups, or Social Services.

Course Descriptions

Foundations for Policy Analysis & Public Involvement (2)

This unit introduces foundational concepts for analyzing public policy and for Christian involvement in public affairs. Students learn basic policy analysis techniques and study the pattern of biblical revelation (creation, fall, redemption, consummation) as an analytical framework. Students also select a policy topic of choice to explore in light of personal background, a Christian worldview and the responsibility of the church in today’s world.

Topics in Domestic Policy (3)

Involving field research and applying tools of policy analysis, this seminar builds on the foundations unit, introduces various perspectives on social and political engagement in the domestic arena. Biblical justice becomes the point of departure for analyzing different views on a pressing national issue. This course is designed to expose students to the complex dynamic of national public policy formation on topics such as abortion, welfare reform, tax policy or presidential elections.

Topics in International Policy (3)

This unit focuses on a major topic in international policy and introduces participants to Washington’s international community. Through case study research you are challenged to develop a biblical perspective on foreign policy. The unity typically emphasizes ways of dealing with conflict and the biblical idea of shalom on the role of governments and of the church in the world. Some issues previously studied in this unit include terrorism, the Asian Economic Crisis, U.S.-Cuba relations, and the war in Iraq.

Internships (8)

An ASP internship can challenge students to integrate faith with practice in an exciting professional setting while providing experiences, skills and vision for continued growth after the internship ends. To receive eight internship credits, students must work at least 20 hours a week and reflect in writing on the experience and assigned readings. Academic credit is granted, so internships are unpaid.

CHINA STUDIES PROGRAM

This program makes use of the rich resources of the People’s Republic of China to give student participants the opportunity to study this vast and intriguing country from the inside. Home bases for the program are in Xi’an at Xi’an Foreign Languages University and in Shanghai at Fudan University, leading universities in the country. Students spend a week in Beijing and visit Hong Kong at the beginning and end of the semester.

All students complete three credit hours each in Chinese History, Intercultural communication, and Contemporary Society: Public Policy and Economic Development. One of two concentration options is taken by the students:

China Studies concentration students also complete three credit hours of Chinese I (Mandarin). Additionally, these students take either Chinese II or Eastern Philosophies & Religions for three credit hours. Students take Tai Chi and/or Chinese Painting for one credit hour each to earn 16-17 credit hours for their semester.

Business concentrations students also complete two credit hours of Chinese I (Mandarin). Additionally, these students complete a three credit hour “International Business in China” course and the three credit hour Business Internship. The concentration features class hours divided between readings, discussions with guest lecturers who have done business in China for many years and 120 actual working hours with Western or Chinese companies in Shanghai. Business students earn a total of 17 credits for their semester.

Course Descriptions

[Note: The course descriptions have been rearranged to follow the pattern above of the three that all take and then the concentrations]

Required Courses:

Chinese History (3)

One-third of this seminar course consists of lectures, one-third consists of presentations by the students, and one-third consists of field trips to historical sites. The course covers the history of China from its earliest beginnings up to the present. Students become familiar with the major dynasties of China, their character and contributions, and their major figures. On a study tour to Xi’an, Beijing, and Shanghai, students visit many of the most famous Chinese sites of historical importance, including the Terra Cotta Soldiers, the Forbidden City, the Great Wall, the temple of Heaven, the Shanghai Museum, and much more. Each student will also read and make a presentation one book about one significant event or person in Chinese history, such as the Boxer rebellion, the Mongol empire, the international voyages or the Ming Dynasty, Matteo Ricci, etc. [Possible credit: history, cross-cultural studies.]

Intercultural Communication (3)

This course covers issues intended to help students understand and adjust to Chinese culture. The focus will be on how our students demonstrate their beliefs in their daily lives within the context of China. Topics include culture and basic values; culture shock, introductory linguistics, contextualization and factors involved in successful cross-cultural interaction. Well-known films featuring famous actors (both Western and Chinese) that focus on cross-cultural experiences will be shown and discussed each week. [Possible credit: sociology, cross-cultural studies, communication, linguistics.]

Contemporary: Public Policy & Economic Development (3)

This required course examines two key and inter-related aspects of modern China: government policy and economic reforms. Public Policy covers the structure of the Chinese government, social rights and the legal system, and issues such as ethnic minorities, family planning and education. Economic development focuses on the government policies from 1949 to present, from the commune system to the current market-oriented reforms. Other topics include foreign investment, pollutions and the environment, and the World Trade Organization. Each student will present an investigative report based on interviews with Chinese about a topic relating to contemporary Chinese society that is of particular interest to Americans. All students will also prepare a marketing paper in which they describe and analyze the ways an American or international company markets its products or its franchise in China. The goal of this course is for students to learn about China by seeking out informed Chinese themselves. [Possible credit: political science, cross-cultural studies, sociology, history, business and economics.]

China Studies Concentration

Chinese I (3)

This course in introductory Chinese focuses on acquiring survival fluency in spoken and written Chinese. The emphasis is on the spoken form of Mandarin Chinese, the national language of China. Students who already have studied Chinese may apply for a more advanced class. All students take the written exams for Chinese characters, vocabulary and grammar of the CSP Chinese I course.

Chinese II (3)

This course focuses on acquiring low-intermediate fluency in spoken and written Chinese so that a student can handle situations such as travel planning, illness, making appointments, etc. The emphasis is on the spoken form of Mandarin Chinese, the national language of China. There will also be lectures on Chinese dialects, simplified v. traditional characters and word radicals.

Eastern Philosophy and Religions (3)

This course introduces the teachings, history, and development of Confucianism, Taoism, Buddhism, and folk religion as well as their role in China today. Other topics covered are the I Ching, Yin and Yang, the Five Phases and the widely varying ways the gospel has been introduced into China over the last 15 centuries. The course will also examine these topics from a Christian perspective, seeing to what extent they might relate to Christian doctrine. Field trips to relevant sites will occur throughout the program.

Electives: (One or Both)

Chinese Painting (1)

Students will learn to paint from a Chinese artist. They will practice the basics of Chinese water-based brushwork, painting traditional pictures of bamboo, flowers, etc.

Tai Chi (1)

This physical education course emphasizes the traditional Chinese forms of stylized self-defense, which tones the

body and concentrates the mind. Exercises may focus on either the gentler form of tai chi, or on the more vigorous wu shu, depending on who is teaching that semester.

Business Concentration:

Chinese I (2)
This course focuses on acquiring survival fluency in spoken and written Mandarin Chinese, the national language of China. Classes with the Xiamen University teacher occur on Mondays, Wednesdays and Fridays. Chinese I classes with CSP teachers will be held as scheduled and include explanations on aspects of learning the languages such as Pinyin (the spelling system used on Mainland China) and tones along with activities such as memorizing an ancient Chinese poem *in Mandarin* and learning Chinese pop songs. Students who already have studied Chinese may apply for a more advanced class, in which they study with their own teacher with other advanced-language CSP students (if any). The course work will be adjusted based on the overall capabilities of the students involved. All students take the written exams for Chinese characters, vocabulary, and grammar of the CSP Chinese I.

International Business in China

(3)
In this course, students hear talks presented by Christians who have done business in China for years. The talks cover issues such as fair and ethical business practices and the factors involved in out-sourcing jobs to China. Additionally, students write responses to assigned readings from the course text, engage in frank discussions with the Internship Coordinator about what to expect and how to deal with business in China and meet with business leaders in Shanghai. Finally, these students prepare a group “end-of-semester” presentation for the rest of the CSP students highlighting what they have learned.

Business Internship

(3)
Early in the semester, participants meet with the Internship Coordinator who briefs them specifically on job placements and matches each student to a specific workplace. Around two-thirds of the way through the semester, the Business Concentration students remain in Shanghai for three weeks working full-time for either Western or Chinese companies.

CONTEMPORARY MUSIC CENTER

This interdisciplinary off-campus study program provides a community for young musicians and aspiring music executives to plumb the depths of their creative souls and test the waters of a career in popular music. Designed as an artists’ community, the program seeks to develop artists and music executives with a Christ-centered vision for music content, production and delivery. The mission of the CMC is to prepare students academically and creatively for potential careers in the music industry.

Core Courses:

Faith, Music and Culture

(3)
The purpose of this course is to help students develop a Christian approach to the creation, marketing and consumption of contemporary music. While engaging in studies of theory, history and criticism, students explore the concept of culture as well as the nature of popular culture and examine popular art and music in contemporary aesthetic, social cultural and industrial contexts. Additional topics include a study of the role of popular music in cultural communication, the development of a Christian critical method and an examination of different Christian approaches to popular art and culture.

Inside the Music Industry

(3)
Through readings, lectures and seminars, this course provides up-to-the-minute insight into the inner workings of the music industry. Emphasis will be given to career possibilities and gifts and skills required to succeed in each of the major areas, including work as a performer, songwriter, record producer and engineer, etc. Students gain an understanding of the structure and methodologies of a typical U.S. record company, including A&R, marketing, radio promotion, public relations, sales & distribution, product development, art, manufacturing and business affairs.

Practicum

(1)
Each student participates in an intensive road trip to a major music market. Briefings, tours and meetings are arranged with leading record companies, artist management firms, booking agencies, recording studios, concert promoters, writers, producers and artists in various cities.

Artist Track:

Essentials of Songwriting

(3)
Artists receive classroom instruction, participate in directed study with faculty and work in collaboration with other students to develop their use of form, melody, harmony, rhythm and lyric. Emphasis is placed on the song as the vehicle for the artist’s creative exploration and public communication.

Studio Recording

(3)
Artists, via both the classroom and lab, work with faculty, other students and visiting experts to learn how to produce, record, mix edit and master recordings in a professional digital studio.

Performance

(3)
In consultation with faculty and executive-track students, artists develop a live concert presentation that best utilizes their gifts as musicians, entertainers and communicator. Both on-campus showcases and public performances are presented throughout the semester.

Executive Track:

Artist Management

(3)
Through lecture, text and online investigations, students gain a thorough understanding of the economic, creative and spiritual elements critical to a career in contemporary music. In concert with faculty, students assist artist-track students in developing a career plan and preparing the materials necessary to pitch an artist to a record company and negotiate a recording contract.

A & R (Artists and Repertoire)

(3)
Executives learn how to spot talent; create a music label business plan; analyze and forecast trends in popular music; assemble a successful artist roster; and, in tandem with artists, plan, budget and produce recording sessions.

Music Marketing and Sales

(3)
Through classroom instruction and hands-on experience, executive-track students become familiar with the role of packaging, retail point-of-purchase materials, publicity, advertising, radio and video promotion, internet marketing and tour support in the marketing and sale of recorded music. Executives will develop a comprehensive marketing plan for each semester’s artist-track recordings.

LATIN AMERICAN STUDIES PROGRAM

An opportunity to live and learn in Latin America is available to students from Coalition member colleges through this program located in San Jose, Costa Rica. Two specialized tracks, International Business and Management and Tropical Sciences and Sustainability, are available to qualified students. The LASP is committed to helping students examine and live out the Lordship of Jesus Christ in an intentional context.

Course Descriptions

Spanish Language Study

(6)
Students come to Costa Rica with varying degrees of fluency in Spanish, so LASP places them in the Spanish course that corresponds to each participant’s level of oral proficiency based on a placement exam and interview during the orientation. Students study grammar, conversation, phonetics and/or literature based on the results of their tests. Classes are taught by Latin Americans, which means participants hear and learn the language the way it is spoken in Latin America. This is reinforced during everyday interaction with Spanish-speaking host families.

Latin American History, Contemporary Issues and Perspectives

(3)
This seminar introduces the social, historical, political, economic, philosophical and theological currents that constitute Latin American society and culture. The course includes personal discussions with Latins and field trips to various sites.

Travel Practicum

(1-3)
The LASP group travels to several countries in Central America during the semester. The travel practicum component is not a vacation trip; it is an integral part of the learning process. Among other assignments, students will be required to attend conferences and maintain a journal of ideas and perceptions developed throughout the trips.

Concentrations

Latin American Studies Concentration

Faith and Practice Seminar

Service Opportunity/Internship

(3)
(3)
This concentration is interdisciplinary by design. Students are challenged in a seminar that includes diverse perspective, broad readings and group presentations which respond to scenarios drawn from the contemporary scene. Participants also gain valuable first-hand experiences in related service opportunities. In recent semesters, these have been organized in neighboring countries throughout Latin America. (Prerequisite: Equivalency of one year of college Spanish.)

Advanced Language and Literature Concentration

- Language and Literature Seminar (3)
- Service opportunity/Internship (3)

This concentration focuses on the social, cultural, political, economic and religious issues of Latin America in the target language. Students examine how Latin Americans view their neighbors to the north. As a part of this concentration students examine Latin America through its literature, using it as a means to examine society and culture. (Designed for Spanish language majors with a minimum of one year of college or university intermediate Spanish and one semester of advanced Spanish conversation and/or composition.)

Environmental Science Concentration (Spring Semester only)

- Science Seminar (4)
- Field Research (2)

Participants in this concentration explore the natural sciences in a tropical setting and study their influence on the process of sustainability. Students are immersed in a variety of ecosystems: dry forests, lowland rain forests, mountain cloud forests, volcanic regions, as well as beautiful reefs. Costa Rica serves as a natural laboratory. (Required prerequisites: One semester of zoology or an applied laboratory science. Recommended prerequisites: One semester of general chemistry or physics.)

LOS ANGELES FILM STUDIES CENTER

The components of the Los Angeles Film Studies Center are designed to integrate a Christian world view with an introductory exploration of the work and workings of mainstream Hollywood entertainment.

Course Descriptions

Internship: Inside Hollywood (6)

Nonpaying internship in some aspect of the Hollywood film or television industry, arranged by the LAFSC. Internships are primarily in an office setting such as development companies, agencies, personal management companies, production offices, etc.

Hollywood Production Workshop (3)

Students work collaboratively in groups to create a festival-ready piece. Offers students the opportunity to make a motion picture production using Hollywood locations, resources, and protocol. Emphasizes the importance of each contribution to a production, the process of production, and effective production management.

Theology in Hollywood (4)

Encourages the development of the necessary skills for analysis of the culture of Hollywood, its role in popular culture and the theological intersections therein. Seeks theological engagement with the culture of Hollywood and cinema by investigating some of the social, ethical, and psychological implications of film upon theology.

(Electives, choose 1)

Motion Picture Production (3)

An intense, hands-on course in short film production. Students individually write, shoot, direct, and edit their own projects. Visual storytelling is achieved through developing skills in directing, cinematography, and editing. Designed to enable both novice and advanced students to develop their integration of story with technical skills.

Professional Screenwriting (3)

An introduction to contemporary screenwriting, including an understanding of dramatic structure, character and dialogue development, and the writing process. Students strive to complete a full-length screenplay for a feature film or “movie-of-the-week.” Emphasis is given to the role of Christian faith and values as they relate to script content.

Independent Study (3)

Set up by special request and arrangement. In order to be considered, students must submit a portfolio and a project proposal. Students with approved projects will be appointed a mentor to supervise the project. Projects could include further development of a portfolio or reel, critical research, or a senior thesis project.

MIDDLE EAST STUDIES PROGRAM

The MESP in Cairo, Egypt, provides students with the opportunity to study Middle Eastern cultures, religions, and conflicts from within this diverse and strategic region. Juniors and seniors participate in interdisciplinary seminar classes, receive Arabic language instruction and serve as volunteers with various organizations in Cairo. The MESP encourages and equips students to relate to the Muslim world in an informed and constructive manner. Trips to Israel, Palestine, and Jordan are included.

Course Descriptions

Introduction to Arabic Language (4)

This course is taught by native speakers of Arabic, Dr. Cahill and guest lecturers, trained at the American University in Cairo. The purpose of the course is for students to acquire basic facility in the spoken Arabic of Egypt.

After a brief survey of the historical development of Arabic in the Middle East, both oral and written exercises form an integral part of the classroom program. This course incorporates the concept of communicative language acquisition to maximize the interaction of students with speakers of Arabic. The language portion of this course consists of small group classes (six to ten students per instructor) held four days a week. Focusing on spoken Arabic, students are given a solid introduction to Egyptian Colloquial grammar and substantial amount of vocabulary. This course includes periods of total immersion into the language. Students use “Language Lab Cairo” to carry out specific assignments with native speakers in the city. Between classes and “Language Lab Cairo,” students spend over 100 hours in language instruction. Students’ involvement in weekly service opportunities further facilitates language acquisition. This course should bring the student well into the intermediate level of spoken Arabic. [Possible credit: language/cross-cultural.]

Islamic Thought and Practice in the Middle East (4)

This course examines the doctrines, rituals, jurisprudence, and historical vision of Islam with an emphasis on contemporary expressions of Islam in the Middle East. Special attention is given to the historical origins of religious traditions which are still alive today, namely Sunni, Shi’ite (Zaydi, Isma’ili, and Twelver) and Sufi Islam as well as the central features of Islamic theology and jurisprudence: the Qur’an, the Hadith, Kalaam, and legal reasoning.

Students study modern political and social expressions of Islam, including the Muslim Brotherhood, “Islamic States” (Saudi Arabia, Iran), Muslim women and gender issues. They are encouraged to carefully examine the historical development and religious claims of these Islamic traditions, especially in regards to the Christian faith. Students encounter the complex diversity of the “Islamic World” and in so doing gain a better understanding of the diversity of humanity. [Possible credit: history/religion.]

Conflict and Change in the Middle East (4)

The purpose of this course is to help students understand the historical, political and religious transformations that have occurred in the last century. Included are discussions of economic development and the political and social implications for Middle Eastern peoples. The Arab-Israeli conflict will receive special emphasis with the goal of helping students understand the complexity of the issues surrounding the current attempts to establish a lasting peace. The course includes an extended travel component based in Jerusalem in order to gain firsthand Israeli and Palestinian perspectives and ideas regarding resolution of the conflict. In Cairo, students enjoy on site briefings from experts at the World Bank, the Arab League and the U.S. Embassy. [Possible credit: political science/history.]

Peoples and Cultures of the Middle East (4)

Using a Socio-anthropological approach, this course seeks to acquaint the students with the enormous varieties of peoples and cultures found in the Middle East. Literature, music, dance and food are integrated into the learning experience. The course examines the basic structure of historical and contemporary societies and cultures with special emphasis on those found in Egypt, Jordan, Syria, and Turkey. The MESP travels to these countries during two weeks of this course, learning about the various ethnic groups firsthand. Students study such groups as Bedouins, Kurds, Jordanians, Turks, Yoruks, Syriac Syrians, Armenians and more. Historical sites include Damascus, Aleppo, Antioch, Cappadocia and Istanbul. Social organization, law, family, tribe, gender, rural-urban migration and social change are among the areas of inquiry in this course. [Possible credit: sociology/anthropology.]

OXFORD SUMMER SCHOOL PROGRAM

Students at Council-member colleges and universities are invited to apply for admission to the Oxford University Summer School Program, a multi-disciplinary study of the history and development of the Renaissance and Reformation through examination of the philosophy, art, literature, science, music, politics and religion of this era. Students have the opportunity to study with the faculty of the Centre for Medieval and Renaissance Studies, which is affiliated with Oxford’s Keble College.

See the Academic Records Office for courses offered.

RUSSIAN STUDIES PROGRAM

The RSP enables juniors and seniors to spend a semester living and learning in Russia. Students study the Russian language and attend seminar courses on Russian culture, literature, history, and current political and economic issues. Program participants experience a variety of Russian environments, living for 12 weeks in Nizhni Novgorod and visiting both Moscow and St. Petersburg. In addition to participating in a service project, after six weeks of language instruction students will have the opportunity to live with Russian families for the remainder of their stay in Nizhni Novgorod.

Courses

Russian Language Study

(4 or 6)

The initial requirement is familiarity with the Cyrillic alphabet upon arrival in Russia (through study materials provided in advance). For students with Russian language capability, small group instruction builds on their current knowledge. Students advanced in Russian are placed in a program which makes use of regular university lectures, written assignments and tutorials with their language instructors. Students learn and practice the use of both spoken and written language in real-life situations. Intensive teaching methods provide good results in a relatively short period of time. Students are thrilled to acquire a vocabulary of 800-1,200 words and a basic grammatical understanding within a few short weeks.

International Relations and Business

(2)

This class, meeting for about ten sessions, explores issues related to the newly-arising world of business in Russia. Cultural differences, economic potential, ethics and government policy will be examined in the laboratory of Nizhni Novgorod, a city widely recognized as a leader in Russian economic reform.

History and Sociology of Religion

(3)

This seminar delves into the history of religion in Russia dating from the beginnings of Christianity in the 10th century to the present day, with emphases on Orthodoxy and Protestantism, including study of the persecution during the Soviet era and the flourishing of religious activity in post-Soviet years. The course also looks at current government regulations from various points of view. Included are visits to numerous churches and cathedrals in Moscow, St. Petersburg, and Nizhni Novgorod and guest lecturers giving Russian Orthodox, Protestant, and other religious perspectives. (Possible credit: biblical studies, comparative religion, history, sociology.)

Russian Peoples, Culture, and Literature

(4)

Introduction to Russian history and culture using the rich resources of Moscow, St. Petersburg, and Nizhni Novgorod. Continued study of Russian people and culture throughout history using well-known works of Russian literature. Works by Pushkin, Tolstoy, Dostoyevsky, Gorky and Bulgakov are used. This seminar also includes visits to appropriate sites, including homes of literary figures, museums and historic cities and villages. (Possible credit: literature, history, sociology, cross-cultural studies.)

Russia in Transition

(3)

An in-depth look at Russia since 1991, as revolutions have encompassed political, economic, social and religious areas — a phenomenon unique in world history. A compendium of background and current journal, magazine and newspaper articles is used, as well as knowledgeable guest lecturers and public policy representatives. Students are introduced to the complexities of transition from a centrally-planned economy to a free market system and establishment of democratic institutions. They discuss the changes and their impact on Russia's economy, political institutions and the life of the Russian people. The seminar includes service projects in selected educational institutions, orphanages, business and other organizations in Nizhni Novgorod, as well as travel throughout western Russia. (Possible credit: political science, business, cross-cultural studies, sociology, history.)

AFFILIATED PROGRAMS:

AuSable Institute of Environmental Studies

Located in Michigan, this program offers courses which cover various aspects of environmental studies and stewardship. Ecological information is provided along with experience in both field and laboratory techniques. Scholarship assistance is available to students at Council-member colleges.

The courses listed below are some of those offered at the AuSable Institute of Environmental Studies. See current AuSable bulletin for detailed course descriptions and special programs. A student may enroll in two courses per summer session for a total of eight hours of credit. A maximum of eight hours may be applied toward the major. Additional courses may be used for elective credit. Through a combination of courses taken at Houghton and AuSable, a student may earn certification from AuSable as one of the following: environmental analyst, land resources analyst or naturalist. Certification requires a minimum of three approved courses to be taken in residence at the Institute. Specific requirements for particular certificates may be obtained from the biology department faculty.

BIOL 220 Environmental Science in Stewardship Perspective.....	4
BIOL 295 Natural History in Spring	4, May
BIOL 301 Land Resources.....	4
BIOL 302 Water Resources	4
BIOL 303 Natural Resources Practicum:	
Ethnobotany and Ecological Agriculture.....	4
BIOL 304 Natural Resources Practicum:	
Hazardous Waste Stewardship	4
BIOL 312 Insect Biology and Ecology	4
BIOL 322 Aquatic Biology	4

BIOL 342 Fish Biology and Ecology	4
BIOL 346 Winter Stream Ecology	4
BIOL 482 Restoration Ecology	4
CHEM 332 Environmental Chemistry.....	4

EduVenture (Mexico and Fiji)

Currently running programs in Mexico and Fiji, EduVenture employs an educational philosophy that combines non-traditional and traditional approaches and that emphasizes guided experiential learning to build strong cross-cultural skills, provide students with a better understanding of nature and themselves, provide practical, personal, social, and spiritual disciplines, guide students into a deeper relationship with God, and make a positive impact among the local people through cooperative development projects.

Applied Missions

(3)

Applied missions is the capstone course of EduVenture, integrating anthropology, cross-cultural communication, spiritual growth and community development into biblically based principles of missions applicable in multi-cultural environments. The course will define missions and discuss models of missions conducted by various mission agencies in the region. [Can be taken as a mission elective.]

Physical Education

(3)

(Mexico) This course provides an introductory experience in the skills, safety and philosophies of horsemanship, backpacking and outdoor living skills. Opportunities will be provided to enjoy, explore, and practice good stewardship of God's creation while developing an understanding of personal fitness as it pertains to an active lifestyle in the outdoors. Liberal Arts Foundation: Physical Education Activity.

(Fiji) This course provides an introductory experience in the skills, safety and philosophies of backpacking, kayaking, snorkeling and outdoor living skills. Opportunities will be provided to enjoy, explore and practice good stewardship of God's creation while developing an understanding of personal fitness as it pertains to an active lifestyle in the outdoors. Liberal Arts Foundation: Physical Education Activity.

Community Development

(3)

Students will learn through observation and participation about the importance of a people-centered approach to community development, focusing on equipping through training and discipleship, focusing on equipping through training and discipleship rather than technology and projects.

[Through prior approval of the Global Develop and Relief professor and additional assignments can be substituted for INCL/MISS 231 Global Relief and Develop.]

Spiritual Formation

(3)

Students will learn experientially about many of the foundational principles of spiritual formation including devotional time, fasting, solitude/meditation, service, prayer, scripture memorization, worship, discussion, and journaling. Spiritual growth will be facilitated by adult mentors. [Counts as an elective.]

Cross Cultural Communications

(3)

This course addresses the process of communication in different cultural contexts. Insights from anthropology and communication theory are applied to the broader field of human relations. Approximately half of the course addresses theoretical models of communication while the other half is devoted to language acquisition and practice. [Counts as an elective, does not fulfill COMM/INCL 325 Cross-cultural Communication credit.]

Training In Ministry Outreach (TIMO)

TIMO (Training in Ministry Outreach) is a two-year training program, equipping new career missionaries in the basics of Evangelism and Church planting with the goal of establishing a church. This is accomplished while living amongst an unchurched and, preferably, unreached people group. Each team is lead by an experienced missionary who has been prepared by the TIMO Administration. The team leaders pour themselves into the training/mentoring of their team. One of the highest priorities for the team is learning the vernacular language of the host people group, using the LAMP method. To effectively learn language in this way, team members must build good relationships in the community, providing both the credibility and the opportunity for sharing Christ. Students take four units of study, each three to four months long. For each unit, books of varying perspective are read and interacted with by the team. At the weekly team meeting, the team works through the study topic in relationship to scripture, constantly looking at the practical applications. The goal is to write a personal philosophy of ministry for each unit with one final paper pulling the two year experience together.

These 5 courses are only offered in conjunction with TIMO, an arm of the Africa Inland Mission based in East Africa. Students must be part of a TIMO team undertaking a 2 year learning/ministry project with proper supervision.

TLIN 202 Language Acquisition:

Students will study the underlying philosophy for learning a language. They will study various theories on methods of language learning with an emphasis on right brain learning in a relational setting. The theory will then be put into practice in a community setting. The students will actually learn a language with weekly support and evaluation.

TMIS 204 Spiritual Dynamics and Power Encounters:

This course will encourage the student to critically evaluate their understanding of the spiritual realms. This will be accomplished through reading the writings of a broad range of authors and a thorough study of Scriptures. The goal will be to understand the practical out workings of this topic in the host culture.

TINC 206 Intercultural Research:

Learning about culture through assigned readings, discussion and interaction with people from the host culture in which the student is living. This will include an evaluation of that culture with the goal of understanding how best to communicate with the people in a culturally appropriate manner.

TMIS 306 Evangelism and Church Planting:

Building on the principles of Intercultural Research, the student will seek to develop a biblical model of outreach which is faithful to scripture yet appropriate in the particular cultural context in which the student is living.

TMIS 410 Cross-cultural Discipleship:

After coming to an understanding of what a Biblical model of discipleship looks like, the student will propose a model which will take into account the distinctives of the host culture. This model should not just be theoretical, but will be used in relationships with members of the host culture.

INCL 311 Intercultural Experience**INCL 482 Senior Intercultural Seminar****International Business Institute**

Houghton College is affiliated with the International Business Institute of Messiah College. The 11-week summer program, normally taken following completion of the junior year, includes periods of residence in key locations as well as coordinated visits to major political, business, and economic centers of Western Europe and Russia. Applicants should have completed at least one full year of economics, one semester of accounting, one course in marketing, and one in management. These courses are unique to IBI and are all taken as part of the program. This program meets the cross-cultural study requirement for international studies majors.

Course Descriptions**IBI-331 Comparative Economic Systems (3)**

A survey and critical study of comparative economic systems, their underlying ideological foundations and institutional arrangements. Prerequisites: one year of economic principles.

IBI-339 Global Marketing (3)

The theory and practice of current management concerns in contemporary global marketing including the international marketing environment, market research and entry, product planning and strategy; all within the distinctive cultural setting. Prerequisite: Course work in principles of marketing.

IBI-350 International Trade and Finance (3)

This course presents the central tools, concepts and issues in modern international economics. It provides a discussion of the analytical elements of international trade, trade policy, foreign exchange markets, exchange-rate systems and international monetary policy. Special topics to be covered include regional trade agreements, globalization, international financial crises, and the challenges facing the European Union (EU) and the European Monetary Union (EMU).

IBI-357 Global Business Strategy (3)

This course is designed to cover the major topics normally offered in a course in international business management and strategy. It also has a very important function of enabling the integration of field experiences, corporate visits, and presentations by guest faculty with the current theoretical developments and literature in this field. Students will be expected to prepare analytical reports on the various firms and institutions represented in the program.

Additional Off-Campus Opportunities

The college also has affiliation agreements with other institutions and organizations to provide further study abroad opportunities (see the list below). These programs permit students to study in Europe, Russia, Asia, China, Latin America and Africa. Services provided by the off-campus programs office assist students in program

selection and preparation for departure with advice on visas, passports, immunizations, cultural adjustment and re-entry. Financial aid may be reduced or not be possible with participation in some study-abroad programs.

Consortium Visitor

Houghton has agreements with most of the other 12 colleges in the Christian College Consortium to allow single-semester visiting student status at another college. For information on the opportunities, requirements, and essential paperwork, come to the Academic Records Office.

Tabular Listing of Off-Campus Programs (data is subject to change)

	HC Catalog Courses	Grades on Trnsript	HC Fin Aid Awarded	Qualifies Mayterm
Houghton Programs				
First-Year Honors	Yes	Yes	Yes	Yes
East Meets West Honors	Yes	Yes	Yes	Yes
Houghton in Adirondack Park	Yes	Yes	Yes	Yes
Houghton in Australia	Yes	Yes	Yes	Yes
Houghton in London	Yes	Yes	Yes	Yes
Houghton in Tanzania	Yes	Yes	Yes	Yes
Go Ed (Food for the Hungry)	Yes	Yes	Yes	Yes
Council for Christian Colleges & Universities				
ASP (Washington, DC)	Yes	Yes	No	No
China Studies	Yes	Yes	No	No
Contemporary Music Center	Yes	Yes	No	No
LA Film Studies (Los Angeles)	Yes	Yes	No	No
LASP (Costa Rica)	Yes	Yes	No	No
Middle East Studies Program	Yes	Yes	No	No
Oxford Summer School	Yes	Yes	No	No
Russian Studies	Yes	Yes	No	No
Others*				
AuSable Institute of Environmental Studies (MI)	Yes	Yes	No	No
Brethren Colleges Abroad (PA)	No	Yes	No	No
Center for Cross-Cultural Studies (Seville)	No	Yes	No	No
Central College Abroad (IA)	No	Yes	No	No
Christian College Consortium Visitor	No	Yes	No	No
Daystar University - Kenya	No	No	No	No
EduVenture (Mexico and Fiji)	No	Yes	No	No
International Business Institute	Yes	Yes	No	No
Jerusalem University College	No	Yes	No	No
Laval Language Institute (QB)	No	Yes	No	No
Medical Technology (Robert Packer Hospital)	Yes	Yes	No	No
Music in Europe (Guild Hall School of Music and Goethe Institute)	No	Yes	No	No
Spring Semester in Thailand	No	Yes	No	No
TIMO (Training in Ministry Outreach)	Yes	Yes	No	No
Trinity Christian (Seville, Spain)	No	Yes	No	No
WNY College Consortium	No	Yes	NA	No

*For information about programs not affiliated with Houghton College, please consult with the Off-Campus Programs or Academic Records Office.



P.A.C.E. – Adult Degree Completion Program Program for Accelerating College Education - (BS in Management)

Director: John Durbin

Web site: www.houghton.edu/pace

Phone: 716.674.6363

Houghton College offers an adult degree completion program leading to a Bachelor of Science degree in management in West Seneca, Olean, Arcade, Jamestown, and Dansville with possible other sites in the future. Known by the acronym P.A.C.E. (Program for Accelerating College Education), this program serves those who have interrupted their higher education for work, family, or other commitments and now wish to resume studies leading to a bachelor's degree. For the adult learner, the program combines convenient scheduling, contemporary technology and high-quality conventional classroom instruction.

The adult degree completion program is intended to build on previous college credit and experience equivalent to three years of college. The degree, which can then be completed in about 16 months, has three major requirements:

- Transfer of a minimum of 64 semester hours from approved institutions to Houghton College.
- Completion of all non-core credit requirements as determined after initial transcript review (up to 24 hours of credit).
- Completion of an advanced-level, interdisciplinary core of 36 semester hours, comprised of 12, three-hour courses.

(Note: The combination of transfer credit and non-core credit must provide a minimum of 88 semester hours for completion of degree requirements. Students with fewer total hours may take additional courses at Houghton or elsewhere, or may pursue DANTES credits.)

Gen. Ed. minima: Certain minimum general education requirements for the program must also be met as part of the non-core credit requirements. These general education requirements are:

	Minimum hours
Religion and philosophy	6
Communication (written and spoken)	6
Humanities and social science	
*18 Mathematics/computer science	3
Science	3
Total.....	36

*at least 6 hours in humanities and 3 in social sciences, but no more than 6 hours in any one discipline

The adult degree completion program is conducted year-round. Each core course is taken over five weeks, meeting one evening per week, with four courses combining to make a 20-week term (different from the regular college semester).

For more information, write to P.A.C.E., Houghton College at West Seneca, 810 Union Road, West Seneca, NY 14224, call 716.674.6363 or 888.874.PACE, or visit www.houghton.edu/pace.

Course Descriptions

TERM I

ADC 321 Adult Development (3)

Overview of adulthood in context of life span, including biological change, cognitive characteristics, personality and moral reasoning. Also addresses issues of gender, interpersonal relations, ethnicity, aging and impact of theory on organizational development.

ADC 322 Business Writing (3)

Emphasis on improving ability to communicate effectively through writing, identification of audience and purpose, clear reasoning and rational organization, suitable wording and effective rewriting.

ADC 323 Work Team Dynamics (3)

Focus on dynamic processes affecting task-oriented work groups, including formation, development, maturity and effectiveness. Addresses goals, interactions, problem recognition, interventions and team meetings.

ADC 325 Presentational Speaking (3)

Performance course involving the preparation, delivery and evaluation of presentations commonly required in an organizational setting, including both informative and persuasive presentations. Emphasis on the process of communication, audience analysis, message content and structure, and extemporaneous delivery. The goal is developing confidence and competence as a public speaker.

TERM II

ADC 440 Fundamentals of Management (3)

Effective reasoning and decision making for organizational managers. Assessment and development of individual managerial competencies, involving leadership styles, ethical perspectives, problem solving, stating goals and objectives, and strategic and tactical planning.

ADC 441 Judeo-Christian Values in the Workplace (3)

Biblical basis of Judeo-Christian ethics, social and cultural workplace myths, development of ethical awareness and accountability, and individual contributions to work-world ethics.

ADC 442 Human Resources Management (3)

Perspectives on traditional, current and emerging practices in human resources management, including matters related to economics, law, psychology, sociology, and programs and policies used in employee management.

ADC 451 Quantitative Decision Making (3)

Statistics as a tool in solving real-world problems, including organizing data, using models for predictions, constructing simple graphics; use of logic and reasoning in drawing conclusions and making recommendations. Emphasis on process improvement and decision making.

TERM III

ADC 450 Personal and Professional Ethics (3)

Focuses on ethical theories and specific moral issues in the workplace. Includes small group analyses of selected cases and applicable principles.

ADC 444 Accounting and Finance for Non-financial Managers (3)

Introduction to accounting and finance concepts, including cost control, understanding and analyses of financial statements, budgeting, working capital management and financing alternatives.

ADC 453 Diversity in the Workplace (3)

Sociological approach to examining workplace diversity, stratification, stereotyping and misunderstandings, including matters related to culture, gender, ethnicity and race. Emphasis on contemporary issues and problem solving.

ADC 454 Organizational Development (3)

Development of theory and innovative practice relevant to leadership and organizational change. Major topics include change processes within organizations, intervention strategies in organizations to improve their effectiveness, studies of such interventions, the roles of change agents, and problems of self-awareness, responsibility and the political consequences of organizational development theory and practice.

OPTIONS Courses

ADC 133 Themes and Issues in Visual Arts (3)
This class will explore important themes in the visual arts from a Western perspective. It will study different artists and periods to explore how specific themes and ideas are explored by various artists. The overall intention of this class is to equip students with some basic strategies for understanding art within the context of themes as they relate to the general study of the humanities.

ADC 224 The Birth and Maturation of Western Culture (3)

ADC 225 Western Culture in the Age of Science (3)
This pair of courses comprises a connected narrative of Western culture from ancient Greece to the 20th century. Highlighting key people, places and events, we will examine such issues as church and state, public versus private interest, human identity and worldview construction. We will examine each period by weaving literature and philosophy into the fabric of history. Using these elements, we will examine the worldviews that have characterized the past and equip participants to evaluate critically the worldview options available.

ADC 211 Biblical Literature (3)
Survey of the types of literature found in the Bible. Considers the origin of the Biblical texts and canon, basic issues of interpretation (hermeneutics), and an outline of the history of Israel and of the New Testament church as a backdrop for the message. Literary, historical, and theological aspects of selected texts will be explored.

ADC 213 Masterworks of Sight and Sound (3)
Introduction to art and music from the classic age to the present. Satisfies fine arts requirement.

ADC 155 Computer Applications & Issues (3)
Introduction to personal computer applications, spreadsheet presentation and database software. Students work on real business computing projects. Discussion of current issues in computing.

ADC 218 Marketing Principles (3)
An overview of consumer behavior and strategies related to product development, pricing, promotion and distribution of consumer and business products and services, in both domestic and international markets.

ADC 209 Introduction to Christianity (3)
An introductory survey of the main beliefs and practices that constitute the Christian tradition. Christianity will be approached in a way that overcomes the traditional division between doctrine and practice. The Biblical, theological, historical, ethical and spiritually formative aspects of the Christian faith will be explored. The course aims to help the student to develop a personal theology and life perspective that is informed by Christian faith and Christian spirituality.

P.A.C.E. Financial Information

Costs for the current academic year (cohorts which begin May 1, 2006, to April 30, 2007):

Application fee	\$25
Enrollment deposit.....	\$100
Tuition per term (12 credit hours).....	\$6,468
Tuition for program (36 credit hours)	\$19,404
* OPTIONS courses.....	\$0 or \$300
Experiential learning credits, per credit hour awarded	\$35
DANTES (per test)	\$60
DANTES (per credit hour awarded)	\$35

*A fully-matriculated student in the core P.A.C.E. program may take four OPTIONS courses at no additional charge. They will accrue the “free” courses at a rate of one each during the first two terms and two during the third term. Should they get ahead of this schedule, they will be liable for the cost of the courses, should they not complete eligibility requirements.

Tuition for the P.A.C.E. program is billed in three installments at the beginning of each P.A.C.E. term. Payment is due in full at the beginning of each term unless an alternate payment plan has been arranged in advance. Each P.A.C.E. student completes a payment plan form prior to entering the program.

Students who are eligible for employer reimbursement may be able to defer payment until tuition reimbursement is received.

Tuition covers the use of textbooks, supplemental readings, software and the computer lab. The replacement cost of any unreturned or abused textbooks or materials will be charged to the student’s account.

Students are required to have access to a computer with certain specifications for continuous use throughout the program. Contact the P.A.C.E. office for the required specifications.

Financial Aid for P.A.C.E. Program

Required Applications

Any student wishing to be considered for financial assistance must submit a current fiscal year Free Application for Federal Student Aid (FAFSA) and a New York State TAP application.

Federal Pell Grant

The Pell Grant is an entitlement to students who qualify under a federal formula which determines eligibility. The amount of the Pell Grant is determined by the Pell Grant formula #3 under the federal student aid regulations. The maximum award for the 2006-07 academic year is \$2,025 per term.

Federal Stafford Loan

Interest rate is variable, capped at 8.25 percent, based on the 91-day Treasury Bill rate plus 3.1 percent. If the student is not a previous borrower in repayment who has already used the six-month grace period, interest and principal repayment is delayed until six months after the program is completed.

Federal Unsubsidized Stafford Loan

A loan with the same borrowing limits and interest rate is available to students who do not meet the need qualifications for the Federal Stafford Loan. The student is responsible for making interest payments while in school. Principal repayment begins six months after the student ceases to be enrolled at least half time.

New York State Tuition Assistance Program

New York State’s Tuition Assistance Program (TAP) is a state-funded entitlement program for New York State residents. Grants are based on the New York net taxable income of the preceding year.

P.A.C.E. Refunds

A copy of the worksheet used for refund calculation can be requested from the Student Financial Services Office.

Houghton College Aid

Limited funds are available each academic year from an endowed scholarship fund established for the benefit of West Seneca Campus students. Recommendations for the awarding of these funds may be made by the P.A.C.E. administrative staff to the scholarship committee.

Policy for Return of Title IV Funds

Houghton College’s refund policy is in accordance with the U.S. Department of Education’s regulations. The policy applies to all P.A.C.E. students who do not complete the enrollment period for which he or she has been charged.

The term “Title IV Funds” refers to the Federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: Federal Family Educational Loan Programs (Stafford; subsidized and unsubsidized) and Federal Pell Grants.

A student’s withdrawal date is the date the student began the institution’s withdrawal process or officially notified the institution of intent to withdraw or the student’s last date of attendance.

Refunds will be prorated on a *per diem* basis based on the academic calendar. Students withdrawing before the academic period begins will receive a 100 percent refund of charges. A copy of the worksheet used for the refund calculation can be requested from the Student Financial Services Office.

Title IV aid and any institutional aid is earned in a prorated manner on a *per diem* basis based on the academic calendar. A copy of the worksheet used for the Title IV refund calculation can be requested from the Student Financial Services Office.

In accordance with federal regulations, when financial aid is involved, refunds are allocated in the following order: unsubsidized Stafford Loans, subsidized Stafford Loans, Federal Pell Grants, other federal sources of aid, other state, private and institutional aid, and finally the student. The policy listed above supersedes those previously published and is subject to change at any time.

PCMP – Pastoral and Church Ministries Program (AAS)

Director: Jeff E. Carter, Jr.

Web site: www.houghton.edu/academics/adult/default.htm

Phone: 716.838.0810

Department of Religion and Philosophy: J. Michael Walters, chair

The associate of applied science degree in Christian ministries may be earned through the Pastoral and Church Ministries Program (PCMP). This is a program within the department of religion and philosophy that is offered in an urban context in Buffalo, NY. The following shows how the AAS degree requirements can be met with an educational ministries concentration.

The integrative studies requirements (21 hours) are:

3 hours of Bible..... PBIB 102 or PBIB 103
3 hours of Principles of Writing..... PENG 101
3 hours of math or science
6 hours of humanities, with at least 3 of philosophy
3 hours of social science PSSC 220
6 hours of theology PTHL 230 and PTHL 235

The required religion courses (26 hours) are:

6 hours of Bible: Old Testament..... PBIB 102, PBIB 222 and/or electives
6 hours of Bible: New Testament PBIB 103, PBIB 217 and/or electives
3 hours of missions PMIS 225
6 hours of educational ministries..... PEDM 223, PEDM 227
3 hours of preaching PMIN 222
2 hours of ministerial internship..... PMIN 270

General Information

The educational ministries concentration requirements (15 hours) are: PEDM 233, 235, 252, 254, and 258.

The integrative studies liberal arts courses (Principles of Writing, math or science, and humanities) may be taken through Houghton College, or transferred from another college or university.

A student may also earn the AAS Christian Ministries degree with a concentration in communication, religion, or applied social science by combining course work taken through the Pastoral and Church Ministries Program, Houghton College, and transfer credit from other institutions.

Additional information may be obtained by contacting the office of the director of the Pastoral and Church Ministries Program at 716.838.0810.

Financial Aid for PCMP

Required Applications

Any student wishing to be considered for financial assistance must submit a current fiscal year Free Application for Federal Student Aid (FAFSA).

Federal Pell Grant

The Pell Grant is an entitlement to students who qualify under a federal formula which determines eligibility. The amount of the Pell Grant is determined by the Pell Grant formula #3 under the federal student aid regulations. The maximum award for the 2006-07 academic year is \$2,025 per term.

Federal Stafford Loan

Interest rate is variable, capped at 8.25 percent, based on the 91-day Treasury Bill rate plus 3.1 percent. If the student is not a previous borrower in repayment who has already used the six-month grace period, interest and principal repayment is delayed until six months after the program is completed.

Federal Unsubsidized Stafford Loan

A loan with the same borrowing limits and interest rate is available to students who do not meet the need qualifications for the Federal Stafford Loan. The student is responsible for making interest payments while in school. Principal repayment begins six months after the student ceases to be enrolled at least half-time.

New York State Tuition Assistance Program

Students enrolled in PCMP are not eligible for New York State's Tuition Assistance Program.

PCMP Refunds

A copy of the worksheet used for refund calculation can be requested from the Student Financial Services Office.

Policy for Return of Title IV Funds

Houghton College's refund policy is in accordance with the U.S. Department of Education's regulations. The policy applies to all PCMP students who do not complete the enrollment period for which he or she has been charged.

The term "Title IV Funds" refers to the Federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: Federal Family Educational Loan Programs (Stafford; subsidized and unsubsidized) and Federal Pell Grants.

A student's withdrawal date is the date the student began the institution's withdrawal process or officially notified the institution of intent to withdraw or the student's last date of attendance.

Refunds will be prorated on a *per diem* basis based on the academic calendar. Students withdrawing before the academic period begins will receive a 100 percent refund of charges. A copy of the worksheet used for the refund calculation can be requested from the Student Financial Services Office.

Title IV aid and any institutional aid is earned in a prorated manner on a *per diem* basis based on the academic calendar. A copy of the worksheet used for the Title IV refund calculation can be requested from the Student Financial Services Office.

In accordance with federal regulations, when financial aid is involved, refunds are allocated in the following order: unsubsidized Stafford Loans subsidized Stafford Loans, Federal Pell Grants, other federal sources of aid, other state, private and institutional aid, and finally the student. The policy listed above supersedes that previously published and is subject to change at any time.

Course Descriptions

PBIB 102 Introduction to the Old Testament (3)
General overview of the Old Testament to gain an understanding of the historical, cultural, and spiritual conditions of the people of ancient Israel and its neighbors.

PBIB 103 Introduction to the New Testament (3)
Historical and theological exploration of the New Testament nature of the church as a faith community.

PBIB 217 Gospel Foundations of Evangelism (3)
Exploration of major theological themes in the Gospels. Models and strategies for evangelism and outreach for the modern church are identified from each Gospel.

PBIB 222 Biblical Interpretation in Today's World (3)
Emphasizes skills necessary for reading and interpreting the biblical text through exploration in both the Old and New Testaments.

PEDM 223 The City Church and Specialized Ministries (3)
Provides theoretical and practical experiences in dealing with issues such as AIDS, violence, criminal activity, the welfare system, mental health, and prisons. Special emphasis is given to the role of evangelism in this context.

PEDM 227 Church Planning and Administration (3)
Provides practical tools for planning church growth and outreach, leadership development, and fiscal planning. Special emphasis is given to the "shared ministry" of clergy and lay persons.

PEDM 233 Christian Education in the Church (3)
An introduction to the ministry of Christian education in the church. Emphasis is given to the nature of spiritual development of individuals and the community of faith.

PEDM 235 Foundations of Worship (3)
The role and dynamics of music in shaping Christian disciples. Examines the use of music as a tool to reinforce learning principles in worship and classroom settings.

PEDM 252 Theology of the City (3)
An examination of God's presence and activity in ancient and contemporary urban settings. Consideration is given to understanding urban culture and relationships among diverse populations.

PEDM 254 How to Teach and Study the Bible (3)
An introduction to methods of Bible study. Materials explore biblical teaching methods, with emphases placed on lesson design, planning, and presentation.

PEDM 258 Techniques of Teaching Youth and Adults (3)
Learning styles and psychology of teaching youth and adults are examined. Special attention is placed on discipleship training for effective ministry among this population.

PENG 101 Principles of Writing (3)
Development of writing skills. Focus on narrative, descriptive, and expository essays. Principles taught by frequent writing, peer workshops, discussions, conferences. Extra tutorial contact required of those with difficulties with mechanics.

PMATH 112 Mathematics Survey (3)
A one-semester course designed for students who might or might not take additional college mathematics courses. The objective of this course is to reintroduce concepts in arithmetic and number theory, as well as to reinforce concepts in elementary algebra and basic geometry. Emphasis will be placed on practical use of mathematics. Topics will include arithmetic operations, linear equations, word problem solving and basic geometry.

PMIN 222 Foundations of Preaching (3)
Provides techniques and tools for biblical and prophetic preaching and scriptural research. Emphasis given to organization and structure in sermon, lecture, and speech preparation. Prerequisite: PBIB 102 Introduction to the Old Testament, PBIB 103 Introduction to the New Testament, or PBIB 222 Biblical Interpretation in Today's World.

PMIN 270 Ministry Internship (2)
Supervised experience in church and community ministries under the direction of a skilled professional. A planned, organized and directed process that immerses the student in the practical application of ministry principles and procedures, particularly in urban settings.

PMIS 225 Spiritual and Prayer Foundations (3)
Provides spiritual foundations of urban religious thought, with special emphasis given to the role of prayer in the Black church/community.

PSSC 220 Pastoral Care and Counseling (3)
Exploration of pastoral care in the urban community context. Emphasis is given to the specific counseling needs in the urban community setting. Provides practical skills in counseling and pastoral care, and draws upon the unique expressions of spirituality in the urban community to help the student minister effectively.

PTHL 230 Introduction to Christian Doctrine (3)
An introduction to the main tenets of the Christian faith. Emphasis is given to the biblical basis for developing a personal and group theology.

PTHL 235 History of Christianity (3)
Ancient, medieval, and modern development of Christianity in historical context, including doctrines, prominent lives, and institutions of each era.



Houghton College “equips students to lead and labor as scholar servants in a changing world.” How exactly does this take place? As conceived historically, a liberal education occurs both inside and outside the classroom. At Houghton College, faith and character development are foundational to this process. Our community of faith and learning will include supporting, celebrating and sharpening one another. The Houghton College experience should be one of academic challenge, spiritual vitality and interpersonal connectedness. The typical Houghton student studies hard; but also serves, gets involved in extracurricular activities, participates in intramural sports and forms lifelong friendships through clubs, athletic teams, fine arts performances and residential living. The members of the Department of Student Life encourage this comprehensive student experience through educationally purposeful programming and serve alongside students as we continue to become the persons God created us to be. As students live, learn, grow, play, participate and pursue vocational calling, it is our hope that they become truly liberally educated.

Residence Life

Houghton College is a distinctively residential community. Most students, faculty, and staff live, learn, work, and worship within the tranquil setting of the village of Houghton. The residence life experience is a significant and integral aspect of the educational process. Residence life, together with classroom, chapel, co-curricular activities and general campus interaction, provides an immediate setting for students to examine new or different perspectives, ideas and attitudes. A successful residence hall experience is often closely related to a student's attitude and willingness to learn.

The responsibility of the staff in each residence hall is to help create an environment conducive to the educational, spiritual, social, physical and emotional development of its resident students. Each hall's resident director (RD) oversees and coordinates student activities, conduct, and living conditions. The RD is assisted by a resident director's assistant who is usually a senior student. A resident assistant (RA) lives on each wing or floor and serves as a peer leader and guide for each living unit. An elected residence hall council provides additional programming.

While residence hall staff members strive to provide the best living environment possible for our students, continuing and maximum student growth depends ultimately on the individual's willingness to accept responsibility and participate in the residence hall community. Through the efforts of students and staff, the college's goal of integrating faith, learning, and living can become a reality in individual lives.

All students are required to live in a college residence. All first- and second-year students, as well as some juniors and seniors, live in our four traditional residence halls. Houghton also endeavors to provide more flexible options for upperclass students. Two of the residence halls feature special upperclass floors with additional visitation and cooking privileges. Juniors and seniors are also eligible to apply for one of three options: a townhouse, which has seven students sharing a four-bedroom townhouse with full kitchen facilities; a two-bedroom apartment in a college-owned complex, each apartment houses four students; or a Community Living Option (CLO) which permits a student to privately rent a room or apartment within the village of Houghton. CLOs are granted on a very limited basis, primarily to senior students, based upon projected enrollments. Additionally, some upperclass students reside in the residence hall or townhouses on our West Seneca Campus. Local or married students may elect to commute from home.

Spiritual Life

Knowing God and seeking His will for our lives will pave the way for a life of service. The classroom, Bible study groups, our mentoring program, outreach teams and informal conversations combine to build relationships as we strive to “spur one another on toward love and service” (Hebrews 10:24).

Chapel meets Mondays, Wednesdays and Fridays from 11:00-11:40 a.m. unless otherwise noted. The operating premise for chapel is to provide a biblically-based service of worship in which students are encouraged to become more like Christ in attitude, character, motivation and perspective on life. Those participating in chapel include faculty, staff, students, off-campus speakers, worship teams and college choirs/ensembles. Chapel includes worship through music and song, biblical exposition, personal testimony, missions, church and college heritage. Chapel is required as a commitment made by each student to enhance the building of “community.”

Regular **church attendance** and participation in a local congregation is strongly encouraged.

Christian Life Emphasis Week (CLEW) is a cooperative program of spiritual enrichment offered by Houghton College and the Houghton Wesleyan Church. At the beginning of each semester, CLEW services are held during the evenings as well as during the regularly scheduled chapel services.

Sunday evening **Koinonia** is a service of worship and prayer held at Wesley Chapel. Student worship bands lead this ministry under the direction of the Houghton church’s assistant pastor and the college’s ministry team coordinator.

Class prayer meetings are conducted each week and are coordinated by the class chaplains and SGA chaplain.

Outreach Ministries include the Allegany County Outreach (ACO), Mime Team (Impressions), Evangelicals for Social Action (ESA), World Mission Fellowship (WMF), Habitat for Humanity, Youth for Christ, and Jesters for Jesus. These student-run organizations are designed to provide students with opportunities to apply their faith through service to the church and community.

Student Health Services

The mission of the Student Health Center (SHC) includes the treatment of illnesses and injuries, and the promotion of health and wellness in an environment that reflects the love and compassion of Christ.

Location

The SHC is conveniently located in the lower level of Gillette Residence Hall and can be accessed from the parking lot next to the Campus Center. It is staffed by registered nurses and an on-site physician and is open Monday through Friday, 9 a.m. to 5 p.m.

Services

Services available at the Health Center include unlimited access to our nursing staff while the SHC is open for the assessment and treatment of illness and injury. Allergy injections, administration of immunizations, phlebotomy (blood draws for lab purposes), and daily medication delivery from the local pharmacy are also part of the services offered at the Health Center. In addition, appointments can be made with the college physician if needed following a nursing evaluation. Usually same day appointments can be accommodated. Fees for services provided at the Health Center are billed to students’ health insurance plans. We are working on policies that would consider copays to be pre-paid by the general health fee currently included in overall tuition costs in an attempt to minimize out of pocket cost for services provided on-site at the Health Center. Charges for pharmacy (medications), laboratory testing, radiology and other ancillary, off-site services are billed independently by those institutions, and fees, therefore, may apply, according to the terms outlined in an individual’s insurance plan. Referrals are made to local physicians, area specialists, or ER/hospitals as needed. Women’s health services are available locally for students who desire to see a female provider.

After Hours

When the SHC is closed, students with emergent health needs should contact 911. If the issue is not life threatening, then questions should be directed to Residence Life Staff (RA, RD) who have a list of contacts that can be used if needed to assist in decision making.

Insurance Policy

Houghton College requires that all students taking at least 6 hours of credit provide proof of health insurance coverage. The college makes a reasonably priced, limited benefit Accident and Illness Policy available to students who do not have insurance coverage otherwise. The college program operates under an “opt out” policy, meaning that students will be enrolled in the college negotiated policy automatically (and the charge for such will be applied to their student account) *unless* they submit a waiver providing information regarding alternate insurance coverage with at least equivalent benefits. Because a person’s insurance coverage may

change periodically, a waiver must be submitted *each year* before matriculation can occur. The college accident insurance is mandatory for all intercollegiate athletes and is an option for all other students. The health center staff is available to answer questions and to assist in the filing of claims if needed.

Medical Leave

If a student has a medical condition (physical or psychological) that interferes with that student’s ability to perform academically, or if that student’s behavior/condition is such that other students are being hindered in their academic/living environment, a medical leave from the college may be granted. Such leave is granted by the dean of students. This is not a disciplinary action, and students given medical leave are encouraged to return to the college to continue their studies as soon as they are able to do so. An evaluation may be required to ascertain whether the behaviors/conditions that warranted the granting of the leave have been sufficiently addressed.

Immunization Requirements

In keeping with New York State’s stringent Public Health Law, all students are required to provide documented proof of immunization (2 doses of vaccine) or immunity (by blood work) to measles, mumps and rubella. In addition, state law requires that a waiver form be completed in regard to the meningococcal vaccine, indicating a specific choice to either receive or decline the immunization. The Health Center strongly recommends that students living in the dormitories receive this vaccine. TB testing and up-to-date tetanus/diphtheria immunization is also required. Hepatitis B immunization is recommended. In addition to the immunization records, an admission physical/health form is required to be submitted prior to the beginning of classes. Failure to meet these requirements may result in being restricted from attending classes.

The staff at the Student Health Center desires to help students in any way possible in order to support them during their time here at Houghton. We hope that students who have health concerns will feel free to stop by and speak with us. It is a privilege to serve students in this place and we always appreciate suggestions as to how we can do it better.

Career Services

Career Services has a twofold purpose: 1. to promote the value of a liberal arts education as it relates to employment, and 2. to contribute to the teaching mission of the college by “preparing students to enter their chosen vocations directly or through further professional or graduate studies.” In fulfilling these purposes Career Services seeks to provide the following:

Career Counseling

The knowledge of one’s personal values, goals, skills, interests and personality is fundamental to any wise career choice. Whether selecting courses for a semester, choosing a major, or deciding on a career path, self-awareness is critical. Through a variety of testing instruments and interviews, students are encouraged to expand their vision of career by considering their relationship with God, family, Christian-community and society at large. Practice in making decisions is emphasized.

Career Guidance

An understanding of the world of work is essential for finding a place where an individual’s knowledge and gifts can be used. Career Services provides resource materials of career information, internships and summer opportunities, plus information regarding graduate and professional schools. In addition, the Career Services homepage provides links to career planning sites on the Internet.

Job Search Resources

Career Services subscribes to a variety of directories and employment newsletters to assist students in locating employment. Referral networks, placement newsletters and cooperative efforts with the Alumni Office regarding resume referrals are some of the ways students registered with the Career Services are informed of employment possibilities. The Career Services homepage is another tool students use to locate employment opportunities. Houghton College has partnered with *Monstertrak.com* to provide our students and prospective employers with an electronic meeting place.

Job Search Preparation

Learning how to write resumes, application letters and graduate school essays, along with preparing for interviews are two aspects of the job-seeking process that require expertise and practice. Career Services provides workshops and skills training in these areas, as well as the “Senior DisOrientation” program to assist seniors with the transition to life beyond college.

Consultation and Networks

The Career Services director serves as a resource person to faculty for classroom presentations and academic advising. Additionally, the director is an active member of the Niagara Frontier College Placement Association, a professional group of career counselors in western New York, which sponsors career fairs for their students and alumni.

Counseling Services

The Counseling Center provides personal counseling to all students desiring these services. Counseling is a growth process that can be beneficial to most students at some time during their college experience. Students have come to counseling for many different concerns and issues. Some typical comments that students have made in presenting issues for discussion with a counselor are:

- "...I don't seem able to make friends easily."
- "...I'm depressed an awful lot. Just can't seem to get anything done."
- "...My parents are divorced and always fighting. I don't know how to handle that."
- "...We think we love each other. How can we know it will be a good marriage?"
- "...I'm trying to be more independent, but that's causing problems."
- "...Since we've broken up I can't seem to get back into anything. I can't get on the top of this."
- "...I'm bothered by my attitude toward food and my eating habits...do I have an eating disorder?"
- "...I'm having some doubts about my Christian faith."
- "...I don't have a close relationship with my parents like so many of my friends do."

Perhaps you have said similar things but haven't thought of stopping by to discuss them with a counselor. One or two conversations may enable you to face these issues more effectively.

At times events from the past or other difficulties can present us with emotional conflicts that require more extensive counseling. Such situations are often characterized by a student who is "getting by" but is suffering considerable emotional pain or confusion. The staff of the Counseling Center is also interested in helping you with these concerns. In addition to your counseling needs, the center also has a consulting psychiatrist on staff. On campus one day each month, this individual provides psychiatric evaluation, medication, follow-up and consultation services.

Finally, the Counseling Center provides group experiences for issues such as eating disorders, recovery from abuse, divorce in the family and grief through death or loss. These groups will be offered on the basis of need or popular request.

The center has professionally-trained counselors to help you with any of the above concerns. They can be reached by calling the Counseling Center at extension 6220 or 567.9622. Appointments can be made to meet with a counselor by visiting the Center located on the first floor of the Campus Center. All counseling information is confidential and will not be used without your consent.

Student Programs

Office of Student Programs

Exploring, competing, serving, playing, climbing and worshiping, students in Houghton's unique setting augment their central educational experience through participation in a vibrant community life. The Student Programs Office seeks to enrich the student experience through a varied program of activities. Some of our activities encourage service, some contribute to the educational mission of Houghton College and others are for pure fun. Students have the opportunity to cultivate their leadership skills, to participate in cultural, athletic, co-curricular and spiritual programs and to join/lead one of 36 campus clubs and organizations (see below). In addition to a wide variety of campus activities, Houghton's 1300 acres of woodland offers rich opportunities for exploring on horseback, cross-country skis and hiking trails. Our ropes and initiatives course is used for physical education, leadership development and draws visitors from around Western New York.

First Year Student Programs

New Student Orientation

Prior to each new semester, New Student Orientation provides new first-year and transfer students with the information and resources necessary for ensuring their successful transition to life at Houghton College. Orientation programs are varied in order to address the diverse range of issues facing new students, including the need to make connections with other students and the need to learn about the resources available for assisting with academic questions and support.

FYI (First Year Introduction)

Designed specifically for first year students, FYI is an extended one-credit orientation course in which new students participate in weekly discussions within a small group which is led by an upper-class FYI leader. FYI groups meet throughout the first two months of the fall semester. In addition to weekly discussions, FYI group members view films and participate in workshops aimed at supporting their academic and co-curricular adjustment to the College. Weekly topics include relationship development, the interactive impact of faith and learning, the role of service in the life of a person of faith, and academic skill development. Each new student is also assigned an FYI mentor, a faculty or staff person who serves as a welcoming and knowledgeable support for students during their transition to college.

First Year Service Day

Local ministries and public agencies in Allegany and Wyoming Counties are host to small groups of Houghton College's new students during this day of service and outreach. New students report that this is one of the highlights of their first semester on campus, as it gives them a great opportunity to join together in a meaningful and productive display of Christ's love in action.

First Year Treks

A series of fall semester weekend outings, these events seek to familiarize new students with western NY's natural beauty while providing common experiences and memories for new students. Visits to Letchworth State Park and Niagara Falls are among the destinations of choice for these adventures, which may vary from year to year.

Student Activities and Opportunities for Involvement

Clubs and Organizations:

Student Government Association (SGA) - The SGA, under the leadership of its officers and through its various working committees, provides an opportunity for students to become directly involved in campus decision making. In addition, its members attempt to resolve campus problems and serve as a communication channel between student organizations and faculty, staff, and administration. The Student Government Association creates an atmosphere for the discussion of campus issues and programs that contribute to the growth of each member of the student body.

Campus Activities Board (a division of SGA) works with the Director of Student Programs to provide a wide array of quality on-campus entertainment reflecting the Christian character and geographic setting of our community.

Baseball Club - The purpose is to help develop interpersonal and personal growth by allowing male students to be involved in a ministry field by playing competitive baseball while providing Christian testimonies to other college baseball teams.

Cheerleaders - The Houghton College Cheerleaders desire to establish the squad not only as a club sport, but also as a ministry of encouragement for the intercollegiate men's and women's athletic teams and the community.

Student Class Activity - Classes begin each year with a class retreat and form class choirs for CLEW. Tuesday evenings are reserved for class prayer meetings. Elected class officers, assisted by the faculty advisor, organize and lead activities throughout the year.

Climbing Club - This club provides a safe, Christ-oriented atmosphere where climbing, leadership, encouragement and hard skills are developed and promoted both in the gym and off-campus trips.

College Republicans - The main purpose of the club is to educate and inform the voters of Houghton College and the surrounding community and to enable politics in a Christ-honoring way.

Equestrian Society - The purpose of this society is to create a Christian environment in which equestrian students work together to increase public awareness of their program and its services, and to enhance opportunities for students and community members.

French Club - Seeks to provide opportunities and events that will expose participants to the French language and Francophone culture.

Gadfly Society - Aims to provide a forum for voluntary co-curricular endeavors of interest to philosophy majors, minors and other philosophically-minded persons, and to promote awareness of the relevance of philosophical perspectives to issues.

Intercultural Student Association - ICS promotes cultural awareness on campus and aids in the cultural adjustment of international students, third-culture kids and American-born minorities.

Music Education Club - Seeks to provide music majors with expertise helpful in their development as future educators.

OneThing - In submission to the Holy Spirit and the Word of God, Hungry seeks to encourage people to passionately pursue God both corporately and individually.

Paddle Sports - Seeks to provide recreational opportunities for students that will enhance their college experience.

Psychology Club - Seeks to encourage students to integrate psychology and the Christian faith, provide learning experiences that will be educationally illuminating, and help prepare students for a future in psychology.

Salvation Army Fellowship - The Salvation Army Fellowship seeks to encourage spiritual growth and commitment to Christian service.

Shakespeare Players - The players aim to present Shakespeare plays in a way that is entertaining and applicable to modern audiences while remaining loyal to the original presentations.

Society for Human Resource Management-Houghton College Chapter - The purposes of the chapter are: a) to provide students with the opportunity to gain knowledge and insight into the effective management of personnel in the field of Human Resource Management through affiliation with the Niagara Frontier Chapter of SHRM and the National SHRM organization; b) to acquaint students, considering a future in business, with the field of human resource management and/or labor relations; c) to keep students up-to-date on new developments in the field of human resource management; d) to provide learning opportunities through interaction with human resource practitioners; e) to promote the development of truly professional human resource managers for the future; f) to encourage adherence to the Code of Ethics of the Society for Human Resource Management.

Spanish Club (El Club Espanol) - This club's purpose is to provide a group in which interested people can practice their Spanish, engage in activities emphasizing the Spanish language and learn about the cultures and traditions of Spanish-speaking countries.

Swim Club - This club exists to gather swimmers together for Christian fellowship and to develop discipline, a team mentality and communication skills.

Theological Society - This is a forum to develop discussion of topics related to Christian belief and practice, and its purpose is to encourage students to think more deeply about the significance of the Christian conception of reality for their vocation or ministry.

Service Opportunities

Allegany County Outreach - ACO is a ministry to children through students of Houghton College. The purpose is to befriend children of Allegany County and be positive role models to them, pointing them to Christ.

Evangelicals for Social Action - This group seeks to raise awareness about social justice issues around the world and to provide opportunities for people to make a difference.

Global Christian Fellowship - GCF's purpose is to bring the community and campus to a greater understanding of, and commitment to, their place in God's mission for this world.

Habitat for Humanity - Members work with those needing adequate housing by participating with affiliate chapters in or near Houghton and through work camps to build homes in North America or overseas.

Helping Houghton Seniors (H2S) - The purpose of H2S is to bridge the gap between Houghton students and the Houghton elderly by building relationships and serving.

Impressions (Mime Team) - The purpose of the mime team is to serve as ministers of the gospel through the expression of mime, and reach out to the community to encourage the community; to encourage and edify the church and share the gospel with the unsaved.

Jesters for Jesus (Clowns) - We seek to minister God's word to local churches using the gift of humor and laughter, and to teach the life-changing message of Jesus Christ simply, so all can understand and believe.

Youth for Christ - YFC's purpose is to communicate the life-changing message of Christ to every young person in Allegany County.

Music Opportunities

Artist Series - The Houghton College Artist Series features nationally and internationally known artists, groups and productions which vary from year to year.

College Choir - The College Choir is composed of students chosen for musical and vocal competence by audition. Concerts are given each year, including an extended tour during spring break. The choir rehearses daily.

Chamber Singers - The Chamber Singers perform secular and sacred compositions of all periods. Membership is by audition and permission of the director.

Chamber Ensembles - A variety of instrumental chamber groups form each year. An audition is required.

Men's Choir - Men's Choir presents programs of both sacred and secular music from all periods of musical history. The choir sings regularly in chapel and in concert. Membership is by permission of the director.

Women's Choir - Women's Choir presents programs of both sacred and secular music from all periods of musical history. The choir sings regularly in chapel and in concert. Membership is by permission of the director.

Opera Workshop - The Opera Workshop presents repertoire from opera, operetta, and musical comedy, both in scene recitals and in complete productions. Opera Workshop performs both on- and off-campus in the spring semester. Admission is by audition and permission of the director.

Handbell Choir - The Handbell Choir performs sacred and secular literature from various periods, using standard and innovative ringing techniques. Open to both elementary and advanced ringers, by permission of the director.

Houghton Jazz Workshop - The Houghton College Jazz Workshop is designed to give experience in this American art form. Performances are given each semester at Campus Center functions and in association with other ensembles. Membership is by permission of the conductor.

Philharmonia - The Philharmonia is made up of qualified instrumentalists. Representative selections of classical, romantic, and modern literature are performed. Membership is by audition and permission of the conductor.

Symphonic Winds - Symphonic Winds provides students the opportunity to perform significant symphonic band literature. Concerts are performed on and off campus. Membership is open to advanced wind and percussion players and is by audition and permission of the conductor.

Student Publications:

Boulder - *The Boulder* is the college yearbook, designed and produced by students who are interested in documenting and portraying life at Houghton College.

Star - *The Houghton Star*, the student newspaper, provides an opportunity for the expression of students' ideas via editorials, creative essays, campus and national news coverage, photography, and poetry.

Lanthorn - *The Lanthorn* is a student literary magazine, published annually, with a variety of examples of student creativity in writing and photography.

Summer Outreach Groups

Dayspring - This counseling team, trained in drama ministry, is made up of six members and serves in various youth camps for eight weeks each summer. They are selected through an application and interview process.

Sports Ministry Team - This team is made up of six members and serves in various youth camps for eight weeks each summer. They are a counseling team that serves by incorporating the dynamics of sports and recreation into their ministry. They are selected through an application and interview process.

Student Life Policies

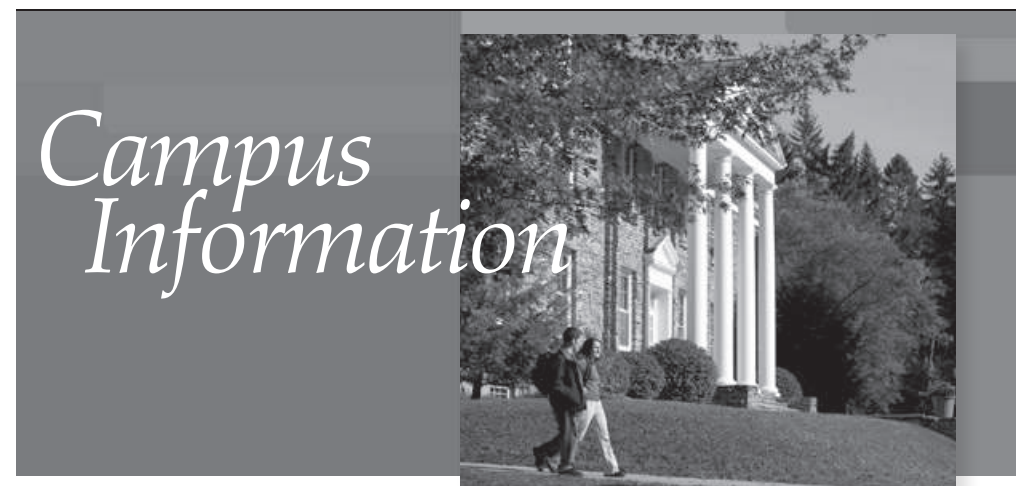
Immunization Policy - New York State's stringent Public Health Law requires all students to provide documented proof of immunization or immunity to measles, mumps, and rubella. In addition, state law requires that a waiver form be completed in regard to the meningococcal vaccine, indicating a specific choice to either get the immunization or to decline. The Health Center strongly recommends that students living in the dorm receive the vaccine. TB testing and up-to-date tetanus/diphtheria immunization is also required. Hepatitis B immunization is also recommended.

Eligibility for Co-curricular Activities - Eligibility to participate in major co-curricular activities, such as organizational offices, intercollegiate sports, or performing groups is determined by the student's previous scholastic record and the amount of time required for the activity. In most cases, a GPA of at least 2.0 is required. (See the Student Guide for detailed information.) Eligibility lists for participation in athletics are reviewed at the end of each semester.

NAIA - Houghton College is a member of the National Association of Intercollegiate Athletics (NAIA), and it adheres to the NAIA rules for student athletes and for all who work with the teams, such as managers and trainers. The constant, non-negotiable floor is a 2.0 GPA and continuing enrollment in at least 12 credits, with other stipulations concerning previous semesters. Consult the NAIA faculty representative for further information.

Student Automobiles - Any student who operates a motor vehicle on campus (even if he or she is not the owner) must register the vehicle at the Office of Safety and Security. The vehicle's state registration and a student ID card are required. A statement of parking policies is given to anyone who registers a vehicle.

For a complete listing of Student Life Policies see the Student Guide at: campus.houghton.edu/orgs/student_life/student_guide.htm.



Buildings and Facilities

John and Charles Wesley Chapel - This 1,200-seat auditorium serves as the worship center and public meeting place for the campus. This facility also houses classrooms, practice rooms, Presser Recital Hall and the Marjorie Paine Memorial Prayer Room. Special features include the 47-stop Holtkamp organ designed and built for this auditorium with its 3,153 pipes in 61 ranks and the Ortlip mural, "Redemption," in the foyer.

Luckey Memorial Building - Built with native stone and completed in 1942, this building stands at the head of the campus quadrangle and faces the historic Genesee River. It houses college offices for the president, academic records, finance, human resources, student financial services, payroll and administrative services.

Fancher Hall - A community landmark built in 1905, this facility was restored and renovated in 1978-79 and was moved to the site of the former Gaoyadeo dormitory in 1987. It houses the offices of admission, alumni, advancement, public relations and church relations.

Willard J. Houghton Library - Originally constructed in 1964 and renovated in 2000, the library contains resources of approximately 225,000 volumes, 400 journal subscriptions and 12 newspaper subscriptions of both local and global interest. The main library building houses special collections of children's literature and Wesleyana; two separate branches of the library also exist in the Center for the Arts (music scores and sound recordings) and at the West Seneca Campus (Ada M. Kidder Library). The library's online catalog, as well as Web-based periodical literature databases like ProQuest, Omnifile, FirstSearch, EBSCOhost, and BioOne are accessible at any computer connected to the college network. Subscriptions to these online journal services offer several thousand journals in electronic full text; many subscriptions are maintained through membership in various regional library consortia. Interlibrary loan services are provided through OCLC (an international cooperative system) at minimal charge to students and faculty.

Campus Center - At the heart of campus life is this 75,000-square-foot building built in 1972. The main floor contains the Campus Store; Community Bank, NA branch; offices for student life, career and counseling services, safety and security, college information and a large lounge. Second floor: kitchen, self-service areas, main dining room and private dining rooms. Basement: campus mailroom; student government offices; Big Al's snackshop with collegenetworkconnections at each booth; student publications and outreach offices; recreation room for ping-pong and pool tables; television production studio and a coffee shop, Java 101.

Chamberlain Academic Center - Constructed in 1989, this 49,000-square-foot, four-story building houses seven academic departments. It includes classrooms, learning resource facilities, student work/study rooms, laboratories and faculty offices as well as a suite of offices for the academic vice president. A beautiful atrium divides the classroom and office wings.

Paine Center for Science - This 65,000-square-foot building built in 1969 houses a computer room, faculty offices, classrooms, animal laboratory rooms and instruction and research laboratories. The Margaret Bush Greenhouse, completed in 1999, adjoins the building.

Center for the Arts - A 44,000-square-foot facility constructed in 1999 that houses faculty offices, classrooms, studios, practice rooms, recital hall, art gallery, board room, music library, rehearsal hall, recording studio and laboratory facilities for keyboard and computers. The Center is connected via an indoor walkway to the John and Charles Wesley Chapel.

Stevens Art Studios - Constructed in 1986, the building includes faculty offices; printmaking studio with lithography and photo silk screening and studios for painting, photography, sculpture, ceramics, drawing, and graphic design.

Computing Facilities - The college has eight computer work stations in the Campus Center; various department-specific PC labs; multi-purpose wired classrooms and extensive wireless connections dedicated to academic and student use. The Art facility has a Macintosh lab for department-specific applications. The college continuously updates its computing services and offers network access for each bed in college-owned dormitories and townhouses.

The fall of 2006 represents the eleventh year in which each first-year student receives a laptop computer and the seventh year in which they receive a printer. Students use this equipment for their four years at Houghton and own them upon graduation.

Athletic Facilities:

Nielsen Physical Education Center - Occupied in December 1980, this facility houses three basketball courts, a running track, auxiliary gymnasium, four racquetball courts, faculty offices, classrooms and seminar rooms; the George R. Wells Natatorium offers a full-sized (25-meter) swimming pool with three diving boards (one a three-meter board). There is parking for 250 vehicles.

Outdoor Recreation - Three soccer fields, a field hockey field, a 1,300-seat grandstand, six tennis courts, two ski slopes, lodge, cross-country routes and ski equipment for rent.

Equestrian Center - This is the site of the Equestrian Program and it includes accommodations for boarding student-owned horses. Five-week summer horse camp are conducted each year in July and August. It provides opportunities for student employment, private lessons and participation in intramural riding shows. In 1991, a 40' x 70' extension was added to the indoor riding ring which includes a classroom, restroom, kitchenette, six stalls and an area for hay storage. A second 36' x 24' indoor riding arena was completed in 1994 with stalls for 15 horses.

Student Housing:

Lambein Residence Hall - A modern, six-story facility with lounge and study rooms for 154 female students.

Rothenbuhler Residence Hall - A four-story men's residence hall with lounges on each floor, a seminar room and individual study rooms for 140 students.

Gillette Residence Hall - A three-section, four-story residence hall with lounge, recreation facilities and a prayer chapel accommodating 335 women.

Shenawana Residence Hall - A two-story men's residence hall with several lounges and a recreation room houses 120 students.

Townhouses - The college owns and operates 29 townhouse units, providing housing for approximately 200 juniors and seniors. The Randall and Leonard Houghton Townhouses (six and seven units, respectively) were constructed in 1994. The seven-unit Hazlett townhouse was completed in 1999. The nine-unit Perkins Townhouses were completed in 2001. All units include kitchen, living room, two baths and three to four bedrooms. Free laundry facilities are available in the common areas.

College Flats - The college constructed an apartment complex totaling 36 units in 2002. Thirty-three units are two bedroom (up to four persons) and three are one bedroom (two person) units. Each unit includes bedroom(s), a full bath, kitchen and living area. The overall complex includes free laundry facilities and a common lounge.

Other Facilities:

Health Center - Located in the southwest wing of Gillette Hall it contains a modern treatment laboratory room, exam rooms, reception area and conference room.

Robert T. Fiegl Maintenance Center - A 12,860 square-foot space containing shops for maintenance and repair crews and a warehouse for materials and supplies.

Spring Lake Preserve - The Spring Lake Wildlife Preserve, approximately eight miles from campus, is leased and operated by Houghton College in partnership with The Nature Conservancy. The 91-acre reserve contains old-growth forest stands, wetlands and second-growth beech-maple forest, and it fronts on an undeveloped glacial kettle lake. The preserve serves as a field site for environmental research and study.

Adirondack Park Campus at Star Lake - Houghton's Adirondack Park Campus, purchased in 2001, is a 40-acre wooded site located on Star Lake in New York State's famed Adirondack Park. The campus includes a main lodge with dining and sleeping facilities, classroom and meeting room facilities and a number of cabins, plus waterfront and beach. Activities in the area include wilderness hiking, rock-climbing, canoeing and cross-country skiing. The college has developed an on-site academic program in Environment and Culture for both Houghton and non-Houghton students. The facilities are also available to outside groups on a limited basis.

HOUGHTON IN WEST SENECA

810 Union Road, West Seneca, NY 14224
716.674.6363 or 888.874.PACE (7223)

General Information

Since 1969, when Buffalo Bible Institute merged with Houghton College, Houghton College at West Seneca has offered a unique range of opportunities to students. Because of its proximity to urban Buffalo, HCWS is particularly suited to the needs of upper-division students who are interested in field experience. Within the greater Buffalo area, opportunities abound for internships, student teaching and other professional experiences which are unavailable at the rural main campus. In addition, students have unique opportunities for ministry which a city affords.

Houghton College at West Seneca also offers a program developed to provide opportunities for adult learners to complete degree requirements as commuter students. Known as P.A.C.E., or the Program for Accelerating College Education, this program enrolls a new cohort of 15-20 students eight times a year.

The West Seneca campus is the host of adult programs and facilities designed to reach community and professional audiences throughout western New York. The Educational Conference Center at West Seneca provides professional training, meeting rooms, overnight accommodations and a serene landscape to create the perfect environment for retreats and conferences.

Academic Standing

Houghton College is fully accredited by the Board of Regents of the State of New York and by the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104 (267.284.5000). All courses taught by Houghton College faculty are approved and registered by the New York State Education Department.

Location

Houghton College at West Seneca is located at 810 Union Road, West Seneca, NY 14224. Besides the college buildings, the campus includes 40 acres of open woodland and is readily accessible to a metro bus transfer center and numerous shops and restaurants.

BUILDINGS

Lambein Learning Center - Named for West Seneca businessman and benefactor Carl Lambein, the center contains offices, classrooms, a classroom/auditorium in the round which also serves as a telecommunications center, computer lab, and a library with linkage to the OCLC computer network and the DIALOG Information Retrieval System.

Cazenovia Hall - Cazenovia provides housing and a student lounge for 35 students, while the lower level houses the offices of Christian Counseling Services of Greater Buffalo and the Frontier Baptist Association.

Ebenezer Hall - This structure contains administrative offices and the student mailroom.

Lyon Memorial Hall - This facility serves as a meeting and activity hall for various campus groups. It was named after the late Dr. Herbert Lyon, a founder of the Buffalo Bible Institute.

Town Houses - The five units provide housing for up to 40 students. Each four-bedroom unit has a furnished living room and a kitchen equipped with washer, dryer, stove, microwave oven and refrigerator.

Faculty/Staff Housing - One house and eight apartments are available on campus for faculty or staff use.

REGULATIONS

Regulations regarding student life and activities are published in the Houghton College Student Guide. Information specific to Houghton College at West Seneca is given to students upon arrival. Please refer to the academic information section of this catalog for information concerning academic requirements.

ADULT DEGREE PROGRAM (P.A.C.E.)

Houghton College at West Seneca offers the Program for Accelerating College Education, an adult degree completion program leading to a bachelor of science degree in management. This program is designed to serve those whose educational pursuits were interrupted by job, family, military or other commitments and who now wish to resume baccalaureate studies. The program addresses the special needs of the working adult learner. More extensive program details are to be found in the Adult Learning Opportunities section of this catalog.

ADMISSION

The main campus and the West Seneca campus use the same admission criteria (modified to accommodate adult-degree students). Requests for admission forms may be addressed to Houghton College at West Seneca, 810 Union Road, West Seneca, NY 14224, or call 716.674.6363 or 888.874.PACE, or visit www.houghton.edu/pace.

EXPENSES

For information regarding tuition and other expenses at the West Seneca Campus, see the earlier section on current year financial information.

For more information, write to Houghton College at West Seneca, 810 Union Road, West Seneca, NY 14224, or call 716.674.6363 or 888.874.PACE, or visit www.houghton.edu/pace.



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 Ronald J. Oakerson, PhD..... Academic Vice President and Dean of the College

Administrative Staff

Mark S. Alessi Administrative Systems Manager
 James ArthurDirector of Alumni Relations
 Margery L. AveryDirector of Academic Records
 Jeffrey S. Babbitt Associate Director of Admission
 Barbara L. Bates Director of Major Gifts Activity
 Wendy R. Baxter Counselor
 Terry Borrowman Campus Manager, Adirondack Park Campus
 David BrubakerDirector of Student Health Services; College Physician
 Katherine A. Buvoltz Twin Tiers Coordinator P.A.C.E.
 Jillian Carey Admission Counselor
 Martin Coates Upward Bound Curriculum Coordinator
 Rebecca Crouch Assistant Director of Conferences & Planning Assistant
 John P. DurbinP.A.C.E. Director
 Chris Fraschetti Programmer
 Eileen Frawley Academic Counselor, Upward Bound
 Phyllis E. Gaerte Director, Campus Store
 Diane M. Galloway Associate Director of Admission
 Ken Griffin..... Director of Development
 Robin L. HaDirector of Houghton Fund
 Noel B. HabashySenior Admission Counselor
 Donald HaingrayDirector of Technology Services
 Carolyn HalePurchasing and Project Administrator
 Kimberly A. HallStudent Accounts Counselor
 Carol Harris..... Student Financial Services Advisor, P.A.C.E.
 Sharon Hibbard Upward Bound Program Director
 James Hutter Associate Director of Academic Records
 Emily Last..... Admission Counselor
 Cindy B. LastoriaAssistant to the President
 Sarah Lingenfelter Media Relations Coordinator
 Jay R. Livingston Associate Director of Technology Services
 Marianne Loper Senior Financial Aid Counselor
 Harold W. Lord..... Assoc. Vice Pres. For Conf. & Dir. of Athletics
 Troy R. Martin..... Director Student Financial Services
 David M. Mercer Controller
 Paul Mills..... Senior Director of Development
 Daniel C. Moore Instructional Support Coordinator
 Nancy L. Murphy..... Director of New Student Programs; Counselor
 Christopher/Jaynie Nafziger Co-directors, Wilderness Adventure
 Julie PalmerHoughton Fund Officer
 Michael Parks.....Assistant Women's basketball coach; Director of Highlander Sports Associates
 Ray M. Parlett Director, Campus Safety & Security
 Mark A. Pavone P.A.C.E. Academic Advisor
 Stephen M. PeckDirector of Facilities
 Beth A. Pocock Assistant Director of Student Financial Services
 Trini G. Rangel Assistant Coach-Track and Field, Instructor
 Patricia A. Regan Major Gifts Officer

Matthew Reitnour Assistant Director of Admission
 Douglas Roorbach..... Web Manager and Milieu Editor
 Robert B. SmalleyCross Country/Track Coach
 Jason Smith..... Campus Visit Coordinator
 Janyce Smithley Director of Intercultural Affairs
 Dennis Stack..... Associate Director of Housing & Calendar Coordinator
 David Stith Graphic Designer
 Scott Stockton P.A.C.E. Program Coordinator
 G. Ange Szymanski..... Assistant Director of Facilities
 Seth Taylor..... Network Administrator
 Matthew Webb..... Head Men's Soccer Coach, Athletic Administrator
 John W. Woodard P.C. Support Administrator
 Dale F. Wright Executive Director of Human Resources and Budget

Faculty

The date following the name indicates year of appointment to the Houghton faculty.

A. Cameron Airhart (1987)

Professor of History; Director of London Programs

BA, Northwest Nazarene College, 1976; MA, PhD, University of California (Santa Barbara), 1979, 1985

Eric C. Alcott (1999)

Vice President for Advancement

BS, Valparaiso University, 1978; EdM, University at Buffalo, 1996

Jonathan E. Arensen (1995-96 part-time; 1998)

Professor of Anthropology

BA, Westmont College, 1968; MA, Central Washington State University, 1976; MS, PhD, Oxford University, 1986, 1991

Glen Avery (1987-93; 1998)

Director of Instructional Technology

BA, Houghton College, 1976; MBA, Plymouth State College, 1980; MLS, EDM, University at Buffalo, 1993, 2001

Denise Bakerink (2000)

Dean of Student Life; Director of Residence Life

BS, Houghton College, 1983; MS, State University College at Buffalo, 1986

Kenneth J. Bates (Spr, 1989)

Associate Professor of Business; Chair, Department of Business & Economics;

Senior Professional in Human Resources

BS, Houghton College, 1971; MBA, Loyola College, 1980

Gary D. Baxter (1979-1982, part-time; 1982)

(Sabbatical, 06-07)

Professor of Art

BA, SUNY College at Geneseo, 1983; MFA, Rochester Institute of Technology, 1985

Alan M. Belford (2003)

Instructor of Biology and Earth Science

BS, Houghton College, 1996; MPS, SUNY College of Environmental Science and Forestry, 1999

Blaine David Benedict (1989)

Professor of Political Science

BA, Houghton College, 1973; MA, PhD, University of Pennsylvania, 1974, 1977

Gregory T. Bish (2004)

Director of Student Programs

BA, Houghton, 1995; MS, Alfred University, 1997

Robert A. Black (1991)
Professor of Economics
 BA, West Virginia Wesleyan College, 1972; MA, PhD, West Virginia Univ, 1979, 1984

Jonathan E. Bradshaw (1999)
Assistant Professor of Accounting
 BS, Houghton College, 1997; MBA, Rochester Institute of Technology, 1999

Bruce N. Brennenman (1982-98 part-time, 1998)
Assistant Professor of English
 BS, Taylor University, 1961; MA, Wesleyan University, 1968

Charles E. Bressler (1980)
Professor of English
 BA, Wilkes College, 1972; MS, University of Scranton, 1974; PhD, Univ. of Georgia, 1985

Darlene G. Bressler (1985)
Associate Academic Dean; Professor of Education
 BS, Geneva College, 1973; MS, Wilkes College 1974; PhD, University of Rochester, 1994

John N. Brittain (2003)
Dean of the Chapel; Professor of Religion
 AB, Brown University, 1969; MDiv, The Methodist Theological School, 1972; DMin, St. Mary's Seminary and University, 1985

Betty J. Bunt (1982)
Serials Librarian
 BA, Houghton College, 1966; MLS, SUNY College at Geneseo, 1981

Kristin A. Camenga (2006)
Assistant Professor of Mathematics
 BA, St. Olaf College, 1997; MS, PhD, Cornell University, exp'd, fall 2006

Jeff E. Carter (1995-04 Adjunct; 2004 part-time)
Director, Pastoral and Church Ministries Program; Assistant Professor of Christian Ministries
 BS, Grambling State University, 1969; MS, Canisius College, 1978

Jonathan P. Case (2005)
Associate Professor of Theology
 BA, Southern Nazarene University, 1983; MA, *ibid.*, 1986; MDiv, Nazarene Theological Seminary, 1989; PhD, Luther Seminary, 1995

Marlene G. Collins-Blair (2005)
Assistant Professor of Spanish; Chair, Department of Foreign Languages and Literatures
 BA, University of the West Indies, 1997; MPhil, PhD, *ibid.*, 1999, 2005

Judy A. Congdon (1991)
Professor of Organ
 BMus, Wheaton College, 1975; MMus, University of Colorado, 1977; Diploma, Hochschule fuer Musik, Frankfurt/Main, Germany, 1979; MA, DMA, Eastman School of Music, 1990

Jacqueline M. Crisman (2004)
Assistant Professor of Biology; Director of Pre-Medical Education; Moreland Research Professor in Biology (2005-2007)
 BS, SUNY at Geneseo, 1985; MS, PhD, Ohio State University, 1992, 1997

Laurie A. Dashnau (2000)
Associate Professor of English
 BA, Nazareth College, 1987; MA, PhD, Miami University of Ohio, 1989, 1996

Karen O. Daugherty (2006, part-time)
Assistant Professor of Sociology
 BA, Houghton College, 1969; BSN, Columbia University, 1971; M.S., The Ohio State University, 1974; M.A., *ibid.*, 1977; PhD, *ibid.*, 1987

Marcus W. Dean (2003)
Associate Professor of Intercultural Studies; Director of Off-Campus Programs
 BA, Indiana Wesleyan University, 1981; MDiv, ThM, Asbury Seminary, 1987, 1988; PhD, Trinity Seminary, 2001

Paul T. DeBoer (2002)
Professor of Brass Instruments
 BMus, Manhattan School of Music, 1973; MMus, DMus, Indiana University, 1974, 1987

William R. Doezema (1979)
Professor of History
 AB, Calvin College, 1969; MA, PhD, Kent State University, 1974, 1978

Richard K. Eckley (1990)
Professor of Theology
 BS, United Wesleyan College, 1980; MDiv, Asbury Theological Seminary, 1983; ThM, Princeton Theological Seminary, 1985; PhD, Duquesne University, 1998

Constance R. Finney (1981-86, part-time; 1986)
Professor of Education
 BA, Houghton College, 1978; MS, SUNY College at Buffalo, 1981; EdD, SUNY at Buffalo, 1994

Carlton D. Fisher (1985)
Professor of Philosophy
 BA, Marion College, 1974; MA, Western Kentucky University, 1978; MA, PhD, University of Notre Dame, 1980, 1984

Cathy E. Freytag (2003)
Associate Professor of Education
 BS, Carson-Newman College, 1990; MA, University of Alabama, 1991; EdD, University of Central Florida, 2003

Kelvin G. Friebe (2006)
Associate Professor of Old Testament
 BA, Seattle Pacific University, 1973; MA, University of Wisconsin, Madison, 1984; PhD, *ibid.*, 1989

Timothy R. Fuller (1980)
Vice President for Enrollment Management
 BA, Houghton College, 1979; MBA, SUNY at Buffalo, 1989

Douglas M. Gaerte (1988)
Professor of Communication
 BS, Grace College, 1983; MA, PhD, Indiana University, 1987, 1995

Andrew F. Gallman, II (1998)
Professor of Linguistics; Chair, Department of Intercultural Studies
 BA, Millsaps College, 1970; MA, PhD, University of Texas at Arlington, 1974, 1983

Robert J. Galloway (1973)
Professor of Piano
 BM, Boston Univ., 1968; MM, *ibid.*, 1972; MTS, Gordon-Conwell Theol Sem., 1970; Staatliche Hochschule fuer Musik, Cologne, W. Germany, 1972-73; PhD, Michigan State Univ., 1995

Richard A. Halberg (1975) (Sabbatical, S07)
Professor of Business Administration; Certified Financial Planner
 BA, Houghton College, 1971; MBA, University of Akron, 1976

Virginia A. Halberg (1978, part-time)
Instructor of Piano
 BMus, Houghton College, 1971

Deanna Hand (2002)

Instructor of Physical Education; Athletic Trainer

BS, University of Pittsburgh, 1998; MS, University of West Florida, 2000

Susan M. Hice (1993)

Associate Professor of Education; Director, Student Academic Services

BA, Kalamazoo College, 1965; MSciEd, SUNY College at Fredonia, 1974; PhD, Michigan State Univ., 1983

Kelley Hijleh (1993, part-time)

Instructor of Voice

BMus, Peabody Conservatory, 1991; Grad. Perf. Dipl., *ibid*, 1993

Mark D. Hijleh (1993)

Professor of Composition and Conducting; Mabel Barnum Davidson Professor of Fine Arts (2005-2008)

BS, William Jewell College, 1985; MM, Ithaca College School of Music, 1987; DMA, Peabody Conservatory, 1991

Donell Brandon Hoffman (2006)

Assistant Professor of Physics

BS, Northwest Nazarene University, 2000; PhD, University of California, Davis, 2006 (expected)

David A. Howard (1969)

Professor of History

BA, Gordon College, 1965; MA, PhD, Duke University, 1967, 1972

Irmgard K. Howard (1970)

Professor of Chemistry; Chair, Department of Chemistry

BA, PhD, Duke University, 1962, 1970

Wei Hu (1997)

Associate Professor of Mathematics and Computer Science

BS, Zhejiang Teacher's University, 1982; MS, Hangzhou University, 1985; MS, Michigan State University, 1994; MS, PhD, University of Kentucky, 1996, 1997

Nan M. Hussey (2002)

Assistant Professor of German and Spanish

BA, Hope College, 1982; MA, University of Washington, 1992; PhD, *ibid*., 1999

David M. Huth (2006)

Assistant Professor of Visual Communication and Media Arts

BA, Houghton College, 1991; MFA, Rochester Institute of Technology, 2005

Lori L. Huth (2004)

Assistant Professor of Creative Writing

BA, Houghton College, 2000; MA, SUNY University at Buffalo, 2001

Richard A. Jacobson (1966)

Professor of Mathematics; Chair, Department of Mathematics & Computer Science

BS, MS, South Dakota School of Mines, 1959, 1961

Brandon P. Johnson (2003)

Assistant Professor of Vocal Music & Conducting and Director of Choral Activities

BMus, Concordia College, 1996; MMus, DMA, University of Arizona, 2001, 2003

Sandra D. Johnson (2000)

Athletic Trainer/Physical Education Instructor

BS, Houghton College, 1999; MSED, University of Akron, 2000

Sharon L. Johnson (2004)

Assistant Professor of Piano; Accompanying & Ministry Team Coordinator

BMus, University of North Carolina, 1983; MM, *ibid*, 1985

Thomas R. Kettelkamp (1975-76, 1978)

Professor of Recreation and Physical Education; Chair, Department of Physical Education/Recreation

BS, Southern Illinois University, 1970; MS, Illinois State University, 1972; PhD, University of Illinois, 1982

Ben R. King (1980-1992, 1996)

Professor of Voice; Director, School of Music; Associate Dean for Music

BM, MM, Texas Tech University, 1973, 1974; DMA, Eastman School of Music, 1985

Jill K. Kingdon (2001; 2005, part-time)

Head Reference Librarian

BA, Houghton College, 1985; MSLS, Catholic University of America, 1999

Kristina LaCelle-Peterson (2001)

Associate Professor of Religion

BA, Houghton College, 1982; MDiv., Gordon-Conwell Theological Seminary, 1987; MPhil., PhD, Drew University Graduate School, 1992, 2001

Mark LaCelle-Peterson (2001)

Professor of Education; Chair, Department of Education

BA, MA, University of Minnesota, 1984, 1987; EdM, EdD, Harvard University, 1991

Michael D. Lastoria (1982)

Director of Counseling Services

BS, Rutgers University, 1970; MS, University of Nebraska (Omaha), 1974; EdD, Loyola University (Chicago), 1982; Clinical Internship, Marriage and Family Therapy, University of Rochester, 1987-92; Clinical Member, American Assoc. of Marriage and Family Therapists

John R. Leax (1968)

Professor of English; Poet in Residence

BA, Houghton College, 1967; MA, Johns Hopkins University, 1968

David B. Lewis (1993)

Assistant Professor; Head Womens Soccer Coach; Athletic Administration

BA, The King's College, 1978; MDiv, DMin, Gordon-Conwell Theological Seminary; 1982, 1992

Mengyang Li (2004)

Assistant Professor of Chemistry

BS, Nanjing University, 1982; MS, Beijing University, 1985; MS University of Rochester, 1989; PhD, University of Chicago, 1995

Benjamin J. B. Lipscomb (2002)

Assistant Professor of Philosophy

BA, Calvin College, 1996; MA, PhD, University of Notre Dame; 1999, 2002

Susan Bruxvoort Lipscomb (2005)

Assistant Professor of English

BA, Calvin College, 1996; MA, University of Chicago, 1997; MA, University of Illinois, Urbana-Champaign, 1998; PhD, *ibid*, 2005.

Gregory A. Magie (2005)

Assistant Professor of Conducting and Horn

BMus, Eastman School of Music, 1990; MMus, University of Redlands, 1993; DMus, University of California, LA, 1996

Wayne A. MacBeth (1975-92; 2004)

Vice President for Market Relations and Administration

BA, Houghton College, 1975; MBA, St. Bonaventure University, 1988

Susan G. Martin (1994, part-time; 1995)
Assistant Professor of Education
 BS, Houghton College, 1984; MS, Alfred University, 1990

Charles E. Massey (1976; part-time since 1998)
Professor of Education
 AB, Southern Pilgrim College, 1968; MA, EdD, Univ. of NC at Greensboro, 1972, 1976

Jayne E. Maugans (1991-92; 1993)
Professor of Sociology
 BA, MA, Wichita State University, 1983, 1988; PhD, SUNY at Buffalo, 1990

Peter C. Meilaender (2001)
Assistant Professor of Political Science; Chair, Department of Integrative Studies; Chair, Department of History/Political Science
 BA, Kenyon College, 1993; MA, PhD, University of Notre Dame, 1997, 1999

Daniel C. Minchen (2006)
Associate Professor of Communication and Business
 BA, SUNY College at Geneseo, 1968; MS, Syracuse University, 1999

Shirley A. Mullen (2006)
President; Professor of History
 BA, Houghton College, 1976; MA, University of Toronto, 1977; PhD, University of Minnesota, 1985; PhD, University of Wales, 2000

Theodore J. Murphy (1986)
Professor of Art
 BA, Mount Vernon Nazarene College, 1980; MFA, Ohio State University, 1983

William J. Newbrough (2002)
Assistant Professor of Piano
 BA, University of California at Berkeley, 1994; MM, Peabody Conservatory of Music/Johns Hopkins University, 1995; DMA, *ibid.*, 1998; AD, *ibid.*, 2000

Justin S. Niati (2005)
Assistant Professor of French
 Licencie, Universite Du Zaire, 1982; MA, University of Iowa, 1998; PhD, University of Nebraska, 2005

Timothy J. Nichols (1990)
Director of Career Services
 BA, Houghton College, 1981; MS, SUNY College at Buffalo, 1983; PhD, University at Buffalo, 1997

Ronald J. Oakerson (1992) (Sabbatical, S07)
Academic Vice President and Dean of the College; Professor of Political Science
 BA, Taylor University, 1966; MA, PhD, Indiana University, 1973, 1978

Terence P. Paige (1994)
Professor of New Testament
 BA, Seattle Pacific University, 1982; MCS, MDiv., Regent College, 1986; PhD, University of Sheffield (England), 1994

Meic Pearse (2004)
Associate Professor of History
 BA, University of Wales, 1978; DMS, Polytechnic of Wales, 1981; MPhil, Oxford University, 1989; DPhil, *ibid.*, 1992

Matthew K. Pelletier (1999)
Associate Professor of Biology;
 BS, Liberty University, 1993; PhD, Virginia Tech, 1997

David Perkins (1998-00, part-time; 2000)
Associate Professor of Mathematics
 BA, Houghton College, 1988; MS, South Dakota State University, 1997; PhD, University of Montana, 2005

Trini G. Rangel (1998)
Instructor of Physical Education
 BS, Colorado State University, 1991; MS, Bemidji State University, 1996

Barbara Jean Reigles (1975)
Professor of Voice
 BS, Roberts Wesleyan College, 1969; MM, University of Cincinnati Conservatory of Music, 1975; PhD, Texas Tech University, 1995

John M. Rhett (1995)
Associate Professor of Art
 BFA, MFA, Virginia Commonwealth University, 1979, 1995

Jean-Louis Roederer (1966-72; 1976)
Associate Professor of French and Spanish
 BA, Houghton College, 1964; MA, Middlebury College, 1970

Carl Schultz (1965-67; 1971)
Professor of Old Testament
 BRE, Malone College, 1952; BA, Houghton College, 1953; MA, Wheaton College, 1954; PhD, Brandeis University, 1973

Paul W. Shea (1994-96, part-time; 1996)
Associate Professor of Missions
 BA, Houghton College, 1969; MDiv, DMiss, Trinity Evangelical Div. Sch., 1973, 1994

Robert B. Smalley (1988)
Assistant Professor of Recreation
 BS, Houghton College, 1978; MEd, State University of New York at Buffalo, 1985

Jillian L. Sokso (2005)
Assistant Professor of Art
 BFA, Moore College of Art and Design, 2003; MFA, University of Delaware, 2005

Jeffrey B. Spear (1989-91; 1997-spring)
Associate Professor of Accounting
 BS, Houghton College, 1979; MS, Rochester Institute of Technology, 1984

Richard D. Stegen (1981)
Professor of Psychology
 BA, Houghton College, 1969; MA, Temple University, 1972; PhD, St. John's Univ., 1982

Daryl H. Stevenson (1982) (Sabbatical, S07)
Professor of Psychology; Chair, Department of Psychology and Sociology
 BA, Houghton College, 1970; MS, SUNY College at Brockport, 1975; MA, PhD, Rosemead Graduate School of Psychology, 1978, 1981

William Christopher Stewart (1993)
Professor of Philosophy; Associate Director of London Programs
 BA, Wheaton College, 1982; MA, Western Kentucky University, 1988; MA, PhD, University of Notre Dame, 1989, 1992

Gary M. Stith (2002)
Associate Professor of Music Education
 BMus, Ohio State University, 1972; MMus, Eastman School of Music, 1978

Aaron M. Sullivan (2004)
Assistant Professor of Biology; Moreland Research Professor in Biology (2005-2007)
 BS, Mount Vernon Nazarene University, 1997; MS, Southwest Missouri State University, 1999; PhD, SUNY Binghamton, 2004

Sunshine R. Sullivan (2005, part-time; 2006)
Instructor of Education
 BA, Mt. Vernon Nazarene University, 1997; MS, Binghamton University, 2003

William R. Swanson (1994)
Professor of Physical Education
 BS, MS, EdD, Illinois State University, 1974, 1980, 1989

Cynthia S. Symons (1994)
Professor of Psychology
 BA, Utica College, 1986; MS, PhD, Syracuse University, 1990, 1992

Küllli Tõniste (2006)
Assistant Professor of New Testament
 BA (equivalent), Baltic Methodist Theological Seminary, 2000; MA, Asbury Theological Seminary, 2002

John R. Tyson (1979)
Professor of Theology
 AB, Grove City College, 1974; MDiv, Asbury Theological Seminary, 1977; MPhil, PhD, The Graduate School Drew University, 1980, 1983

Paula A. Valley (2000 – part-time)
Reference Librarian
 BS, SUNY College at Buffalo, 1974; MSE, St. Bonaventure University, 1988; MILS, SUNY at Buffalo, 1998

John F. Van Wicklin (1983)
Professor of Psychology
 BS, Wheaton College, 1968; MA, Columbia University, 1971; PhD, New School for Social Research, 1981

J. Michael Walters (1995)
Professor of Christian Ministries; Director of Ministerial Education; Chair, Department of Religion & Philosophy
 BA, Circleville Bible College, 1972; BA, Houghton College, 1986; MAR, Asbury Theol. Sem., 1974; MA, St. Mary's Univ., 1980; DMin, Trinity Evangelical Divinity School, 1991

James F. Wardwell (1989)
Associate Professor of English
 BA, Gordon College, 1979; MDiv, Eastern Baptist Theological Seminary, 1982; MA, Villanova University, 1984; PhD, University of Rhode Island, 1989

Bradley E. Wilber (1997)
Interim Director of Library, Reference and Music Librarian
 BA, Houghton College, 1991; MLS, Syracuse University, 1996

James M. Wolfe (1988)
Professor of Biology; Chair, Department of Biology
 BA, Gordon College, 1975; MS, University of Oklahoma, 1978; PhD, University of Rhode Island, 1988

Daniel P. Woolsey (1991)
Professor of Education
 BA, Houghton College, 1977; MA, Simmons College, 1983; PhD, Ohio State University (Columbus), 1986

Linda Mills Woolsey (1999, part-time; 2004)
Professor of English; Chair, Department of English and Communication
 BA, Houghton College, 1974; MA, SUNY Binghamton, 1976; PhD, Drew University, 1989

Stephen A. Woolsey (1999)
Professor of English
 BA, Houghton College, 1973; MA, SUNY Binghamton, 1976; PhD, Drew University, 1988

Paul D. Young (1980)
Professor of Psychology
 BS, Houghton College, 1976; MA, PhD, University of Alberta, 1978, 1984

Jo-Anne O. Young (1985; part-time)
Instructor of Horsemanship; Equestrian Program Director
 BS, Houghton College, 1969; MA, Salem International University, 2005

Mark E. Yuly (2000)
Professor of Physics; Chair, Department of Physics/Earth Science
 BS, Northwest Nazarene College, 1987; PhD, Massachusetts Inst. of Technology, 1993

Bradford P. Zarges (1999)
Men's Basketball Coach; Instructor of Physical Education
 BS, Houghton College, 1992; MA, East Tennessee State University, 1999

James A. Zoller (1984)
Professor of Writing and Literature
 BA, University of New Hampshire, 1971; MA, San Francisco State University, 1973; DA, SUNY at Albany, 1984

Adjunct Faculty

John M. Andrews, Jr. (1986)
Adjunct Professor of Physics
 BS, Houghton College, 1958; PhD, Massachusetts Institute of Technology, 1964

Philip Bence (1999)
Adjunct Associate Professor of Religion
 BA, Houghton College, 1978; MDiv, Asbury Theological Seminary, 1981; PhD, St. Mary's College, University of St. Andrews (Scotland), 1989

John A. Bernbaum (1977)
Adjunct Professor of American Studies
 AB, Calvin College, 1965; MA, PhD, University of Maryland, 1967, 1972

Craig Fellenstein (2005)
Adjunct Professor of Business, Executive-in-Residence
 Chief architect and senior executive consultant for IBM's Global Services Division

Wilson Greatbatch (1968)
Adjunct Professor of Physical Science
 BA, Cornell, 1950; MS, SUNY at Buffalo, 1957; ScD, Houghton College, 1970; ScD, SUNY at Buffalo, 1980

Joseph T. King, MD (1989)
Adjunct Professor of Clinical Laboratory Science
 Associate Pathologist and Medical Advisor, Robert Packer Hospital Clinical Laboratory Science Program

Jameson Kurasha (1999)
Adjunct Professor of Philosophy
 BA, University of York (England), 1978; MA, University of Manitoba (Canada), 1981; MA, University of Zimbabwe: Harare, 1993; PhD, Georgetown University, 1985

Anthony Petrillo (1996)
Adjunct Professor of Computer Science
 BA, SUNY at Buffalo, 1980; MBA, *ibid.*, 1982; PhD, *ibid.*, 1992

Brian Spezialetti (1988)
Adjunct Professor of Clinical Laboratory Science; Program Director, Robert Packer Hospital Clinical Science Program
MS, Elmira College

Robert C. Tice (1986)
Adjunct Assistant Professor of Christian Education
BS, Houghton College, 1980; MA, ThM, Fuller Theological Seminary, 1984, 1986

Faculty Emeriti

Dates indicate beginning and termination of service.

Richard J. Alderman (1971-91)
Director of Admissions and Records; Executive Director of Alumni
BA, Houghton College, 1952; MS, Alfred University 1960

William T. Allen (1953-92)
Professor of Piano and Theory, Composer in Residence
BM, MMus, Northwestern University School of Music, 1950, 1951; PhD, Eastman School of Music, 1954

Bruce C. Brown (1974-2002)
Professor of Voice
BM, Wheaton College, 1962; MM, DMA, University of Southern California, 1964, 1974

E. Douglas Burke (1958-94)
Professor of Physical Education; Director of Intercollegiate Athletics
BS, Wheaton College, 1953; MA, Syracuse University, 1954

Ruth G. Butler (1969-85)
Librarian-Buffalo Suburban Campus
BEEd, Geneseo State Teachers College, 1943; MLS, SUNY College at Geneseo, 1964

Arnold W. Cook (1960-89)
Professor of Business Administration; Head, Business Admin. and Economics Department
BA, Houghton College, 1943; Certified Public Accountant (Washington); MA, East Tennessee State University, 1970

E. Elizabeth Cook (1964-88)
Associate Professor of Biology
BS, Houghton College, 1962; MS, St. Bonaventure University, 1972

L. Keith Cheney (1963-75)
Professor of Education; Head, Education Department
BS, Michigan State, 1929; MS, University of Michigan, 1936; Diploma for Advanced Graduate Studies, Michigan State University, 1963

Robert L. Cummings (1962-88)
Professor of German
BA, Houghton College, 1950; MA, University of Rochester, 1952

William N. A. Greenway (1962-99)
Associate Professor of English
BA, Bob Jones University, 1956; MA, Stetson University, 1962

Lola M. Haller (1963-91)
Professor of Education; Coordinator of Teacher Certification
BS, MA, Western Michigan College of Educ., 1954, 1957; EdD, Michigan State Univ., 1967

Helen H. Hirsch (1960-80)
Professor of Christian Education
BA, Upland College, 1949; MRE, Asbury Theol Sem, 1959; EdD, University of Pittsburgh, 1966

Ruth F. Hutton (1962-88)
Associate Professor of English and Speech
BA, Houghton College, 1943; MA, Wheaton College, 1947; MA, SUNY College at Brockport, 1979

Paul F. Johnson (1972-94)
Professor of French
BA, MA, Boston University, 1951; MEd, Rhode Island College, 1969

Katherine W. Lindley (1963-89)
Professor of History; Chair, Division of History and Social Science
BA, Houghton College, 1943; MA, PhD, University of Wisconsin, 1946, 1949

Robert R. Luckey (1942-76)
Professor of Mathematics; College Administrator
BA, BS, Houghton College, 1936, 1937; MEd, NYU, 1939; PhD, Cornell University, 1942

Harold E. McNiel (1958-2002)
Professor of Brass Instruments
BM, Oklahoma City Univ., 1956; MMus, DMA, Eastman Schl of Music, 1958, 1968

Robert A. Mattke (1969-88)
Associate Professor of Bible and Theology
BS, University of Wisconsin, 1946; BD, Asbury Theological Seminary, 1949; MA, State University of Iowa, 1965

Laurence K. Mullen (1966-93)
Professor of Bible and Philosophy; Director of Church Relations
BA, ThB, Eastern Nazarene College, 1949, 1950; MA, Boston University, 1952

Doris J. Nielsen (1971-1997)
Associate Professor of Recreation and Physical Education, Director of Upward Bound
BA, Houghton College, 1971; MEd, SUNY at Buffalo, 1982

Kenneth L. Nielsen (1972-1997)
Vice President for Finance
BA, The King's College, 1954; MDiv, Faith Theological Seminary, 1958

Edgar R. Norton (1956-93)
Associate Professor of Music Education; Music Education Coordinator
Mabel Barnum Davidson Professor of Fine Arts
BS, Fredonia State Teachers College, 1949; MS, Potsdam State Teachers College, 1960

Frederic C. Parker (1976-1998)
Associate Professor of Mathematics
BS, MS, Columbia University, 1954, 1955; MS, University of Notre Dame, 1964

Bernard J. Piersma (1971-2004)
Professor of Chemistry
BA, Colgate University, 1959; MS, St Lawrence, 1961; PhD, Univ. of Pennsylvania, 1965

Richard C. Pocock (1959-95)
Professor of Mathematics
BA, Houghton College, 1955; MS, Syracuse University, 1959; EdD, Columbia Univ, 1974

Edith Redman (1975-87)
Head Catalog Librarian
BA, Houghton College, 1942; MSLS, SUNY College at Geneseo, 1961

William A. Roeske (1965-95)
Associate Professor of Mathematics; Director of Data Processing
BS, Houghton College, 1956; MA, University of Buffalo, 1960

Frederick Shannon (1958-93)
Professor of Chemistry; Chair, Department of Integrative Studies
BS, MS, PhD, University of Akron, 1953, 1959, 1964

Marjorie O. Stockin (1939-59, 1963-78)

Associate Professor of Art

BS, Columbia University, 1938; DFA, Houghton College, 1994

George R. Wells (1947-88)

Professor of Physical Education

BA, Houghton College, 1947; MEd, Springfield College, 1950; EdD Univ. of Buffalo, 1956

Lois Jane Wilt (1968-88)

Assistant Professor of Music

BMus, Houghton College, 1946; MA, Western Reserve University, 1947

Richard L. Wing (1978-98)

Professor of Writing; Administrator

BS, Cornell University, 1956; MEd, University of Southern California, 1970; PhD, SUNY at Buffalo, 1990

Warren M. Woolsey (1958-59; 1966-94)

Professor of New Testament and Missions

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