## 2001-2002 Catalog



Houghton College provides an academically challenging Christcentered education in the liberal arts and sciences to students from diverse
traditions and economic backgrounds and equips them to lead and labor as scholarservants in a changing world.

## HOUGHTON COLLEGE

One Willard Avenue
Houghton, NY 14744 www.houghton.edu
(716) 567-9200, After Nov. 15, 2001: (585) 567-9200
or toll free 800-777-2556

## In Memory



MRS. LINDA DOEZEMA Coordinator of Public Services, Library 1948-2000


DR. WILLIAM O'BYRNE
Professor of Educational Ministries 1934-2000
Calendars ..... 3, 4
General Information ..... 5
Admission ..... 9
Financial Information ..... 12
Current Year Financial Information ..... 12
General Information on Annual Expenses ..... 14
Scholarships, Grants and Loans ..... 16
Academic Information ..... 25
Courses of Instruction ..... 34
Integrative Studies ..... 37
Academic Programs ..... 40
Off-campus Programs ..... 141
Adult Learning Opportunities ..... 149
Student Life ..... 154
Campus Information ..... 162
Buildings and Facilities ..... 162
Houghton College at West Seneca ..... 164
Personnel ..... 166
Trustees, Officers, Administators ..... 166
Faculty ..... 168
Faculty Emeriti ..... 178
Index ..... 182

## Accreditations

Houghton College is accredited by the Middle States Association of Colleges and Schools 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.

FALL
SEMESTER


SPRING
SEMESTER

MAYTERM

Aug 31, Friday
Sept 1, Saturday
Sept 3, Monday, 7:45 am
Sept 3-7
TBD
Sep 9-14, Sun.-Fri.
Sep 17, Monday
Sep 17, Monday
Oct. 5-6, Fri.-Sat.
Oct 12-13
Oct 18-21, Thur.-Sun.
Oct 22, Monday, 7:45 am
Oct 23, Tues., 11 am
Oct 24Wednesday
Oct 26-27
Nov 1-8, Thur.-Thur.
Nov 12, Monday
Nov 21-25, Wed-Sun
Nov 26, Mon., 7:45 am
Dec. 14, Fri.
Dec 15-20, Sat.-Thu.
Dec 20, Thu., 6:00 pm
Dec 27, Thur., 11 am
Jan. 14, Monday, 7:45 am
Jan. 14-18
Jan 20-25, Sun.-Fri.
Jan 28, Monday
Jan 28, Monday
Feb. 20-Feb. 24, Wed.-Sun.
Feb. 25, Monday, 7:45 am
Mar 6, Wednesday
Mar 12, Tues., 11 am
Mar 19, Tuesday
Mar 23-Apr 1, Sat.-Mon.
Apr 2, Tuesday, 8 am
Apr 4, Thursday
Apr 8-11, Mon.-Thur.
May 2, Fri schedl on Thur.
May 3, 4, 6-8
May 8, Wed., 6:00 pm
May 9, Thurs., 11 am
May 12, Sunday, 10:30 am
May 13, Monday, 10 am
May 20, Mon., 11 am
May 14, Tuesday, 8:00 am
May 31, Friday
Jun 7, Friday
Jun 11, Tuesday, 11 am

New students arrive
New student orientation
Classes begin
Validation week
Student teacher orientation and validation
Christian Life Emphasis Week (tentative)
Last day to add full semester courses*
Library Research sessions begin
Founders' Day/Homecoming
Parents' weekend for upperclass students
October break
Classes resume
Midsemester grades due
Second half semester courses begin*
Parents' weekend for first-year students
Course selection
Last day to withdraw from a full sem course without an $\mathrm{F}^{*}$
Thanksgiving recess
Classes resume
Last day of classes
Reading day/Final exams (see exam schedule)
Semester ends
Final grades due
Classes begin
Validation
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*
Midsemester grades due
Mayterm course selection
Easter vacation
Classes resume
Last day to withdraw from a full sem course without an $\mathrm{F}^{*}$
Course selection
Last day of classes
Reading day/Final exams (see exam schedule)
Semester ends
Designated senior grades due
Baccalaureate
Commencement
All final spring grades due
Classes begin
Three-week courses end
Four-week courses end
Mayterm final grades due
*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.

FALL
SEMESTER

## SPRING SEMESTER

## MAYTERM

Aug 30, Friday
Aug 31, Saturday
Sept 3, Tuesday, 7:45 am
Sept 2-6
TBD
Sep 8-13, Sun.-Fri.
Sep 16, Monday
Sep 17, Tuesday
Oct. 4-5, Fri.-Sat.
Oct 11-12
Oct 18, Friday
Oct 21, Monday, 7:45 am
Oct 22, Tues., 11 am
Oct 23, Wednesday
Oct 25-26
Oct 31-Nov.7, Thur.-Thur.
Nov 12, Tuesday
Nov 26, Tuesday
Nov 27-Dec 1, Wed-Sun
Dec 2, Mon., 7:45 am
Dec. 13, Fri.
Dec 14, 16-20, Sat, Mon-Fri
Dec 20, Fri., 12:30 pm
Dec 27, Fri., 11 am

Jan. 13, Monday, 7:45 am
Jan. 13-17
Jan 20-25, Sun.-Fri.
Jan 27, Monday
Jan 27, Monday
Mar 1-9, Sat-Sun
Mar 10, Monday, 7:45 am
Mar 10, Monday
Mar 11, Tues., 11 am
Mar 27-Apr 3, Thu-Thu
Mar 31, Monday
Apr 17-21, Thu.-Mon.
Apr 22, Tuesday, 8:00 am
Apr 29, Tuesday, 6-9:00 pm
Apr 30, Wednesday
May 1-7, Thur-Wed
May 7, Wed., 3:30 pm
May 8 Thurs., 11 am
May 11, Sunday, 10:30 am
May 12, Monday, 10 am
May 19, Mon., 11 am
May 13, Tuesday, 8:00 am
May 30, Friday
Jun 6, Friday
Jun 13, Tuesday, 11 am

New students arrive
New student orientation
Classes begin
Validation week
Student teacher orientation and validation
Christian Life Emphasis Week (tentative)
Library Research sessions begin
Last day to add full semester courses*
Founders' Day/Homecoming
Parents' weekend for upperclass students
October break
Classes resume
Midsemester grades due
Second half semester courses begin*
Parents' weekend for first-year students
Course selection
Last day to withdraw from a full sem course without an $\mathrm{F}^{*}$
Follows FRIDAY class schedule
Thanksgiving recess
Classes resume
Last day of classes
Reading day/Final exams (see exam schedule)
Semester ends
Final grades due

Classes begin
Validation
Christian Life Emphasis Week (tentative)
Library Research sessions begin
Last day to add full semester courses*
March break
Classes resume
Second half semester courses begin*
Midsemester grades due
Course selection
Last day to withdraw from a full sem course
without an $\mathrm{F}^{*}$
Easter vacation
Classes resume
THURSDAY evening classes meet
Last day of classes
Reading day/Final exams (see exam schedule)
Semester ends
Designated senior grades due
Baccalaureate
Commencement
Final grades due
Classes begin
Three-week courses end
Four-week courses end
Mayterm final grades due
*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.


## 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 other local churches, is strongly encouraged.

## History

In 1883 the Lockport Conference of The Wesleyan Methodist Church of America founded Houghton Wesleyan MethodistSeminary. 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.

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 1200.

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. Current enrollment is approximately 1400.

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 1300 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 was merged with Houghton College in 1969, the West Seneca Campus was created. The programs on this campus have evolved from lowerdivisional 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 organizational management.

## 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 Association of Colleges and Schools, with the most recent renewal of this status awarded in 1995.

The Houghton College 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

In recent years over one-fourth of Houghton's graduates have entered full-time Christian service as ministers or missionaries. The rest have been divided among other professional fields (medicine, law, engineering, and others), business, and homemaking. A significant percentage of graduates go on to graduate school.

## Placement Rates

The most recent placement survey was conducted with the Class of $1998.51 \%$ of the 297 graduates responded to the survey. Among the respondents, $70.2 \%$ found employment in their field, $17.9 \%$ reported part-time employment, and $36 \%$ had entered graduate studies.

## Christian College Consortium

Houghton College is a member of the Christian College Consortium, based in Concord, New Hampshire, which provides valuable cooperative program. 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, Kentucky; Bethel College, St. Paul, Minnesota; George Fox College, Newberg, Oregon; Gordon College, Wenham, Massachusetts; Greenville College, Greenville, Illinois; Malone College, Canton, Ohio; Messiah College, Grantham, Pennsylvania; Seattle Pacific University, Seattle, Washington; Taylor University, Upland, Indiana; Trinity International University, Deerfield, Illinois; Westmont College, Santa Barbara, California; Wheaton College, Wheaton, Illinois. 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, an organization of approximately 92 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 special studies 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, DC 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 the 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.

## Four-College Consortium

Houghton has established an on-going consortium relationship with three other colleges serving this northern tip of Appalachia: St. Bonaventure University, Alfred University, 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. For further information, contact the academic records office.

## 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 the 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.

## 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 taxexempt corporations under federal law).

## Articulation Agreements

Houghton College has established formal articulation agreements with several western New York two-year colleges. These agreements allow graduates who meet certain criteria to transfer directly to Houghton with junior class standing. These colleges include: Jamestown Community College, Trocaire College, and Villa Maria College.


Only students who appear capable of success at Houghton are accepted for admission. To determine this possibility, the admission committee carefully studies each application. The final decision regarding admission is made only after review of all scholastic records, of references, and of the completed application, including the essays related to Christian commitment.

## 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 its right to operate as a churchrelated institution and to develop policies consistent with the religious tenets of its sponsoring denomination, The Wesleyan Church.

## Application Forms

Application forms are available from the Office of Admission, Houghton College, Houghton, NY 14744. E-mail: admission@houghton.edu, or phone 800-777-2556. An applicant desiring to major in music should request a special application which is to be filled out in addition to the regular forms. Address all correspondence to the Office of Admission.

## Processing Dates

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 allow. A student will be considered for admission after all parts of the application are received, including the signed completed application form, a pastor's recommendation, high school transcripts, an official statement of test scores, and the application fee. An accepted applicant is asked to confirm his or her intention to enroll by paying a nonrefundable enrollment deposit by May 1, thereby reserving a place in the entering class.

Applications for spring semester must be received by December 1 and all credentials must be on file by December 20 .

## Application

An application fee is normally charged on all applications. This is a service charge and is nonrefundable.

## Class Size

The college seeks to enroll approximately 340 first-year students and 70 transfers each fall semester. Review of successful candidates is done in order of receipt of complete applications. Both firstyear students and transfers may also apply for spring semester admission.

## Recommended High School Courses

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

English .. 4
Foreign language at least ..... 2

Algebra* ..... 2
Geometry* ..... at least 1
History or social science ..... at least 3
Science ..... at least 2
*For New York State students, Houghton recommends at least mathematics course I and II.

## 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. Achievement tests are not required.

The applicant is responsible for making all arrangements with CEEB or ACT authorities to take this test. A bulletin of information regarding the Scholastic Aptitude Test may be obtained without charge by writing to College Entrance Examination Board, P.O. Box 592, Princeton NJ 08540. (Applicants in western states, territories, or Pacific areas should write to College Entrance Examination Board, P.O. Box 1025, Berkeley CA 94701.)

Dates for test administrations are available in your guidance office. A cutoff date for applications to take the Scholastic Assessment Test precedes each test date by approximately four weeks.

## TOEFL

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, and see that these scores are forwarded to the college. Students with paper-based TOEFL scores of 550 or higher or computerbased scores 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 50 on all five tests, with no individual test score below 45 . 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 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.

## Limitation on Non-Classroom Credit

Not more than 32 hours of advanced placement (AP), CLEP, correspondence, distance education, or other non-classroom credit will transfer in to Houghton.

## Advanced Placement Tests

Advanced course standing and college credit may be granted to students who pass 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. Credit will be contingent upon a favorable review by Houghton College faculty members. Generally, a score of 4 is required for credit.

Inquiry concerning these tests should be made to the high school guidance office or to Advanced Placement Program, College Entrance Examination Board, 45 Columbus Avenue, New York, NY 10023-6992.

## CLEP

College-level examination program (CLEP) tests for advanced placement and/or credit may be taken at Houghton College at regularly scheduled testing dates. Information on these dates and on
subjects available may be obtained from the director of assessment. 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 first semester of an intermediate course, and at the intermediate level provided the testing is done prior to the completion of the first advanced course. There is a $\$ 44$ fee for each CLEP test, plus a charge of 10 percent of the tuition for total semester hours in excess of 18. Information is available through Dr. Willis Beardsley, CLEP administrator.

## Transfer Student Admission and Credit

Transfer students are welcome at Houghton with preference given to individuals who present a grade-point average of 3.0 or higher ( 4.0 scale). Transfer students are expected to reside in college housing, to complete at least 30 hours at Houghton, and to earn at least 50 percent of the major hours here. Note: only grades received at Houghton will be used to figure your Houghton College grade point averages; accepted hours earned elsewhere, however, will be posted to the Houghton transcript.

## Transfer credit rules:

- Transfer credits are accepted from institutions that are regionally and listed by the U.S. Office of Education in its current Education Directory, Colleges and Universities.
- Transfer credit of up to 67 hours will be given for appropriate courses completed with a grade of C- or above, taken at a two- or four-year institution.
- At least 62 hours must be taken at Houghton to be eligible for honors (cum, magna, summa) at graduation.
To apply for admission, a transfer student must submit an application, pastor's recommendation, official high school and college transcripts, and an application fee. SAT I or ACT scores are not required for students with a grade point average of 2.5 or higher.

Transfer students entering in September are encouraged to be present for one of the new student orientation periods scheduled during the spring and summer prior to the fall semester validation day or to have a personal visit.

As approved by the Houghton College faculty, transfer students who have earned an Associate in Arts or Associate in Science degree from an accredited community or junior college may enter asjuniors. Such students must take Biblical Literature and another Bible/theology course 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.

The college has formal articulation agreements with both Bethany Bible College in New Brunswick, Canada, The Salvation Army School For Officers' Training in Suffern, N.Y., Jamestown Community College, Jamestown, N.Y.; and Villa Maria and Trocaire colleges in Buffalo, N.Y. The formal agreement makes efficient credit transfer possible for students in selected majors who study at Bethany for one or two years. 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.

## Home Schoolers

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

Houghton does not recommend any particular packaged curriculum program. In fact, most of our homeschooled students were taught via an eclectic approach with the family using textbooks and materials from a variety of publishers. Homeschoolers who submit work to an established school program (i.e. Christian Liberty Satellite Academy) should have the organization send a transcript. Otherwise, families should provide information regarding academic work and related activities for the $9-12$ th grade years. The admission page of the Houghton College website (www.houghton.edu) features a sample curricular template which may be helpful in this process.

Homeschoolers should also plan to take theSAT or ACT exam. The latter is strongly recommended as it also is an approved "ability to benefit" test (the SAT is not approved at this time). This is important for financial aid purposes.

# Financial Information 

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

## General

The average annual college charges are summarized below. Travel, personal expenses, textbooks and supplies are costs that vary and are not included in the fixed costs below. However, the financial aid office will provide an estimate of these expenses as part of the financial aid package.

| Tuition | $\$ 16,290$ |
| :--- | :---: |
| Room rent | $\$ 2,760$ |
| Board | $\$ 2,760$ |
| Total: ..................... $\$ 21,810$ |  |

The room rent used above is based on a double room in a traditional dormitory. 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

$$
\begin{aligned}
& \text { Tuition (flat rate: } 12-18 \text { hours per semester) ................... } \$ 8,145.00 \\
& \text { Tuition (per hour, 1-11 hours) ......................................... \$ } 680.00 \\
& \text { Tuition (per hour, for hours over 18) ............................... \$ } 380.00 \\
& \text { Additional tuition, Houghton in London Program........ \$ } 300.00 \\
& \text { Additional tuition, Houghton in Tanzania ..................... \$ } 500.00 \\
& \text { Fee for auditing class (if not covered under flat rate) .... \$ } 50.00 \\
& \text { Tutorial fee (per hour; add to tuition fee) ....................... \$ } 215.00 \\
& \text { Tuition (per hour Mayterm overload and ...................... \$ } 380.00 \\
& \text { Summer Sessions) }
\end{aligned}
$$

## 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) ..... \$ 275
Hour lesson (for 3-4 hours credit) ..... \$ 550
Hour-and-a-half lesson (for 5-6 hours credit) ..... \$ 825
Housing:
Room rates per semester are as follows:
College-owned housing ..... \$ 975
Dorm triple and West Seneca dorm doubles ..... \$ 1,210
Dorm doubles, dorm "suite" triples and West Seneca dorm singles ..... \$ 1,380
Townhouse doubles and West Seneca townhouse double ..... \$ 1,550
Dorm singles, dorm double held as single,dorm triple held as double, townhouse single,and West Seneca townhouse single\$ 1,850
A residence hall fee of $\$ 10$ is required when the room key is picked up
Rooms in private housing vary in cost depending on location, facilities, and quality of furnishings.
Board rate:
Following are the rates for the various meal plans:21 Meals (per week) Plan (per semester)\$ 1,380
( 21 meal plan is required for first-year students and sophomores; juniors and seniors intraditional dorms must be on 14 or 21 meal plan)
14 Meals (per week) Plan (per semester) ..... \$ 1,210
10 Meals (per week) Plan (per semester) ..... \$ 975
5 Meals (per week) Plan (per semester) ..... \$ 565
Block Plan*
240 Block ..... \$ 1,450
160 Block ..... \$ 1,140
80 Block ..... \$ 685
There are no board plans available at the Buffalo campus.

* Students buying block plans will purchase a certain number of meals per semester, and these meals will be available to them over the whole semester. This type of plan allows for greater flexibility in the usage of meals over a semester. Unfortunately, these meals are not able to be carried over from semester to semester. This plan is designed for $100 \%$ usage of the meals. However this means that these plans are slightly more expensive than the weekly plans, because there is no "missed meal factor" built into a block plan. There is another advantage to the block plans. With the block plans only, more than one meal at a time can be scanned off of a student's card. This means that if you have a guest visiting you at college, you can use one of your meals for them, so that they do not have to pay to eat in the cafeteria.


## College fees

Application ..... \$ 25
Art studio lab fee ..... \$ 90
Education practicum fee ..... \$ 62
Enrollment deposit (annual; credited toward tuition/room)
First-year students ..... \$ 300
Returning students ..... \$ 100
Horsemanship I course fee ..... \$ 62
Horsemanship (all other courses with labs) ..... \$ 124
Independent study extra-late fee ..... TBD
Science laboratory fee (per lab) ..... \$ 90
Late payment fee ..... \$ 100
Late validation fee ..... \$ 50
Sickness and accident coverage ( 12 months) ..... TBD
Special test fee ..... \$ 10
Student teaching fee ..... \$ 215
Transcript fee (each copy) while a student ..... \$ 3
Transcript fee (each copy) after leaving school ..... \$ 5
Transcript fee (special handling: FAX, registered mail) ..... \$ 5
Vehicle registration/year, depending on parking location ..... \$15-100

## 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 dorms 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 and sophomores are required to be on the 21 meals per week plan or the 240 block plan. All juniors and seniors may elect either the 14 meal or 21 meal 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 $5,10,14$, or 21 meal plan or a 240,160 , or 80 block plan. The contract period begins on the day preceding student validation 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.

## Houghton Off-Campus Programs

Students participating in the "Houghton in London" or "Houghton in Tanzania" programs are charged an additional fee. Students participating in the First Year Honors pay no additional fee.

## 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 or all students, reserves the student's position in the fall validation 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 insurance is required for all students not covered under an existing policy. This insurance is optional for all others. The optional plan includes sickness and extended accident insurance (August 19-August 19 a year later). It provides sickness insurance for 12 months and extends the 9-month accident insurance to a full year. An enriched accident and health insurance plan is also available. Contact the college Health Center for details.

Accident insurance is available to students on an optional basis and is designed to protect the Houghton College student while at home, at school, or while traveling, 24 hours a day for a period from August 19 to June 1. Such insurance becomes operative after application of the student's health insurance. The college Health Center acts as plan administrator and can provide further information.

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

Late payment - assessed to each student who fails to pay in full the account balance (less financial aid and amounts budgeted through Academic Management Services, Inc.) two weeks prior to the start of validation week.

Late validation - assessed to each student who fails to begin the validation process on the day assigned by the Student Accounts Office.

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 two weeks prior to the start of validation week. Timely payments will reduce time spent in the validation line and will avoid a late payment fee. Checks should be made payable to Houghton College and should be sent to the Student Financial Services Office along with the validation worksheet.

A monthly payment plan is available through Academic Management Services, Inc. that allows fixed payments of annual college expenses over a ten-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 offcampus 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.) Awarded financial aid from Houghton cannot be applied against the cost of such 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 in the judgment of the college 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 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 $60 \%$ point in the semester. There are no refunds after that point in 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 $60 \%$ point in the semester. Title IV aid and all other aid is viewed as $100 \%$ 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 $100 \%$ 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.

## 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. 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.

## 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, and must obtain and complete a Houghton College Financial Aid Application. The FAFSA, and the HCFAA are mailed to prospective and current students in December or available in the financial aid office after January 1. The HCFAA is also available on the Houghton website. Priority consideration is given to students whose applications are received by March 1st. Houghton College aid may not be renewed to those applying for it after July 1st.

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 within 14 days unless written authorization to hold excess funds is received.

## 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 2001-02 academic year, the estimated maximum Pell Grant is $\$ 3,750$.

## 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 $\$ 625$.

## 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 maximum Perkins Loan borrowing limit this year (01-02) is $\$ 3,000$.

## Federal Stafford Loan and PLUS

There are two loan programs administered off 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 $3.1 \%$ with a cap of $8.25 \%$. (Latest rate is $5.99 \%$.)

The other loan is the Federal Parental Loan for Undergraduate Students (FPLUS), at a variable interest rate based on the 52-week Treasury Bill rate plus $3.1 \%$ with a cap of $9 \%$. (Latest rate is $6.79 \%$.) 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.

Note: all Federal Education Loan Programs are subject to an origination and insurance fee of approximately $3.0 \%$.

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 submit proof of compliance with Selective Service regulations.

## CitiAssist Student Loans

The CitiAssistStudent loan is a private alternative educational loan through CitiBank Student Loan Corporation. 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 for Houghton student borrowers is prime +.375 . Applications may be obtained from the Financial aid Office. Loan approval is based on certification by the Financial Aid Office 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 2001-02 academic year, the estimated maximum TAP award for first year students is \$5,000. Educational Ministries students are ineligible for TAP unless they have declared a double major.

## 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 financial aid 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 4, or even 5 years. See "Classification" in Academic Information section for further information.

| Semesters | Min. credit <br> hrs. enrolled | Credit hrs. <br> that must be <br> completed | Min. accrued <br> credit hrs. | Cum. grade <br> 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 |


|  |  |  |  | 23 |
| ---: | ---: | ---: | :--- | :--- |
| 9 | 12 | 12 | 12 | 2.0 |
| 9 | 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 financial aid office 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 onetime waiver of the necessary academic requirements. Petitions will be considered based on physical injury or illness, extraordinary personal difficulty, or other special circumstances.

## 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, extracurricular 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 leasta3.0GPA 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 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 1,300 or higher (or an ACT of 29 or higher) and rank in the top $10 \%$ 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. TheScholarship Committee then selects students from the applicant pool to invite to campus for competitive interviews. Three $\$ 10,000$ per year awards are given each year, renewable annually with a GPA of at least 3.25.

## Houghton Neighborhood Scholarship

New students entering in the fall of 1999 and beyond, who are graduates of a high school in Allegany County or a neighboring school district (Keshequa, Letchworth and Pioneer) 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 dependent on maintaining a minimum 3.0 grade point average. Students who are not members of the National Honor Society receive a $\$ 3,000$ per year scholarship with annual renewal dependent upon meeting satisfactory academic progress. Home-schooled students who have been residents of the school districts for their final two years of high school are eligible. 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 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 basis 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)
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)
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
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
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)
S. Hugh and Wilfreda Paine Scholarship

Presser Foundation 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
George I. Alden Trust
Barnes-Eldrod Scholarship
Benson Scholarship
The Rev. P. Arthur Brindisi Scholarship
Buffalo Endowed Scholarship
Calvary Church 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

Parker Scholarship
Dr. and Mrs. Gustave Prinsell Scholarship
Rapp Scholarship
Rev. Bertrand E. Rudd Scholarship
Shisler Scholarship
Howard F. and Guendolen S. Smith Scholarship
Snowberger Scholarship
Ethlyn Stebbins Foundation
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
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
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.
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
Lucele Hatch Wilson Scholarship: teaching
Fred and Floy Willmott Scholarship: United Methodist

## Canadian Student Grant

All new Canadian students will receive a $\$ 3,000$ scholarship. 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 $\$ 750$ a 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 1st to ensure a matching scholarship for the following academic year. Church funds must be received in the Student Financial ServicesOffice by Dec. 31st. Money used for the scholarship must be from sources which are "detached and of disinterested generosity" (i.e., not family). Please contact the financial aid 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 $\$ 8,145$ 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 cumulative grade point average is maintained.

## International Student Scholarship

International students may apply for assistance from the International Student Scholarship program. Awards range from $\$ 1000$ to $\$ 2000$ 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 and the Houghton College Financial Aid Application.

The first five 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 entering in the 2000-01 academic year will receive a grant of \$1,000 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 District Scholarship

Each district of The Wesleyan Church may designate one new student per year to receive a scholarship of $\$ 2,500$.

## 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.

## Parental Christian Service Grant

Students whose parents are ordained or licensed ministers or missionaries and are employed fulltime 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 $\$ 2,000$ 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 $\$ 1,650$ 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.

## 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, internships, and the courses in applied art, applied music, and applied physical education. 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 $\$ 1000$ or over. Presently of use to students are the following:
Name Loan Funds Established by

Jennie E. Alexander Fund
*Darrow Basney Fund
*Lucius H. \& Mary E. Fancher Fund
Kenneth Hill Glasier Fund
Lee Christian Service Loan Fund
Henry F. Meeker Jr. Fund George M. Press Fund Clarence Watson Fund larence Watson Fund Bequest
*Interest-free while borrower is in school; 6 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 (716-567-9328).

Houghton College is approved by the New York State Education Department for the training of veterans.

Orphaned children of veterans my enroll under Public Law 634 ("War Orphans Act"). A Certificate for Education and Training is required before proceedings for monthly allowances can be initiated. Application for this certificate is made to the Veterans' Administration. Inquiry for specific information regarding this subsistence grant may be addressed to the director of financial aid.


## Academic Vice President and Dean of the College

The dean is the chief academic officer at Houghton. Questions concerning academic policy and programs should be directed to the dean. The office is on the first floor of Luckey Building.

## Dean of Academic Administration/Associate Academic Dean

The dean of academic administration supervises the delivery of the academic programs and curricula of the college; administers and applies student-related academic regulations and policies, and carried out other responsibilities as assigned by the academic vice president.

## Academic Records

The director of academic records will answer 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 fifteen departments: Art, Biology, Business and Economics, Chemistry, Education, English and Communication, Foreign Languages, History and Political Science, Integrative Studies, Mathematics and Computer Science, Physical Education/Exercise Studies and Recreation/Leisure, Physics and Earth Science, Psychology and Sociology, Religion and Philosophy, and the School of Music. 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 nonteaching 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 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. 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 Horsemanship, ROTC, or Theater Workshop may count toward graduation. 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.

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 will require a petition.

## Second Degree

A second bachelor's degree (different from the first one) may be earned by completing 30 additional semester hours in residence and fulfilling all the requirements for the second degree, the major for which shall be in an area unrelated to the major of the first degree. A second degree is not to be confused with a double major, for which only one degree is granted.

## 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 college requires a minimum of 90 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.

## 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 90 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

A student who earns the associate in arts degree by completing a total of 62 semester hours (plus one credit for FYI) distributed in three categories: 42 hours in level I integrative studies requirements, 15 to 16 hours in a departmental concentration, and 2 or 3 hours of electives in two different areas.

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.

## 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.

This program is designed to prepare students for church work as pastors' assistants, youth leaders, and Sunday school teachers. More information is available in the academic records office.

## 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:

| Department of Art | Degree | HEGIS Code* |
| :---: | :---: | :---: |
| Art | BA | 1002 |
| Department of Biology |  |  |
| Biology | BA, BS | 0401 |
| General Science | BA, BS | 4902 |
| Department of Business and Economics |  |  |
| Accounting | BS | 0502 |
| Business administration | BS | 0506 |
| Department of Chemistry |  |  |
| Chemistry | BA, BS | 1905 |
| General science | BA, BS | 4902 |
| Department of Education |  |  |
| Childhood Education | BS | 0802 |
| 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 |
| Department of English and Communicat |  |  |
| Communication | BA, BS | 0601 |
| English | BA | 1501 |
| Writing | BA, BS | 1507 |
| Department of Foreign Languages |  |  |
| French | BA | 1102 |
| Spanish | BA | 1105 |
| Department of History and Political Scien |  |  |
| History | BA | 2205 |
| International relations | BA | 2210 |
| Political science | BA | 2207 |
| Department of Integrative Studies |  |  |
| Intercultural studies | BA | 2210 |
| Department of Mathematics and Compu | er Science |  |
| Computer Science | BS | 0701 |
| Mathematics | BA | 1701 |
| General science | BA, BS | 4902 |


| School of Music |  |  |
| :---: | :---: | :---: |
| Music | BA | 1004 |
| Music Education | BMus | 0832 |
| Piano | BMus | 1004 |
| Voice | BMus | 1004 |
| Stringed Instruments | BMus | 1004 |
| Organ | BMus | 1004 |
| Brass Instruments | BMus | 1004 |
| Woodwinds | BMus | 1004 |
| Composition | BMus | 1004.10 |
| Department of Physical Education/Recreation |  |  |
| Physical education | BS | 0835 |
| Recreation | BS | 0835 |
| Department of Physics and Earth Science |  |  |
| Physics | BA, BS | 1902 |
| General science | BA, BS | 4902 |
| Department of Psychology and Sociology |  |  |
| Psychology | BA | 2001 |
| Sociology | BA | 2208 |
| Department of Religion and Philosophy |  |  |
| Bible | BA, BS | 1510 |
| Christian ministries | AAS | 5502 |
| Church ministries | BS | 1510 |
| Educational ministries | BS | 1510 |
| Humanities | BA | 4903 |
| Ministerial | BS | 2301 |
| Philosophy | BA | 1509 |
| Religion | BA | 1510 |
| Interdisciplinary/Special Studies |  |  |
| Management | BS | 0515 |
| Liberal arts | AA | 5649 |

## *HEGIS - Higher Education General Information Survey

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. Majors are elaborated above; minors may be found in the academic programs section of this catalog.

## Contract Minor

This option is available for students wishing to specialize in an area not covered by an existing minor. It consists of 12-15 hours of courses 211 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 (General Education) 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. 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.)
b. The student on academic probation is not permitted to take more than 15 hours.
c. 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.
d. 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.
e. 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.
f. 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 doublecounting 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 childhood education major.

## Examination Attendance

Students absent from a test or examination may be allowed to make up the examination at the discretion of the professor. A $\$ 10$ fee may be charged for makeup tests and examinations.

## Final Exam Policy

Houghton College does not have an official final exam policy. However, if a student believes the scheduling of too many exams in one day poses a problem, she or he may appeal to the Academic Dean's office.

## 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 taxexempt corporations under federal law).

## Grading System

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

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

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 an " $F$ ". Incomplete forms must be obtained from the academic records office.
P-Indicates satisfactory work done (equivalent to a regular grade of D or above); gives semester hours but no quality points.
U-Indicates unsatisfactory work; credit is not earned from the course and does not figure in the overall quality point average.
M-Indicates no grade was assigned. It may be used at midsemester 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, in writing, again, within ten 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 ten 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.)

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 totalled, 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 |
|  | Pre-Calculus | 3 | D+ | 1.33 | 3.99 |


| Intro to Psychology | 3 | $\mathrm{~B}+$ | 3.33 | 9.99 |
| :--- | :---: | :---: | :---: | :---: |
| Intermediate Spanish | 4 | $\mathrm{~A}-$ | 3.67 | 14.68 |
|  |  |  |  |  |
| Totals | $\boxed{16}$ |  | NA | $\overline{\mathrm{NA}}$ |

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.

## Honesty

Students are expected to exhibit extreme care relative to personal honesty in the classroom, in homework, in papers submitted to the instructor, and in quizzes and tests.

Dishonest work in written assignments is (a) the receiving of aid or information without giving due recognition to the source from which the aid or information was obtained, or (b) the giving of aid or information without ascertaining that due recognition is being given to the source. Each professor shall define to the class what constitutes dishonest work in the course.

Students found guilty of dishonesty in any daily work, notebook work, term papers, or tests will automatically receive a zero for that work. All offenses after the first shall be referred to the associate dean.

Any dishonesty on a test or examination will be referred to the associate dean and will result in loss of credit for the course and a notation on the permanent records of the college.

Dishonest work may be considered grounds for suspension from the college. Unauthorized use of college computing equipment, facilities, or programs may also be considered grounds for suspension from the college and may lead to more serious consequences.

## 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 QPA of 2.0 for unconditional classification in any class.

## Academic Guidance \& Probation

Each incoming student is assigned a faculty mentor who is responsible for academic advising during the first year. A student receiving a semester quality point average below 2.00 but who is not placed on academic probation is placed on academic guidance and is encouraged to work closely with the mentor or 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 mentor or 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.

## 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 studies at Houghton.

A student dropped from the student body for the above reason and readmitted by the Admissions 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 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 3.25 ; for magna cum laude, at least 3.50, and for summa cum laude, at least 3.80.

Students transferring from other colleges must complete $\mathbf{6 2}$ 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.

## 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 associate academic dean 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 1,2 , or 3 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 regular course offerings. 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 4 -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-inabsentia 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 (716/567-9239). Students needing facility adjustments must contact Jeffrey B. Spear, Vice President for Finance and 504 Coordinator (716/ 567-9312). The complete Policy for Students with Learning-Related Disabilities may be obtained from Dr. Hice 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 request to take more than 18 credit hours in a semester
Further information is available in the academic records office.

## 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 upontwoormorelowernumbered courses inthesamedisciplineclasssize 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 |
| 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 |
| F02 | Course offered in fall, even-numbered years |
| F01 | Course offered in fall, odd-numbered years |
| S03 | Course offered in spring, odd-numbered years |
| S02 | Course offered in spring, even-numbered years |
| F/S | Course offered in two-semester sequence |
| F/S 01-02 | 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, which was intended to be accurate at the time of printing.

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 office of academic records.


| DISTRIBUTION OF HOURS FOR ACADEMIC MAJORS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CREDIT HOURS |  |  |  |  |  |  |  |
| Deg. | Major | *IS I | IS II | Pre-/ Co-req. | Major | Req'd Other | Minor \& electives |
| BS | Accounting | 39 g | 6k | 15 | 46 |  | 19 |
| BA | Adolescence (Sec) | Ed 44m | 9 j | 6 | 39-40 | 2nd major | ? |
| BA | Art | 39a | 12 |  | 49** |  | 25 |
| BA | Bible | 42 | 9 c |  | 27 |  | 47 |
| BS | Bible | 42 | 9c |  | 27 |  | 47 |
| BA | Biology | 38h | 9 j | 16 | 26 |  | 36 |
| BS | Biology | $35 i$ | 9 j | 36 | 26 |  | 19 |
| BS | Business Adm. | 39 g | 6k | 9 | 34 |  | 37 |
| BA | Chemistry | 38 i | 9 j | 19 | 35 |  | 24 |
| BS | Chemistry | 35 i | 9 j | 25 | 34 |  | 22 |
| BS | Childhd (Elem) Ed | d 40 m | 6d,j | 9 | 50 | 30-31 conentn | ? |
| BA | Communication | 43 f | 9 c |  | 30 |  | 43 |
| BS | Computer Science | 39a | 9c | 8 | 36 |  | 33 |
| BS | Chur. Ministries | 42 | 9 c |  | 27 | +37 music | 0 |
| BS | Educ. Ministries | 42 | 9c |  | 39 | +12 Bible | 26 |
| BS | Elementary Ed\# | 43 | 9c | 18 | 40 | 21 concntn | ? |
| BA | English | 39 g | 9c | 6 | 30 |  | 41 |
| BA | French | 42 | 9 c |  | 27-33 |  | 41-47 |
| BA | General Science | 35 b | 9c |  | 46 |  | 35 |
| BS | General Science | 36 b | 9 c |  | 46 |  | 34 |
| BA | History | 42 | 9c |  | 27 |  | 47 |
| BA | Hist. (aug.) | 40a | 9c |  | 36 |  | 40 |
| BA | Humanities | 42a | 6 e |  | 37 |  | 40 |
| BA | Intercultural Stu | 39 g | 6d |  | 35-44 |  | 36-45 |
| BA | Intnt'l Relations | 40a | 9 c | 3 | 38-39 |  | 37-38 |
| BA | Mathematics | 39a | 9 c |  | 28 |  | 49 |
| BS | Ministerial | 43 | 9 c | 15 | 39 |  | 19 |
| BA | Music | 39 | 12 |  | 36-37 |  | 37-38 |
| BMus | Music: Perform | 27 | 0 |  | variable |  | ? |
| BMus | Music: Educ. | 27 | 0 |  | variable |  | ? |
| BMus | Music: Theory | 27 | 0 |  | variable |  | ? |
| BA | Philosophy | 42 | 12c |  | 24 |  | 47 |
| BS | Ph. Ed: Teach. | 39 h | 6k | 12 | 38 | +30 educ | 2 |
| BS | Ph. Ed: Non-tch'g | 39h | 6k | 8 | 24 |  | 48 |
| BS | Ph. Ed: Ath Tng | 39 h | 6k | 19 | 53-55 |  | 0 |
| BS | Ph. Ed: Phys. Fit. | 39 h | 6k | 18 | 37 | +3-12 intnshp | 14-22 |
| BA | Physics | 35 i | 9 j | 16 | 24 |  | 41 |
| BS | Physics | $35 i$ | 9 j | 16 | 31 |  | 34 |
| BA | Political Science | 39 g | 9 | 3 | 27 |  | 47 |
| BA | Psychology | 42 h | 9c | 3 | $31^{* *}$ |  | 40 |
| BS | Rec: Therapeu. | 38h | 6k | 10 | 31 |  | 40 |
| BS | Rec: Otdr/Camp | 42 | 6k | 8 | 32 |  | 38 |
| BA | Religion | 42 | 9c |  | 38 |  | 36 |
| BA | Sociology | 39 | 9 c | 3 | 24 |  | 50 |
| BA | Spanish | 42 | 9 c |  | 27-33 |  | 47 |
| BA | Writing | 42 g | 9 c |  | 30 |  | 44 |
| BS | Writing | 42 g | 9 c |  | 30 |  | 44 |

* does not include any hours of beginning language (elective credit)
${ }^{* *}$ students with a double major (art plus another academic discipline) need only 37 hours; see Art Department pages.
*** students with a double major may satisfy psychology major requirements with 25 hours.
\# only for students who can complete their el ed major by Dec. 2003.
Notes a-k on next page.

| Notes: | a | = | 3 hours of level I included in major |
| :---: | :---: | :---: | :---: |
|  | b | = | 7 hours of level I included in major |
|  | c | = | 3 hours of level II included in major |
|  | d | = | 6 hours of level II included in major |
|  | e | = | 9 hours of level II included in major |
|  | f | = | 2 hours of level I replaced by 3 hours in prerequisite |
|  | g | = | 3 hours of level I included in prerequisites |
|  | h | = | 4 hours of level I included in prerequisites |
|  | i | = | 7 hours of level I included in prerequisites |
|  | j | = | 3 hours of level II included in prerequisites |
|  | k | = | 6 hours of level II included in prerequisites |
|  | m | = | 2 hours of level I included in the major |
|  | qui |  |  |
|  |  |  |  |
|  |  |  |  |

## Academic program note

A student's academic program normally contains six elements:
integrative studies, level I
integrative studies, level II
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.

Faculty: Paul Young (chair), Cameron Airhart, Bruce Brenneman, Carlton Fisher, Robert Galloway, Mark Hijleh, Richard Jacobson, Ben King, Jayne Maugans, Terence Paige, Christopher Stewart, James Wardwell, Stephen Woolsey

## 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 (formerly "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, and writing. The following requirements should be taken in the first year: physical education and research. Total hours for integrative studies equals 54 .

Level I (42 hours)
(1) College Orientation Reqmnt: CLLS 101 FYI (First Year Introduction)
(3) Writing: ENGL 101 Principles of Writing. Students with a score of 670 or higher on the verbal portion of the SAT are to take Advanced Composition (WRIT 212 or 213) in place of POW.
(0) Research (This requirement is attached to several first level IS courses each semester See Master Schedule for approved courses.)
(3) Literature: ENGL 201 Lit. of Western World
(2) Communication: COMM201 Fundamentals of Speech, or one of these:
*(3) COMM 210 Public Speaking
*(3) COMM 216 Organizational Communication
[*Hours above 2 count for degree but not for level I]
(4) Intermediate Language
(Childhood education majors have different language requirement; see Education in Academic Programs section.)
$(4,4)$ Beginning Language I and II may be prerequisite
(Students whose native language is other than English may satisfy the foreign language requirement with English if their TOEFL score is 550 or above.)
(3) Social Science, chosen from:

ECON 210 Microeconomics
ECON 211 Macroeconomics
POLS 101 Introduction to Politics
SOC 101 Introduction to Sociology
SOC 243 Cultural Anthropology
$(2,2)$ Western Culture
HIST 101, 102 Western Civilization I and II
$(1,1)$ Physical Education:
PHED 101 Lifetime Wellness
PHED 102 Physical Education (or alternatives listed under Physical Education
or Recreation course descriptions in Academic Programs section of this catalog)
(3) Mathematics, chosen from:

MATH 107 Pre-Calculus
MATH 181 Calculus I
MATH 182 Calculus II
MATH 261 Linear Algebra
(4) Science (with lab), chosen from

BIOL 103 Fundamentals of Biology
BIOL 105 Conservation Biology
BIOL 151 General Biology
CHEM 207, 208 Intro to Nutrition and Lab
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
ESCI 224 Atmospheric Science
PHYS 101 College Physics
PHYS 151 General Physics
$(3,3)$ Biblical Foundation
(3) Biblical Survey: BIBL 101 Biblical Literature
(3) Christian Theology: THEL 209 Intro to Christianity
$(2,2)$ Philosophical Foundation
(2) Knowledge and Reality: PHIL 200 Knowledge and Reality
(Not required for Childhood or Adolescent education majors.)
(2) Values: PHIL 201 Ethics, or PHIL 225 Aesthetics
(3) Music or Art, chosen from

ART 131 Introduction to Visual Arts
ART 230 Art in Europe Since Renaissance
ART 231 Ancient Art History
ART 232 Renaissance Art History
ART 233 Art for Grade Teacher (only for Childhood Ed majors)
ART 237 Modern Art History
ART 314 Art and History of Film
ART 322 Contemporary Art and Critical Theory
Two- and three-dimensional Design plus: Drawing I, Painting I, Ceramics I,
Print-making I, Graphic Design I, Sculpture I, Photography I
MHS 113 Masterworks of Sight and Sound
MHS 111 Intro to Music and Listening

MHS 222 Intro to Film Music
MHS 254 Music of World Cultures
CHMU 216 Intro to Hymnology (ministerial program only)
CHMU 351 Music in Christian Worship
MUS 137, 143, 145, 147, 149 Ensembles

Note: INTS 152 Honors Study in London satisfies Level I IS requirements in western civilization, philosophy, literature and fine arts.

## Level II (12 hours)

(3) Languages and Literature-Any course in the Departments of English / Communication and Foreign Languages not used in level I (including any literature courses in the Department of Foreign Languages, but not including practicums, internships, foreign languages, English grammar, and theatre workshop).
(3) History and Social Science - Any course in the Departments of Business/Economics, History/Political Science, and Psychology/Sociology not used in level I (excluding SOC/PSY/POLS 309 Statistics, SOC/POLS 312 Research Methods, and all accounting and business courses).
(3) Mathematics and Sciences - Any math course numbered above 155 or any other course from the departments of biology, chemistry, physics \& earth science not used in level I or CSCI 155.
(3) Advanced Bible - Any Bible course numbered BIBL 211 or above except BIBLE 24 Holy Land Tour, and BIBL 251 Bible History and Geography.

## Houghton College Integrative Studies Requirements - BMus

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

## Integrative Studies Research Requirement

Each student is required to fulfill an information research requirement by registering for an Rdesignated course and successfully completing all research-related requirements. This includes participation in a number of library sessions and completion of the research requirements for a particular course. R-courses are designated in the Master Schedule. There are 15 to 20 lower-level, integrative studies courses designated as R-courses each semester - for example, ENGL 101FR, PSY 111AR, PHIL 201BR.

## Course Descriptions

CLLS 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 and at 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 freshmen.

INTS 152 Honors Study in London
Combines a traditional humanities curriculum with the opportunity to study in London. Integrating 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. Admission is selective. Satisfies Level I Integrative Studies requirements in western civilization, philosophy, literature, and fine arts.

## ACCOUNTING (MAJOR AND MINOR)

Department of Business and Economics: Kenneth Bates, chair
Faculty: Jonathan Bradshaw, Raymond Martel
Major: (46 hours in the major; 15 in pre/co-requisites)
The accounting major is a registered accounting curriculum in New York State and meets all of the educational requirements for certification in the accounting profession.
Required courses for the major but without major credit:
Accounting Principles I \& II (ACCT 211, 212)6
Micro and Macroeconomics (ECON 210, 211) ..... 6
Computer Applications and Issues (BADM 155) ..... 3
Total: ..... 15
Major required courses:
Business Law I \& II (BADM 213, 214) .....  6
Financial Management (BADM 406) .....  3
Investment Management (BADM 302) .....  3
Statistics I (BADM 309) .....  3
Intermediate Accounting I \& II (ACCT 311, 312) ..... 6
Cost Accounting (ACCT 314) .....  3
Auditing (ACCT 315) ..... 3
Federal Income Tax (ACCT 316) ..... 3
Accounting Information Systems (ACCT 317) ..... 3
Advanced Accounting (ACCT 418) .....  3
Principles of Management (BADM 212) ..... 3
Marketing Principles (BADM 218) .....  3
Senior Seminar (BADM 481) .....  1
Total:43
Major elective credit courses; choose 3 hours
Business Communication (BADM 301) ..... 3
Human Resources Management (BADM 314) .....  3
Business Strategy \& Policy (BADM 421) ..... 3
Internship in Accounting (ACCT 417) ..... 6
Honors in Business (BADM 496) ..... 3
Economics courses numbered 200 or above .....  3
Total: ..... 3

## Minor

An accounting minor consists of 15 hrs above Accounting Principles I (ACCT 211). A student electing to take an accounting minor with a business administration major may not use accounting courses to fulfill elective requirements in the major area.

## Course Descriptions

## ACCT 211 Accounting Principles I

Basic theory and practices of financial accounting for proprietorships and partnerships.

## ACCT 212 Accounting Principles II

Accounting for corporations, cost accounting and statement analysis. Prerequisite: ACCT 211.
ACCT 311 Intermediate Accounting I
Measurements and valuation of assets, liabilities, and equities. Accounting principles and standards. Prerequisite: ACCT 212.

## ACCT 312 Intermediate Accounting II

Special problems in accounting. Accounting for contingencies, bonds, pensions, leases, consolidations. Financial position and statement analysis. Prerequisite: ACCT 311.

## ACCT 314 Cost Accounting

Job order cost accounting, process cost accounting, standard cost systems, cost allocations, budgeting, cost-profit-volume analysis, behavioral considerations. Prerequisite: ACCT 212.

## ACCT 315 Auditing

Practices and procedures used by internal auditors and CPAs in verifying financial statements and records of organizations; legal and ethical requirements of auditor. Prereq: ACCT 212 or permission.
ACCT 316 Federal Income Tax

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.
ACCT 317 Accounting Information Systems
Design, maintenance, monitoring of computerized accounting systems. Includes systems and audit concepts. Prerequisites: BADM 155, ACCT 211, 212.

## ACCT 323 Tax Practicum

Supervised preparation of tax returns through the Voluntary Income Tax Assistance Program sponsored by the Internal Revenue Service. Prerequisite: ACCT 316.
ACCT 418 Advanced Accounting
Addresses complex issues in accounting including business combinations, consolidated statements, partnerships, government and not-for-profit organizations, foreign operations, and other current topics in the field. Prerequisite: ACCT 312.

ACCT 421 Internship in Accounting
Supervised experience in corporate or public accounting. By application only.
ACCT 460 CPA Review (P/F)
Computer assisted study and review of all areas covered on the CPA exam. Prerequisites: senior accounting majors or permission.
ACCT 295, 395, 495 Special Topics

## ART (MAJOR AND MINOR)

Department of Art: Scot E. Bennett, chair
Faculty: Gary Baxter, Scot E. Bennett, Theodore J. Murphy, John Rhett

## 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 field 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 or
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
ART 245 Graphic Design I
ART 251 Sculpture I
ART 261 Printmaking I
ART 271 Ceramics I
ART 281 Photography I
Total 9
Four of the following five:
ART 231 Ancient Art History
ART 232 Renaissance Art History
ART 234 Art and Architecture in Europe
ART 237 Modern Art History

$$
\begin{aligned}
& \text { ART } 322 \text { Contemporary Art \& Critical Theory } \\
& \text { Total } \\
& 12
\end{aligned}
$$

## 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:
ART 211 Drawing I ..... 3
ART 241 Two-dimensional Design .....  3
ART 242 Three-dim ..... 9
Three of the following five:
ART 231 Ancient Art HistoryART 232 Renaissance Art HistoryART 234 Art and Architecture in EuropeART 237 Modern Art HistoryART 322 Contemporary Art \& Critical Theory
Total 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 allother 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

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.

## ART 371 Ceramics II

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

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

## ART 472 Advanced Ceramics

Self-directed study in consultation with the instructor. Emphasis on development of a quality body of work for exhibition. Prerequisite: ART 471.

## Design

## ART 241 Two-dimensional Design

Theory and application of compositional elements and principles of design. Experiences in twodimensional problem solving. Lecture, group critiques, discussion.

## ART 242 Three-dimensional Design

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

## Drawing

ART 211 Drawing I
Basic introduction to drawing media and techniques; exploration of concepts of form and space in varied subject matter.

## ART 311 Anatomy and Figure Drawing

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 Draw

Introduction to theory and practice of graphic design communication. Emphasis on techniques for exploration of 2-dimensional problems, and interpretation of verbal to visual form. Computer design is introduced.

## ART 345 Graphic Design II

Further development of conceptualization and visualization skill within graphic design media, including computer design. Assignments directed towards commercial production.

## ART 445 Graphic Design III

Subjects include advertising campaigns, corporate identity systems, and a variety of complex contemporary design problems.
ART 446 Advanced Graphic Design
Intense study in preparation for challenges facing the design professional. Special emphasis in one or two areas of expertise, leading to presentation of designer's portfolio. Prerequisite: ART 445.
ART 447 Graphic Design Internship
$(3, O D)$
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.

## ART 321 Painting II

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

Emphasis on individual development and refinement of personal expression in various approaches to painting. Prerequisite: ART 321.
ART 422 Advanced Painting
Self-directed study in consultation with the instructor. Emphasis on development of a quality body of work for exhibition. Prereq: ART 321.

## Photography

ART 281 Photography I
(3, F\&S)
Introduction to basic black and white photographic processes and design principles. Emphasis on criticism, expression, composition within context of photographic print. Technical aspects of film developing, paper printing, presentation. Survey of history of photography; comparative analysis of other media in visual arts.

## ART 381 Photography II

Continued development of technical and aesthetic skills within black and white processes. Expressive possibilities of special-effect films, filters, chemical, manipulative processes.

## ART 481 Photography III

$(3, O D)$
Continued exploration of advanced techniques in black and white and color processes. Individualized study will be structured by art faculty to meet needs of each student. Prerequisite: ART 381.

## ART 482 Advanced Photography

Self-directed study in consultation with the instructor. Emphasis on development of a quality body of work for exhibition. Prereq: ART 381.

## Printmaking

ART 261 Printmaking I
(3, F\&S)
Introduction to the multiple art object through relief and intaglio processes. Examination of historical significance of print media.

ART 361 Printmaking II
Continued development of conceptual, compositional, technical expertise in one or two printmaking processes, including lithography. Emphasis: color multiple image. One-on-one instruction, group critiques. Prerequisite: ART 261.

## ART 461 Printmaking III

Individual examination of photo- and/or combination-process print-making, concentrating on personal expression through printmaking medium. Prerequisite: ART 361.

ART 462 Advanced Printmaking
(3, OD)
Self-directed study in consultation with the instructor. Emphasis on development of a quality body of work for exhibition. Prereq: ART 361.

## Sculpture

ART 251 Sculpture I
(3, F01 \& 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.

## ART 351 Sculpture II

$(3, O D)$
Exploration of 3-dimensional form/space through individual creative experiences working with various sculptural media. Prereq: ART 251.
ART 451 Sculpture III
$(3, O D)$
Advanced exploration of various sculptural concepts with development of the personal statement in one or more media. Prereq: ART 351.
ART 452 Advanced Sculpture
Self-directed study in consultation with the instructor. Emphasis on development of a quality body of work for exhibition. Prereq: ART 451

## Special Topics

ART 395 Special Topics
Designed to provide opportunity for students to explore avenues within visual art not covered in other courses. Examples include furniture design, illustration, watercolor, papermaking and bookmaking.

## 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.

## ART 132A Art and Architecture in Context in Europe

(3, M02)
A course for the non-art student participating in the Mayterm trip to Europe. Students are given selected readings and are required to answer a number of essay questions related to the work they will be viewing. A detailed journal of the trip, a written summation of that journal and the essay questions must be submitted.

## ART 231 Ancient Art History

History of world art from prehistoric to the 14th century. Emphasis on function of art as visual communication of religious, political, and social concerns.

## ART 232 Renaissance Art History

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.

## ART 233 Art for the Grade Teacher

Lecture-laboratory combination to give the future elementary teacher a grasp of art education theory and the creative use of materials and methods for various age groups. Prerequisite: permission.

## ART 234A Art and Architecture in Europe

Approximately 20 days studying the art and artists from antiquity to the present. Credit may be taken for Intro to Visual Art, Art Major/Minor Studio or Art History.

ART 237 Modern Art History

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.
ART 314 The Art and History of Film
An introduction to the history, craft, theory and critical content of film; 15 films viewed in class, 20-25 outside of class research work.

## ART 322 Contemporary Art \& Critical Theory

Introduction and discussion of influences and developments at work in the world of contemporary art, including pop, minimalism and performance art. Multicultural and post-modernist ideas and the role of art critics in shaping dialogue will also be considered.

## Senior Concentration

ART 485 Senior Seminar and Concentration
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, and critique comprise the course atmosphere. Required of all art majors during the fall semester.
ART 486 Senior Concentration and Thesis
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 art majors in the spring semester. This course is repeatable for extra studio emphasis.

## ATHLETIC TRAINING (SEE PHYSICAL EDUCATION)

## BIBLE (MAJOR AND MINOR)

Department of Religion and Philosophy: Harold Kingdon, chair
Faculty: Richard Eckley, Harold Kingdon, Kristina LaCelle-Peterson, Terence Paige, Carl Schultz
Part-time: David O'Brien

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 .

Minor: (12 hours in Bible, numbered 211 or above)

## 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 course is a prerequisite for all other Bible courses and THEL 209.
BIBL 221 Biblical Interpretation
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.

## BIBL 231 Pentateuch

Analysis of critical and historical background, literary content, and development of the religion of Israel. Relevancy of contents.

## BIBL 233 Life of Christ

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.

## BIBL 251 Bible History and Geography

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.

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.

## BIBL 303 Old Testament Historical Books

Study of the twelve Books of History, including Joshua through Esther. Integrates critical, analytical, and devotional approaches, and combines inductive and lecture methods.

BIBL 310 Old Testament Prophets I
Historical background, biographical data, critical problems, and contents of Isaiah, Jeremiah, and six minor prophets preceding the Babylonian captivity. Relevancy of messages.
BIBL 312 Old Testament Prophets II
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.

BIBL 321 Poetic Books
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.
BIBL 331 Early Pauline Epistles
The epistles of Paul's major missionary travels: the Thessalonian, Corinthian, Galatian, and Roman letters. Background, contents, analysis of key passages.

## BIBL 333 Later Pauline Epistles

Paul's prison epistles and pastoral epistles. Analysis of each book; exposition of great passages.
BIBL 335 General Epistles
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.

BIBL 337 Gospel and Epistles of John
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.
BIBL 351 Daniel/Revelation
(3, May)
A study of the nature of apocalyptic literature, critical problems, and various systems of interpretation.
BIBL 361 Job
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.
BIBL 363 Dead Sea Scrolls
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.

BIBL 371 Book of Acts
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.
BIBL 395 Special Topics in Bible
Study of select blocks or groups of scripture related to a particular topic or theme.
BIBL 410 Isaiah
A study of the historical, critical, and contextual issues, with an emphasis on a vital faith to our generation.

## BIBL 412 Jeremiah

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.
BIBL 4531 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 191, -2; 291, -2; 391, -2; 491,-2 Independent Study
BIBL 496 Honors in Bible

BIOLOGY, BA, BS (MAJOR AND MINOR)<br>Department of Biology: James M. Wolfe, chair<br>Faculty: J. Kenneth Boon, Timothy O. Leonard, Davis C. McGuirt, Matthew K. Pelletier, James M. Wolfe<br>Part-time: David Odell, David Schwert

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
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.

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 Seminar ............................................................ 1
Co-requisites (8):
CHEM 151, 152 8

Graduates from this program primarily enter the field of science teaching in secondary schools.
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 Seminar ....................................................... 1
BIOL $x x x$ At least one course with zoological emphasis ....... 4
Field experience required 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 ...................................................................... 8
ESCI 101 Physical Geology ......................................................... 4
ESCI 212 Environmental Earth Science (Offered on demand) ......... 3
Recommended courses include the following:
SOC 309 Statistics3
CSCI 151 Computer Science I ..... 3
REC 401 National Resource Management ..... 3

The BA in biology with environmental emphasis prepares students for careers in environmental education, analysis, and research. Students may opt for a BS with environmental emphasis by taking Organic Chemistry, Physics, and Calculus I (see BS program). Students can take the New York State civil service exam for application as a conservation biologist to the NYS Department of Environmental Conservation.

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Biologist (wildlife) (18 hours required)
    BIOL }105\mathrm{ Conservation Biology (4)
    BIOL 214 Wildlife Biology (3)
    BIOL 364 Animal Ecology (4)
    BIOL XXX Special Topics: Ornithology (4)
    BIOL }211\mathrm{ Ecology of Alaska (4)
    REC 401 Natural Resources Management (3)
Biologist (ecology) (18 hours required)
    BIOL }151\mathrm{ 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)
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Biology minor: (12 hours above BIOL 151, 152)

## Environmental Studies

Environmental studies at Houghton takes 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 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 8 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 for science and nonscience 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.

## Course Descriptions

## BIOL 103 Fundamentals of Biology

(4, F\&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. Sections may emphasize either human or environmental aspects.
BIOL 105 Conservation Biology
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 lecture, three laboratories each week.
BIOL 151, 152 General Biology
(4/4, F/S)
Two-semester survey; preparation for advanced work. 151 includes cell biology, genetics, animal taxonomy, behavior and development; 152 includes plant taxonomy and physiology, ecology and
animal physiology. Three lecture, three laboratory each week. Note: BIOL 151 or permission is prerequisite to BIOL 152. BIOL 151 and 152 are prerequisites for most biology courses numbered above 200.

BIOL 207 or 212 Wildlife Behavior in East Africa
(3 or 4, F)
Ethology of East African wildlife including the principles of feeding and social behavior, mate selection, migration and communication. Lectures and two weeks of field observations at the Tanzania Field Station. Daily field notes in a journal are required. Only BIOL 212 may be used for major credit. Additional work will be required.
BIOL 211 The Ecology of Alaska
(3 or 4, Summer 03)
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 $\$ 1500$. Prerequisite: BIOL 152.

BIOL 214 Wildlife Biology
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
$(3, F 02)$
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
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. Counts for major credit only in BA Biology degree.
BIOL 218 Human Anatomy and Physiology II
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. Counts for major credit only in BA Biology.

## BIOL 220 Biological Oceanography

(2, May02)
Laboratory adjacent to Acadia National Park, Maine. Course includes adaptations of marine organisms to the marine ecosystems, biogeochemical cycles, stewardship of the marine environment. Field trips include rocky intertidal, cobble and sandy beaches, salt marshes, open ocean ecosystems. Cost above tuition and lab fee: \$600.
BIOL 221 Plant Anatomy and Physiology
$(4, S 02)$
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
$(4, \mathrm{~S} 02)$
Comparative study of vertebrate structure. Laboratory includes dissection and detailed study of representative vertebrates. Two lecture, six laboratory hours each week.

## BIOL 242 Microbiology

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, F01)
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 311 Invertebrate Biology
(4, S03)
Morphology, physiology, taxonomy of invertebrate phyla, including selected parasites and their life cycles. Two lecture, six laboratory hours each week.

## BIOL 322 General Ecology

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 350 Forest Ecology

Study of forests and their interactions with physical, chemical, and biological factors in the context of ecosystems. Includes physiognomy, nutrient cycling, climatic factors, soils, fire and disturbance, succession, and harvesting and management. Lab includes forest mensuration and analysis and introduction to SILVA. Three lecture, three laboratories each week. Prerequisites: BIOL 322 or 301.
BIOL 361 Vertebrate Histology
Microscopic anatomy of vertebrate tissues and organs. Two lecture, six laboratory hours each week.
BIOL 364 Animal Ecology
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

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 366 Molecular Biology

Basic molecular mechanisms of carcinogenesis, embryogenesis and cell metabolism, DNA and protein chemistry, biotechnology and its impact. Includes a survey of state-of-the-art laboratory techniques used in molecular biology. Three lectures, three laboratory hours each week. Prerequisite: BIOL 251.
BIOL 372 Comparative Animal Physiology
General consideration of functional processes in animals with emphasis on the comparative aspects. Three lecture, three laboratory hours each week.

## BIOL 382 Developmental Biology

Study of morphogenesis and biochemical processes involved in development, with emphasis on vertebrates. Three lecture, three laboratory hours each week. Prerequisite: BIOL 251.
BIOL 388 Cell Biology
The morphology, physiology and biochemistry of cells are covered from a variety of phyla. The role of cell theory in the rise of modern biology is explored to provide the student with an appreciation of the concepts that inform current approaches to organismal structure and function. Laboratory techniques include in-vitro culture, organelle isolation, and specific assays for cell identification. Three lecture and three laboratory hours per week. Prerequisite: BIOL 251. Recommended: BIOL 366.
BIOL 195, 395, 396 Special Topics
(1-4, F\&S)
Courses designed to meet the individual needs of advanced students in such areas as electron microscopy, introduction to clinical medicine, marine biology, microscopical techniques, medical terminology, limnology and ornithology. Some of the courses include laboratory.

BIOL 482 Senior Seminar
Discussions on history of biological science, ethical problems in biology and health related issues, and environmental issues. Each student presents a seminar to the entire department during the fall or spring of their senior year. Required of all biology majors during their final spring semester. Open only to majors.
BIOL 391, -2; 491, -2 Independent Study
Research under the supervision of a biology department faculty member. Total 5 credits.
BIOL 475 Environmental Stewardship Seminar
(1, F01)
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.

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 Bates, chair
Faculty: Kenneth Bates, Robert Black, Jonathan Bradshaw, Richard Halberg, Raymond Martel, Jeffrey Moore
Part-time: Thomas Fuoco

Major (BS): (34 hours; 9 in pre-co-requisites)..

Courses for major but without major credit:
Computer Applications and Issues (BADM 155) .................... 3
Micro and Macroeconomics (ECON 210, 211) ........................ 6
Prerequisite total: .......................................................................... 9
Major core courses:
Accounting Principles (ACCT 211, 212) .................................... 6
Business Law I (BADM 213) ...................................................... 3
Principles of Management (BADM 212) .................................. 3
Marketing Principles (BADM 218) ............................................ 3
Statistics (BADM 309) ................................................................. 3
Financial Management (BADM 406) ....................................... 3
Business Strategy and Policy (BADM 417) .............................. 3
Seminar (BADM 481) .................................................................. 1
Major core total: ......................................................................... 25
Elective major credit courses:
BUS, ACCT, or ECON courses numbered 200 or above ........ 9
Total: ........................................................................ 43

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

Management (any 2):
Business Communication (BADM 301)
Human Resources Management (BADM 314)
ST: Operations Management (BADM 395)
ST: Leadership Development (BADM 395)
Marketing (2):
Advertising \& Public Relations (BADM 312) and
Marketing Research (BADM 319) or
Business Communication (BADM 301) or
ST: eCommerce (BADM 395)
Finance (2):
Investment Management (BADM 302)
Money and Banking (ECON 301)
Economics (2):
Managerial Economics (ECON 315) or
Money and Banking (ECON 301) and
Industrial Economics (ECON 212)
International Business:
International Business Institute (IBI 331, 339, 350, 390) or
International Economics (ECON 212) and
International Business (BADM 313) and
an approved cross-cultural experience
Minor: A minor in business administration requires the following courses in addition to Computer Applications and Issues (BADM 155) and Micro or Macroeconomics (ECON 210 or 211).

Required:
Accounting Principles (ACCT 211) ........................................... 3
Principles of Management (BADM 212) .................................. 3
Plus 6 hours in business courses numbered 200 or above ..... 6

## Course Descriptions

## BADM 155 Computer Applications and Issues

(3, F\&S)
Introduction to personal computer applications: spreadsheet and database software, and webpage creation and publishing. Student teams work on real business computing projects. Discussion of current issues in computing. (Counts for upper-level Math/Science integrative studies.)
ACCT 211 Accounting Principles I
(See description under accounting section.)

## ACCT 212 Accounting Principles II

(3, F\&S)
(See description under accounting section.)
BADM 212 Principles of Management (CDRP, see Foreign Language)
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

Basic law covering contracts, agency, bailments, and negotiable instruments.
BADM 214 Business Law II
Basic law covering forms of business organization, sales, estates, bankruptcy. Prerequisite: BADM 213
BADM 218 Marketing Principles (CDRP, see Foreign Language)
Factors in product development, pricing, distribution, and promotion of consumer and industrial goods.

## BADM 220 Advanced Computer Applications

Advanced spreadsheet word processing and database software topics, management of DOS and Windows environments. Prerequisite: CSCI/BADM 155.

## BADM 301 Business Communication

Techniques and practices in business writing and oral communication. Prerequisite: BADM 212.
BADM 302 Investment Management
A study of stocks, bonds, mutual funds, commodities, real estate, investment analysis, and portfolio theory. Prerequisite: ACCT 211, 212 or permission.

## BADM 303 Entrepreneurship

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.
BADM 312 Advertising \& Public Relations
Prerequisite: BADM 218 (See description under communication.)
BADM 313 International Business (CDRP, see Foreign Language)
An examination of the variations in business management and practices in developed and less developed countries around the world. Prerequisites: BADM 212; ECON 110, or permission.

BADM 314 Human Resources Management (CDRP, see Foreign Language)
Personnel functions, relationships, employee selection, testing, training, and incentives. Prerequisite: BADM 212.

BADM 319 Marketing Research
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 406 Financial Management
Financial analysis, budgeting, working capital management, capital budgeting, sources of financing,
cost of capital. Prerequisites: ECON 110; ACCT 211, 212 or permission of instructor.
BADM 417 Business Strategy \& Policy (CDRP, see Foreign Language)
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.)

## 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 481 Senior Seminar
(1 or $2, \mathrm{~S}$ )
Exploration of current issues faced by management. Required of all senior business administration and accounting majors.
BADM 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
(1,2 or 3)
BADM 295, 395, 495 Special Topics
( $1,2,3$, or 4 )
BADM 496 Honors in Business

## CHEMISTRY (MAJOR AND MINOR)

Department of Chemistry: Irmgard Howard, chair
Faculty: Larry Christensen, Irmgard Howard, Bernard Piersma
Major BA: (35 hours in the major, 19 in co-requisites)
Major BS: (41 hours in the major, 19 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.

Required courses:
CHEM 151, 152 General Chemistry ........................................... 8
CHEM 241, 241 Organic Chemistry .......................................... 8
CHEM 277 Analytical Chemistry .............................................. 4
CHEM 278 Chemical Instrumentation ..................................... 4
CHEM 286 Special Topics .......................................................... 2
CHEM 361, 362 Physical Chemistry ......................................... 8
CHEM 482 Chemistry Seminar ................................................. 1
Additional 6 hours in chemistry selected from courses numbered above 300, excluding chemistry projects, independent study, or honors.

Co-requisites:
PHYS 151, 152 General Physics .................................................. 8
MATH 181, 182 Calculus I/II ................................................... 8
MATH 241 Differential Equations or MATH 321 Multivariate Calculus ............................................. 3
Recommended:
CSCI 151 Computer Science I .................................................... 3
MATH 321 Multivariate Calculus ............................................. 3
Major (BA): The major in chemistry designed for preparation for medical school or for secondary teaching culminates in the bachelor of arts in chemistry.

Required courses:
CHEM 151, 152 General Chemistry ........................................... 8
CHEM 241, 241 Organic Chemistry .......................................... 8
CHEM 277 Analytical Chemistry .............................................. 4
CHEM 278 Chemical Instrumentation ...................................... 4
CHEM 286 Special Topics .......................................................... 2
CHEM 361, 362 Physical Chemistry ......................................... 8
CHEM 482 Chemistry Seminar ..... 1
Co-requisites:
PHYS 151, 152 General Physics8
MATH 181, 182 Calculus I/II ..... 8
MATH 241 Differential Equations or MATH 321 Multivariate Calculus ..... 3

Minor: (12 hours above 152)
These hours may be taken in one of two ways: Organic Chemistry (CHEM241,242), and Analytical Chemistry (CHEM 277), or Organic Chemistry (CHEM 241, 242), Biochemistry (CHEM 332), and Bioanalytical Laboratory (CHEM 334).

## Course Descriptions

## CHEM 113 Elements of Biochemistry

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.

## CHEM 121 Impact: Science on Society

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
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.

## CHEM 152 General Chemistry II

Continuation of CHEM151; 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 207 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.

## CHEM 208 Intro to Nutrition Laboratory

This laboratory is designed to parallel the structure of CHEM 207, demonstrating at a hands-on level the components, concepts, and stewardship of contemporary nutrition. Three lab hours per week.

## CHEM 221 Contemporary Organic Chemistry

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

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.) Prereq: CHEM 152.

## CHEM 277 Analytical Chemistry

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

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. Two lecture, eight laboratory hours per week. Prerequisite: CHEM 277.

## CHEM 286 Special Topics in Chemistry

An introduction to areas of chemistry not treated in other courses. Topics will vary yearly; consult the department for the topic offered in any given year. Prerequisite: CHEM 241.

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

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

$(3, \mathrm{~F} 02)$
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. (CHEM361 must precede CHEM362.) Prerequisites: PHYS151,152; CHEM 242, 277, 278 (may be taken without 278, if not taken for major credit); MATH 241 or MATH 321.

CHEM 281, 282, 381, 382 Chemistry Projects
(1 or $2, ~ F \& S)$
Selected problems in experimental chemistry to acquaint the student with current literature coupled with laboratory techniques. Prerequisite: permission.

CHEM 453 Advanced Inorganic Chemistry
(3, F01)
Theories of atomic and molecular structure, bonding; emphasis on organometallic chemistry; descriptive chemistry of the elements; current topics of special importance. Prereq: CHEM 277.

CHEM 482 Chemistry Seminar
Journal reports and discussion of recent developments in chemistry. Required of all chemistry majors.
CHEM 391, 392; 491, 492 Independent Study
(1-3, Arr)
CHEM 496 Honors in Chemistry

## CHRISTIAN EDUCATION (SEE EDUCATIONAL MINISTRIES)

## CHRISTIAN MINISTRIES (AAS) (ALSO, SEE MINISTRY)

Department of Religion and Philosophy: Harold Kingdon, chair
Faculty: Under the direction of the department chair
The Christian ministries curriculum is a 2 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 12-16 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 3 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.

## CHURCH MINISTRIES (major)

The church ministries curriculum, resulting in a BS degree, is recommended for those who desire to combine a major in Bible or educational ministries with a 37 hour concentration in music. This program will equip the student for varied service in the small church. See Music.

## COMMUNICATION (MAJOR AND MINOR)

Department of English and Communication: Douglas Gaerte, chair
Faculty: Bruce Brenneman, Douglas Gaerte, Roger Rozendal, Thomas Prinsen
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
Introduction to Communication Theory (COMM 205),
Public Speaking (COMM 210) (also satisfies the integrative studies communication requirement) Advanced Composition: Rhetorical Patterns (WRIT 212)
Rhetorical Strategy (COMM 316),
Seminar in Interpersonal Communication (COMM 415), and
Seminar in Public Communication (COMM 417).
Additional electives from: 15
Organizational Communication (COMM 216)
Argumentation and Debate (COMM 217),
Introduction to Broadcasting (COMM 218),
Oral Interpretation (COMM 219),
Theater Arts (COMM 245),
Television Production I, II (COMM 251, 351),
Advertising and Public Relations (COMM 312),
Special Topics in Communication (COMM 320),
Cross-Cultural Communication (COMM 325),
Broadcast Journalism (COMM 350),
Independent Study in Communication (COMM 291, 391 or 491), Periodical Writing (WRIT 303),
Creative Nonfiction: Writing about Nature, Landscape, etc. (WRIT 306)
Creative Nonfiction: Writing about Spiritual Experience (WRIT 307)
Creative Nonfiction: Writing about Cultural Issues (WRIT 308).
(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 both Rhetorical Strategy (COMM316) and Seminar in Interpersonal Communication (COMM 415) in the fall of their junior year.

Minor: (15 hours)
These hours including Introduction to Communication Theory (COMM 205), Public Speaking (COMM 210) and Seminar in Public Communication (COMM 417). Six 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 Special Topics: Readers Theater (COMM320). 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 8 hours of Theater Workshop may count toward graduation.

## Course Descriptions

COMM 201 Fundamentals of Speech
(2, F\&S)
The basic course in speech. Emphasis on the process of communication, vocal effectiveness, informative and persuasive speaking. Satisfies Integrative Studies speech requirement.
COMM 205 Introduction to Communication Theory
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)
Performance course emphasizing presentations typical of public and small group settings. Emphasis on preparing speeches: topic selection, audience analysis, content, structure, persuasive strategies, and delivery. Satisfies the first level Integrative Studies speech requirement.
WRIT 212 Advanced Composition: Rhetorical Patterns
(See course description under writing major.)
COMM 216 Organizational Communication
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.
COMM 217 Argumentation and Debate
A performance course in argumentation and debate. Emphasis on evidence and reasoning, affirmative and negative case construction, refutation and rebuttal, and extemporaneous delivery. Recommended for pre-law and pre-ministerial students.
COMM 218 Introduction to Broadcasting
Introduction to Principles and practices of announcing as applied in a variety of formats including news, public address, sports, weather, and music. Other topics include a brief survey of broadcast history, consideration of current trends in broadcast media, broadcast law and media ethics, basic principles of production, programming, and management.
COMM 219 Oral Interpretation
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 245 Theatre Arts
Beginning acting, basic mime, introduction to stage techniques. Opportunity for practical experience in class production. Brief survey of Western theatre.
COMM 246 Theatre Workshop
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 8 hours.
COMM 251, 351 Television Production
A workshop designed to develop an understanding of basic television production and the programming of entertainment, news, and advertising. Permission required for advanced level (-351).
WRIT 303 Periodical Writing
(See course description under writing major.)
WRIT 306 Creative Nonfiction: Writing about Nature, Landscape, and the Environment
(See course description under writing major.)
WRIT 307 Creative Nonfiction: Writing about Spiritual Experience
(See course description under writing major.)
WRIT 308 Creative Nonfiction: Writing about Cultural Issues
(See course description under writing major.)
COMM 312 Advertising and Public Relations
(3, S\&F, 02)
Study of methods and responsibilities of advertising and public relations in both profit and nonprofit contexts.

Examination of contemporary persuasion theory from various neo-Aristotelian perspectives. Decision making, audience analysis, reasoning, rhetorical purpose and structure, motivation and strategy. Prerequisite: COMM 205 and 210.

## COMM 320 Special Topics in Communication

Opportunity for study of issues and problems not covered elsewhere in the curriculum.

## COMM 325 Cross-Cultural Communication

Theory and practice in communication across cultural boundaries. Recommended for those with an interest in international vocations.

## COMM 350 Broadcast Journalism

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 353 Communication Internship

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

## COMM 415 Seminar in Interpersonal Communication

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

COMM 291, -2, 391, -2, 491, -2 Independent Study
COMM 496 Honors in Communication

COMPUTER SCIENCE (MAJOR AND MINOR)
Department of Mathematics and Computer Science: Richard Jacobson, chair
Faculty: Coenraad Bakker, Wei Hu
Major: (33 hours; 15 in pre/co-requisites)
Major required courses:
CSCI 211 Programming I ............................................................ 3
CSCI 214 Discrete Mathematics .................................................. 3
CSCI 221 Data Structures .......................................................... 3
CSCI 226 Computer Architecture .............................................. 3
CSCI 327 Sequential and Parallel Algorithms ......................... 3
CSCI 328 Foundations of Computing ....................................... 3
CSCI 335 Programming Languages ......................................... 3
CSCI 490 Senior Project ............................................................... 3
*Two CSCI courses numbered 300 or above ........................... 6
*One other CSCI course .............................................................. 3
Total: ........................................................................... 33
*Three additional Computer Science courses must be selected depending upon one's interest. Two of these electives must be selected from courses numbered 300 or above. The requirements also include an integral mathematics component of one course selected from Mathematical Statistics (MATH 232), Linear Algebra (MATH 261), or Numerical Analysis (MATH 331). Though not part of the major, Calculus I (MATH 181) and Calculus II (MATH 182) are recommended as basic courses.

Minor in Computer Science: (15 hours)
Required courses:
CSCI 211 Programming I ........................................................... 3
CSCI 221 Data Structures ........................................................... 3
CSCI 226 Computer Architecture .............................................. 3
Two CSCI courses numbered 300 or above .............................. 6
Minor in Computer Information Systems: (15 hours)
Required courses:
CSCI 211 Programming I ..... 3
CSCI 220 Advanced Computer Applications ..... 3
CSCI 245 Systems Analysis and Design ..... 3
BADM 309 Statistics ..... 3
One CSCI course numbered 300 or above ..... 3

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 155 Computer Applications and Issues

(3, F\&S)
Introduction to personal computer applications: spreadsheet and database software, and webpage creation and publishing. Student teams work on real business computing projects. Discussion of current issues in computing.

## CSCI 211 Programming I

(3, F\&S)
An introduction to modern techniques of object-oriented programming using $\mathrm{C}++$. Writing programs to solve problems.
CSCI 218 Programming II
Java is a new object-oriented programming language. It is simple compared to $\mathrm{C}++$, and it is platform independent. This course covers Java fundamentals, creating applications, applets, and Graphic User Interfaces (GUIs). Prerequisite: CSCI 211 or permission.

## CSCI 214 Discrete Mathematics

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.

## CSCI 220 Advanced Computer Applications

$(3, \mathrm{~S} 03)$
Topics include advanced features of word processing, spreadsheets, database and presentation software, communications and networking applications, web page design, and application integration. Prerequisite: CSCI 155 or equivalent.

## CSCI 221 Data Structures

A continuation of Programming I. Use of top-down design and object-oriented techniques to write larger programs in C++. Course content includes programming techniques of searching, sorting, recursion, and algorithmic analysis. Data structure topics include stacks, queues, linked lists, trees. Prerequisite: CSCI 211 or permission.

## CSCI 226 Computer Architecture

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 245 Systems Analysis and Design

(3, F01, 03)
Structured and object-oriented systems analysis and design including software life cycle, project management techniques, end-user involvement, cost-benefit analysis, professional ethics. Group projects using CASE tools and a team approach. Prerequisite: CSCI 220 or CSCI 221.

CSCI 326 Operating Systems
(3, F 02, 04)
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 NT and systems programming in C++. Prerequisite: CSCI 221 or CSCI 245 or permission.

## CSCI 327 Sequential and Parallel Algorithms

(3, F)
This course examines the design and efficiency of algorithms from both sequential and parallel perspectives. It also investigates problem-solving strategies and the relative difficulty of various classes of problems and problem-solving techniques. Prereq: CSCI 221 or 245, or permission.

## CSCI 328 Foundations of Computing

This core course builds upon the ideas presented in previous courses such as complexity analysis of algorithms, Boolean logic, the use of recurrence relations to analyze recursive algorithms, and the formal description of abstract data types. The subject matter will demonstrate the logical and mathematical foundations of computer science and provide a context for this theory by using the ideas in applications such as models of computation, grammars and parsing, solvable and unsolvable problems. Prerequisites: CSCI 214 and 221.

## CSCI 335 Programming Languages

This is a survey of major languages. Topics include organization of languages, run time behavior of languages, formal aspects of programming language specification and analysis. Exposure to coding in most languages covered. Prerequisite: CSCI 221 or 245 , or permission.

## CSCI 340 Data Bases

(3, S02, 04)
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 211 and (CSCI 220 or 221) or permission.

## CSCI 420 Networking

(3, F02, 04)
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 221 or 245 , or permission.

CSCI 425 Computer Graphics
(3, F01, 03)
An introduction to graphics hardware and software. Graphics standards. Topics include two and three dimensional transformations, clipping, projection, hidden line and hidden surface algorithms. Significant laboratory component. Prerequisite: CSCI 221.
CSCI 430 Modeling and Simulation
A study of modeling and simulation methods, focusing on discrete systems. A variety of simulation languages are reviewed. Many applications are surveyed and group term projects are carried out. Prerequisites: (CSCI 221 and MATH 232) or (CSCI 245 and BADM 309).

## CSCI 490 Senior Project

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
CSCI 496 Honors in Computer Science
CSCI 295, -6; 395, -6; 495 Special Topics in Computer Science
(1,2 or $3, O D)$

## EARTH SCIENCE (CONCENTRATION IN GENERAL SCIENCE)

Department of Physics and Earth Science: Mark Yuly, chair
Faculty: Ronald Rohe, Mark Yuly
Part-time: Peter Bryant
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 (ESCI101) 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 independent studies in oceanography, glacial morphol-
ogy, mineralogy, field work in geology, or appropriate AuSable courses (listed under off-campus programs).

## Course Descriptions

## ESCI 101 Physical Geology

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.

## ESCI 102 General Astronomy

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.
ESCI 212 Environmental Earth Science
Relationship between humans and Earth systems in the atmosphere, hydrosphere, lithosphere. Environmental problem solving. Introduction to remote sensing and GIS.

## ESCI 213 Geographic Information Systems (GIS) Laboratory

Optional laboratory to accompany Environmental Earth Science. The laboratory will focus on applications of GIS and GPS to environmental and earth science problems.

## 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.

## ESCI 230 Hydrology

$(3, \mathrm{~S} 03)$
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
ESCI 295, 395, 495 Special Topics in Earth Science

## ECONOMICS (MINOR)

Department of Business and Economics: Kenneth Bates, chair
Faculty: Robert Black
Minor: (15 hours)
Economic theory provides essential background for careers in business, law, politics, teaching, and all areas of private and public administration.

Major required courses:
Micro and Macroeconomics (ECON 210, 211) ........................ 6
Addtn'l hours from list below numbered 200 or above ......... 9

## Course Descriptions

## ECON 102 Personal Finance

Basic understanding concerning Christian perspectives toward stewardship, including the management of money, insurance, credit, budgeting, investment, and retirement planning. Elective credit only.

## ECON 210 Microeconomics

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 Macroeconomics
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.

## ECON 212 International Economics

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.

## ECON 213 American Economic History

Economic and business development of the United States, colonial period to the present. May be counted toward economics minor or history major/minor.
ECON 237 Comparative Economic Systems
Examination of alternative economic systems; comparison of U.S. economic system with other economies along capitalist-socialist spectrum. Prerequisite: ECON 210 or permission.

ECON 301 Money and Banking
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. Prereq.: ECON 210 and 211.
ECON 302 History of Economic Thought
Development of modern economic thought in Europe and United States. Required for a minor. Limited to juniors and seniors. Prerequisites: ECON 210 and 211 or permission.

ECON 303 Industrial Organization
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

Theories of consumer and producer behavior with emphasis on applications to public policy and management of business enterprise. Rationality of consumers, decision-making under risk with applications to insurance and investment, theory of the firm and efficient production, 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
ECON 295, 395, 495 Special Topics
Group study of selected topics.

## EDUCATION (MAJORS AND MINOR)

Department of Education: Darlene Bressler, chair
Faculty: Darlene Bressler, Carol Brown, Constance Finney, Mark LaCelle-Peterson, Susan Martin, Charles Massey, James Schwartz, Daniel Woolsey

Majors: Childhood (Elementary) Education (50 hours in the major; 9 in pre/co-requisites) Adolescence (Secondary) Education (39-40 hours; 6 in pre/co-requisites)

## General Information:

- As of fall 1999, there were 265 students (freshman to senior) enrolled in the education programs at Houghton College.
- Our students spend an average of $30+$ hours / week student teaching for approximately 15 weeks.
- During the 1999-2000 AY, 75 Houghton College students completed education requirements for NYS certification. Of these, 64 students took the ATS-W and/or LAST (or NTE) and all 64 (100\%) passed. This compares favorably to the statewide passing percentage of $94 \%$.

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

1. complete the application to enter the teacher education program
2. present a writing sample which demonstrates the ability to communicate in writing,
3. present a cumulative grade point average of 2.40 or above
4. receive formal approval by the Teacher Education Committee.

For entry into upper level education courses (300 or above), a student must:

1. have taken EDUC 201 Instructional Psychology and Research, or EDUC 240 Teaching in Urban America and, if the student is a childhood education major, EDUC 114 Math for Elementary Teachers
2. present a cumulative grade point average of 2.40 or above
3. complete the Upper Level Course Approval form and bring it to the Education Department advisor for course selection.
To be approved for student teaching, a student must:
4. complete the application to student teach (to be submitted in the first two weeks
of the semester preceding student teaching)
5. submit a portfolio of educational progress, including but not limited to a portion of a videotaped lesson and several sample lesson plans
6. present a cumulative grade point average of 2.50 or above

To be approved for overseas student teaching, the student will complete the first two requirements for student teaching approval noted above, as well as the following:

1. present a cumulative grade point average of 2.60
2. submit an essay explaining why they are qualified for the experience and how they would benefit through the experience
3. provide a recommendation letter from the academic advisor.

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 2.50 cumulative grade point average as the necessary requirement for approval to studentteach. However, there are rare occasions when students are slightly below the 2.50 cumulative grade point average, yet show reasonable potential for success in student teaching. When such students are identified by their education department advisor and/or the Director of Student Teacher Placement, the student may prepare a Letter of Appeal and the case will be considered by the Teacher Education Committee.

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

Any student who wishes a student teaching placement beyond that normally provided during the student teaching semester must present such request in a timely manner to the Teacher Education Committee.

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

## New York Teacher Certification

Initial Certification in New York State may be obtained by completing one of the following programs, and by completing 3 of the 4 sections of the New York State Teacher Certification Exam (NYSTCE). These sections include the LAST, ATS-W, and CST. Note: these programs apply only to those graduating after January 2004. Those graduating prior to this time should follow guidelines found in Houghton's 1999-2000 catalog, available in the office of the Education Department chair.

## Childhood Education - grades 1-6

Includes the Education major and a 30-hour concentration in one of eight areas: English Language Arts; Language, Culture \& Linguistics; Intercultural Studies; Mathematics; Mathematics \& Science; Science; Social Studies; Spanish Language, Culture \& Linguistics. (Note: Childhood education majors are required to take no more than 2 semesters of foreign language.)

Requirement for 100 hours of pre-student teaching field experience will be met through the following courses: EDUC $114 \quad 6$ contact hrs.

EDUC $201 \quad 15$ contact hrs.
EDUC $221 \quad 8$ contact hrs.
EDUC $240 \quad 60$ contact hrs.
EDUC 328/329 6 contact hrs.
EDUC $341 \quad 6$ contact hrs.
EDUC $342 \quad 6$ contact hrs.
Adolescence Education - grades 7-12
Includes the Education major and a second major in one of eight areas: Augmented History (Social Studies), Biology, Chemistry, English, French, Mathematics, Spanish, or Physics.

Requirement for 100 hours of pre-student teaching field experience will be met through the following courses: EDUC $201 \quad 15$ contact hrs.

EDUC $240 \quad 60$ contact hrs.
EDUC $313 \quad 13$ contact hrs.
EDUC $338 \quad 20$ contact hrs.

## Music Education - birth - grade 12

See the description for this program in the Music section of this catalog.
Physical Education - birth - grade 12
See the description for this program in the Physical Education section of this catalog.
Students who desire to teach in states other than New York should familiarize themselves with the requirements of the state in question and select those courses that meet such requirements. Thirty-eight states plus the District of Columbia and Overseas Dependent Schools had reciprocity agreements with New York State in matters of certification. Lists of these states may be obtained from the education office.

Childhood Certification - Program leading to grades 1-6 Certification
Students must complete the following program plus one of the concentrations outlined below.

## Prerequisites/Co-requisites

PSY 111 Introduction to Psychology ......................................... 3
PSY 214 Child Psychology ........................................................ 3
American Studies: choose one ................................................................ 3
HIST 220 American History Survey
POLS 222 American Political System
Childhood Education Major
EDUC 114 Math for Elementary Teachers ................................ 3
EDUC 201 Instructional Psychology \& Research ................... 3
EDUC 217 Philosophy \& History of Education ...................... 3
EDUC 221 Children's Literature ............................................... 3
EDUC 226 Multimedia Technologies ........................................ 2
EDUC 240 Teaching in Urban America ..................................... 3
EDUC 314 Elementary Practicum I ........................................... 1
EDUC 315 Elementary Practicum II ......................................... 1
EDUC 316 Collaboration of School, Home, \& Community I 1
EDUC 317 Collaboration of School, Home, \& Community II1
EDUC 320 Curriculum \& Assessment in Elem Classrms ...... 3
EDUC 328 Foundations of Language \& Literacy .................... 3
EDUC 329 Language \& literacy for Diverse Learners ............ 3
EDUC 341 Teaching Elementary Social Studies through the
Language Arts
2
EDUC 342 Teaching Elementary Math \& Science .................. 3
EDUC 408 Childhood Student Teaching ............................... 10
EDUC 414 Educating Exceptional Children ............................ 3
EDUC 485 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, 203 or above .......... 9
Writing/Communication: 15 hours
ENGL 101 Principles of Writing ................................................ 3
COMM 210 Public Speaking ...................................................... 3
Three of the following, including 1 WRIT and 1 COMM ................. 9
COMM 219 Oral Interpretation
COMM 245 Theater Arts
COMM 320 Special Topics: Reader's Theater COMM 415 Seminar in Interpersonal Comm WRIT 211, 212, or 213 Advanced Composition WRIT 306 Creative Non-Fiction
2. French Language, Culture \& Linguistics (30 hours)

Language: 18 hours
FREN 101/102 Beginning French .............................................. 8
FREN 201 Intermediate French ................................................. 4
Two of the following choices: ................................................................ 6
FREN 301 French Con \& Reading I FREN 302 French Con \& Reading II,FREN 305 French Phonetics
Culture $\mathcal{E}$ Literature: 6 hours
Two of the following:6
One French Civ \& Culture course (300 or above)One French Lit course ( 300 or above)One Mayterm in a French speaking culture
Linguistics: 6 hours
Two of the following:6
LING 220 Intro Linguistics
LING 312 Sociolinguistics
LING 395 TESOL
COMM 325 Cross-cultural Communication
3. Intercultural Studies (31 hours)
Cultural Studies: 16 hours
SOC 243 Cultural Anthropology ..... 3
HIST 101,102 Western Culture ..... 4
COMM 325 Cross-cultural Communication ..... 3
One of the following: ..... 3
SOC 330 Culture \& FamilySOC 361 Race \& Ethnicity
One of the following: ..... 3
LING 220 Intro LinguisticsMISS 222 Modern MissionsURMN 212 Urban Ministry
Global \& Community Awareness: 15 hours
POLS 220 World Regional Geography ..... 3
MHS 254 Music of World Cultures ..... 3
One of the following: ..... 3
PHIL 321 World ReligionsENGL 415 World LiteratureSOC 293 East African Cultures
Exactly 6 hours $(4+2$, or $3+3)$ from the following: ..... 6
INDS 211 Intercultural Trans \& Adjust
INDS 311 Intercultural Experience
INCL/MISS 231 Global Relief \& DevelopmentINCL/POLS 320 Community Org \& DevINCL/ POLS 336 Gov \& Pol in Dev CountriesURMN 250 Evang \& Social Action in Urban ContextSOC 295 Special Topics: Urban Policy
4. Mathematics ( 30 hours)
Mathematics: 17 hours
MATH 107 Pre-Calculus ..... 3
MATH 181,182 Calculus I \& II ..... 8
MATH 251 Modern Geometries ..... 3
EDUC 114 Math for Elementary Teachers ..... 3
Mathematics $\mathcal{E}$ Computer Science: 13 hours
Choose from among the following courses: ..... 13
CSCI 211 Programming I
CSCI 218 Programming II
MATH 190 Math Apps \& Issues
MATH 231 Probability
MATH 232 Math Stats
MATH 241 Differential Equations
MATH 261 Linear Algebra
MATH 321 Multivariate Calc
MATH 422 Advanced Calc
MATH 452 Point Set Topology
MATH 462 Algebra I
MATH 471 Complex Analysis

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5. Mathematics & Science (30 hours)
    Mathematics: at least 12 hours
    MATH 107 Pre-Calculus .................................................... }
    EDUC 114 Math for Elementary Teachers ............................ }
    At least 6 hours from among the following: ...............................6+
    MATH 181 Calc I
    MATH 182 Calc II
    MATH 190 Math Apps & Issues
    CSCI 211 Programming I
    CSCI 218 Programming II
    Science: at least 14 hours
    Choose from among 2 or more of the following areas: BIOL, CHEM, and PHYS/ESCI
    BIOL 103 Fund. of Biology
    BIOL }105\mathrm{ Conservation Biology
    BIOL 214 Wildlife Biology
    BIOL }215\mathrm{ Local Flora
    BIOL 217/218 Human Anatomy & Physiology
    CHEM }121\mathrm{ Impact of Science on Society
        CHEM 207 Intro Nutrition
        CHEM 208 Intro Nutrition Lab
        ESCI }101\mathrm{ Physical Geology
        ESCI 102 General Astronomy
        ESCI 212/213 Env. Earth Science
```

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 2 courses from each of the following areas: BIOL, CHEM, and PHYS/ESCIBIOL 103 Fund. of Biology4
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 207 Introduction to Nutrition ..... 3
CHEM 208 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
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 220 World Regional Geography ..... 3
POLS 222 American Political System ..... 3
Social Science: 6 hours
PSY 111 Introduction to Psychology ..... 3
And one of the following ..... 3
ECON 210 MicroeconomicsSOC 101 Principles of SociologySOC 243 Cultural Anthropology
8. Spanish Language, Culture \& Linguistics (30 hours) Language: 18 hours SPAN 101/102 Beginning Spanish ..... 8
SPAN 201 Intermediate Spanish ..... 4
Two of the following choices: ..... 6
SPAN 301 Spanish Con \& Reading ISPAN 302 Spanish Con \& Reading IISPAN 305 Spanish PhoneticsCulture \& Literature: 6 hoursTwo of the following:6
One Spanish Civ \& Culture course (300 or above)One Spanish Lit course (400 level)One Mayterm in a Spanish speaking cultureLinguistics: 6 hoursTwo of the following:6
LING 220 Intro Linguistics
LING 312 SociolinguisticsLING 395 TESOLCOMM 325 Cross-cultural Communication

## Adolescence Education - Program Leading to 7-12 Certification

Students majoring in adolescence education are required to complete the program outlined below in addition to one of the following content majors: Augmented History, Biology, Chemistry, English, French, Mathematics, Physics, and Spanish. See the descriptions of these majors in the appropriate section of the catalog.

Note: those choosing majors in Mathematics, French (literature track) and Spanish (literature track) must complete 30 hours in those areas - which means an additional elective in the major - to be compliant with New York State certification guidelines.

## Pre/co-requisites

PSY 111 Introduction to Psychology ...................................... 3
PSY 215 Adolescent Psychology ............................................ 3
Adolescence Education Major
EDUC 201 Instructional Psychology \& Research .................. 3
EDUC 217 Philosophy \& History of Education ...................... 3
EDUC 223 Adolescent Literature or
EDUC 226 Multimedia Technologies ............................. 1 or 2
EDUC 240 Teaching in Urban America ................................... 3
EDUC 313 Language \& Literacy in the Content Areas .......... 3
EDUC 33x Secondary Teaching: Content Methods ............... 2
332 English Methods
333 Foreign Language Methods
334 Math Methods
335 Science Methods
336 Social Studies Methods
EDUC 338 Curric \& Assessment in Secondary Classrms ...... 4
EDUC 350 Instructional Envrnmnts for Diverse Learners .... 3
EDUC 409 Secondary Student Teaching I .............................. 6
EDUC 410 Secondary Student Teaching II ............................. 5
EDUC 411 Seminar in Secondary Teaching ............................ 3
Education minor: (12 hours)
An education minor may be chosen by students who wish to broaden their understanding of the educational process yet are not seeking certification. Courses as follows:

Choose 3 of the following:
EDUC 201 Instructional Psychology \& Research .................. 3
EDUC 217 Philosophy \& History of Education ..................... 3
EDUC 240 Teaching in Urban America ................................. 3
EDUC 350 Instructional Envrnmnts for Diverse Learners ... 3
Choose one of the following:
EDUC 114 Math for Elementary Teachers ............................ 3
EDUC 221 Children's Literature ............................................ 3
EDUC 223 Adolescent Literature .......................................... 3
EDUC 330 Teach'g English to Speakers of Other Lang's ...... 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 students who wish to work to full potential.

## EDUC 114 Math for the Elementary School Teacher

(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 201 Instructional Psychology and Research
The individual in the teaching/learning process. Focus on learning models and theories, cognition, individual differences, motivation, instructional psychology and classroom research models. Prerequisite: PSY 111.

EDUC 217 History and Philosophy of Education (formerly Foundations of Education)
(3, F,S,M)
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 philosophy of education.
EDUC 219 Educational Psychology
$(3, O D)$
The individual in the teaching/learning process. Focus on developmental theory, learning models and theories, cognition, individual differences, motivation, and instructional psychology. Prereq: PSY 111.

## EDUC 221 Children's Literature

(3, F\&S)
Offers a survey of various genre in literature for preschool 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

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 226 Multimedia Technologies (formerly Multimedia and Distance Learning Technologies) (1 or 2, F\&S) Introduction to (1) design and production of multimedia presentations and (2) a variety of distance learning models that bring the World Wide Web into the classroom. One outcome product is a multimedia electronic portfolio. Childhood Ed majors must take the course for 2 credits; those with an adolescence education major may opt for either 1 or 2 credits.

EDUC 240 Teaching in Urban America
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 ten-day field experience in an urban school, working as teachers' assistants. Recommended sophomore year.

EDUC 313 Language and Literacy in the Content Area (formerly Reading in the Content Area)
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 Elementary Practicum I
(1, F\&S; begins 02/03)
Two half-days per week in either a primary (grades 1-3) or intermediate (grades 4-6) 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 316 \& EDUC 320. EDUC 342 must accompany either EDUC 314 or 315. Prereq: EDUC 201 and 217.

EDUC 315 Elementary Practicum II
(1,F\&S; begins F02)
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 317. Prerequisites EDUC 314, EDUC 316, \& EDUC 320.
(1, F\&S; begins F02)
Considers the nature of relationships among students, families, educators, and community members and explores means of enhancing these relationships to improve the quality of teaching and learning for all children. Taken concurrently with EDUC 314 \& 320.

EDUC 317 Collaboration of School, Home, and Community II
(1, F\&S; begins F02) A continuation of EDUC 316. Considers the nature of relationships among students, families, educators, and community members and explores means of enhancing these relationships to improve the quality of teaching and learning for all children. Taken concurrently with EDUC 315. Prereq: EDUC 314, 316.

## EDUC 320 Curriculum and Assessment in Elementary Classroom <br> (formerly Art \& Science of Elementary Teaching)

Provides an exploration of the development of elementary curriculum and assessment and the creation of learning environments that support diverse learners. Includes an examination of lesson planning and unit planning. Taken concurrently with EDUC 314 \& 316.

## EDUC 328 Foundations of Language and Literacy

Examines diverse perspectives on language and literacy learning in families, schools and communities. Explores instructional planning and means of developing literacy learning. Students articulate a philosophy of teaching the English language arts and begin to develop a teaching portfolio. Prerequisites: EDUC 201, EDUC 217, and EDUC 221, or permission of instructor.

## EDUC 329 Language and Literacy for Diverse Learners

Explores issues related to the teaching and learning of the English language arts including working with English language learners, developing authentic assessment, and meeting the needs of special learners. Students focus on educational research and continued development of their portfolio. Prerequisite: EDUC 328.

EDUC 330 Teaching English to Speakers of Other Languages (TESOL)
Students will review the difference between first and second language acquisition. Examines some of the major linguistic patterns and structures of English which are difficult for speakers of languages other than English. Reviews second language teaching methodologies.
EDUC 33X Secondary Teaching: Content Methods
Adolescence Education majors register for the appropriate content area methods course concurrent with EDUC 338 Curriculum \& Assessment in Secondary Classrooms. 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.

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EDUC 332 English Methods
    EDUC 333 Foreign Language Methods
    EDUC 334 Math Methods
    EDUC 335 Science Methods
    EDUC 336 Social Studies Methods
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## EDUC 338 Curriculum \& Assessment in Secondary Classrooms

(formerly Art \& Science of Secondary Teaching)
Examination and analysis of the strategies and dynamics of teaching and learning in adolescent classroom. Students will spend 20 class hours in a secondary school practicum experience. Taken concurrent with EDUC 33x Secondary Teaching Methods. Prereq: EDUC 201 and EDUC 217.
EDUC 341 Teaching Elem Social Studies and Language Arts
(2,F\&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 201, EDUC 217, and EDUC 221, or permission of instructor.
EDUC 342 Teaching Elementary Mathematics and Science
(3, F\&S)
Exploration of methods and materials pertaining to teaching elementary mathematics and science. National curriculum standards are examined as well as New York State Learning Standards in each subject. This course must be taken concurrently with Elementary Practicum, EDUC 314 or EDUC 315. Prerequisites: EDUC 201 and EDUC 217.
EDUC 350 Instructional Environments for Diverse Learners
(3, F\&S)
Overview of the history and legislation related to exceptional learners, along with the CSE and referral processes. Examines the scope of disabilities, designing supportive learning environments and transitional planning. Considers means for integrating classroom modifications and safety issues that address special needs across the content areas. Includes classroom experiences related to exceptional learners. Prerequisite: EDUC 201 and EDUC 217.

## EDUC 351 TESOL (Teaching English to Speakers of Other Languages)

$(3, F)$
Review of second language teaching methodologies and learning theories. Examination of some of the unique challenges of English structure (phonological, morphological and syntactical) and the transfer problems that non-native speakers may have. Recommended prereq: LING 220.

## EDUC 355 Theory and Practice of Bilingual Education

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 405 Elementary Student Teaching K-6 (first placement)
*EDUC 407 Elementary Student Teaching K-6 (second placement)
A full semester of student teaching, either fall or spring. Two placements for each student. K-6 placements in primary and intermediate grades. Student must register for EDUC 411 concurrently. (See policy below on "Employment and Activities while Student Teaching")
*EDUC 408 Childhood Student Teaching
(10, F\&S; begins F03)
Twelve weeks in a supervised student teaching experience in one classroom, either primary (grades 13) or intermediate (grades 4-6) depending on the elementary practicum placement. Designed for students who have completed all education course work except EDUC 414 and EDUC 485. Students must also register for EDUC 414 \& EDUC 485. (See policy below on "Employment and Activities while Student Teaching.")
*EDUC 409 Secondary Student Teaching I
( $6, \mathrm{~F} \& \mathrm{~S}$ )
Minimum 7-week placement in either grades 7-9 or grades 10-12 in the appropriate content area. The experience will include a minimum of 2 weeks with full teaching load responsibilities. Prerequisite: EDUC 33x (Secondary Teaching Methods), EDUC 338, and EDUC 313. Taken concurrent with EDUC 410 \& EDUC 411. (See policy below on "Employment and Activities while Student Teaching.")
*EDUC 410 Secondary Student Teaching II
(6, F\&S)
Minimum 6-week placement in either grades 7-9 or grades 10-12 in the appropriate content area. The experience will include a minimum of 2 weeks with full teaching load responsibilities. Prerequisite: EDUC 33x (Secondary Teaching Methods), EDUC 338, and EDUC 313. Taken concurrent with EDUC 409 \& EDUC 411. (See policy below on "Employment and Activities while Student Teaching.")

## *EDUC 411 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. Other issues examined include identification and prevention of child abuse and abduction, safety education, substance abuse prevention, and similar current educational concerns. Taken concurrently with EDUC 410 \& EDUC 411.
*EDUC 414 Educating Exceptional Children
(3, F \& S; begins F'03)
Examines the historical/legal context for providing services for exceptional children. Explores the scope of exceptionalities and the processes used to identify and address special needs. Focus on the CSE and referral process and the development and implementation of IEP's in the classroom. Taken concurrently with EDUC 408 and EDUC 485.
*EDUC 485 Seminar on Reflective Teaching
(2, F\&S)
Provides an opportunity for childhood student teachers to research their practice and reconsider their philosophy of education in light of their student teaching experiences and educational research. Students also complete the development of their portfolio. Students must also register for EDUC 414 \& EDUC 408.
*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
*EDUC 496 Honors in Education

## *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 enteringthis stage of training are often unaware of the many facets of the experience and do not fully comprehend the time and effort needed to ensure success. Therefore, students are expected to eliminate all employment during the student teaching semester. This guideline was established to protect education students from overextending themselves as well as to protect the reputation of Houghton College's education program. 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 day and hours.
- A supporting letter form his/her advisor indicating 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 afterschool 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 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 or 414 and 485

## Post- Baccalaureate Teacher Certification

All participants in the post-baccalaureate certification program must meet all requirements for admission as a student at Houghton College. Admission to the college must be accompanied by admission to both the teacher education program (2.4GPA required) and the student teaching program, which requires a 2.5 GPA.

K-6 - A New York K-6 provisional certificate may be issued to a student in the post-baccalaureate program who meets these criteria:

1. A baccalaureate degree from a regionally accredited institution of higher education or from an institution authorized by the Board of Regents to confer degrees and whose programs are registered by the State Department of Education. The baccalaureate degree must include:
a. successful completion of at least 6 semester hours of college-level credit each in: English, mathematics, science, and social studies;
b. a satisfactory concentration of 36 hours of college-level credit in one of the liberal arts and sciences;
c. one year of college-level study (or its equivalent) of a language other than English;
2. a concentration of 30 semester hours in professional education, including 6 semester hours of study in the teaching of reading;
3. college-supervised student teaching at both the lower (PreK-3) and upper (4-6) elementary grades for a full semester;
4. satisfactory performance on the liberal arts and sciences portion of the NYS Teacher Certification Examinations and on the written assessment of teaching skills portion of the New York State Teacher Examination.
Note: students must complete at least one full semester of coursework at Houghton College before participating in the student teaching semester.
7-12 - A New York 7-12 provisional certificate may be issued to one in the post-baccalaureate program who meets these criteria:
5. A baccalaureate degree from a regionally accredited institution of higher education or from an institution authorized by the Board of Regents to confer degrees and whose programs are registered by the State Department of Education. The baccalaureate degree must include:
a. a satisfactory concentration of 36 semester hours of college-level credit in the area in which certification is sought;
b. one year of college-level study (or its equivalent) of a language other than English;
6. a concentration of 18 semester hours in professional education;
7. a college-supervised student teaching experience in both the middle level and high school grades for one full semester;
8. evidence of having achieved a satisfactory level of performance on the liberal arts and sciences portion of the New York State Teacher Certification Examinations and on the written assessment of teaching skills portion of the New York State Teacher Examination.
Note: students must complete at least one full semester of coursework at Houghton College before participating in the student teaching semester.

EDUCATIONAL MINISTRIES (MAJOR, MINOR, YOUTH MINISTRIES CONCENTRATION)<br>Department of Religion and Philosophy: Harold Kingdon, chair<br>Faculty: Richard Eckley, Harold Kingdon, Kristina LaCelle-Peterson, Terence Paige, Carl Schultz, Paul Shea, John Tyson, J. Michael Walters<br>Part-time: David O'Brien

Major (BS): (39 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.

24 hours in educational ministries:
EDMN 231 Foundations of Educational Ministry .................. 3
EDMN 319 Ministry with Children ........................................... 3
EDMN 326 Ministry with Youth ............................................... 3
EDMN 324 Ministry with Adults .............................................. 3
EDMN 325 Bible Study and Teaching Methods ..................... 3
EDMN 431 Leadership in Ministry ........................................... 3
EDMN 442 Internship in Educational Ministries ................... 6
3 hours in ministry:
MIN 210 Introduction to Christian Ministries ........................ 3
3 hours in theology:
THEL 313 Systematic Theology .................................................. 3
3 hours in psychology, chosen from:
PSY 214 Child Psychology ......................................................... 3
PSY 215 Adolescent Psychology ................................................ 3
PSY 218 Social Psychology .......................................................... 3
PSY 306 Psychology of Religion ................................................ 3
3 hours in family studies chosen from: ...................................................
PSY 230 Life-span Development of the Family ....................... 3
PSY 326 Introduction to Family Systems .................................. 3
SOC 237 Intro to Marriage and Family Studies ...................... 3
3 hours of urban ministry chosen from:
URMN 212 Urban Ministry ........................................................ 3 URMN 250 Evang \& Soc Action in 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 (45 hours; plus a minor in Bible)
The youth ministry concentration requires the full core of Educational Ministries courses listed above, plus 6 hours as follows:

EDMN 350 Youth Evangelism and Discipleship .................... 3
3 hours chosen from the following:
REC 227 Outdoor Leadership Training .................................... 3
REC 240 Administration of Organized Camps ....................... 3
REC 300 Program Planning and Evaluation............................. 3
REC 301 Methods and Materials for Camps \& Outdoor Education3

Minor: (15 hrs arranged on a contract basis 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, 6 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

## Course Descriptions

## EDMN 231 Foundations of Educational Ministry

Historical, philosophical, and theological developments of religious and Christian education in relation to the practice of ministry.

## EDMN 319 Ministry with Children

Integrates developmental psychology, educational concepts, and biblical perspectives in developing principles and methods for children's spiritual development in home, church, and community; examines: play, drama, music, story telling, worship, sexual awareness, current curricula.

## EDMN 324 Ministry with Adults

Characteristics, needs, problems of adults, with responsive approaches in ministry to singles, married, families, the elderly.

## EDMN 325 Bible Study and Teaching Methods

Survey of methods of Bible study and approaches to teaching/learning. Emphasizes: lesson design, planning and presentation, small group leadership, curricula.

EDMN 326 Ministry with Youth
Adolescent psychology and sociology inform a biblical approach to adolescent spiritual growth, emphasizing concepts, objectives, organization, counseling; methods for home and para-church ministry.

## EDMN 350 Youth Evangelism and Discipleship

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 431 Leadership in Ministry

Principles and methods of leadership, administration, and organization for ministry in church and para-church agencies. A prerequisite for the educational ministries practicum.

## EDMN 442 Internship in Educational Ministries

(6, 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, 421, and two out of three EDMN 319, 324, and 326, or permission of the educational ministries advisor.
EDMN 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
EDMN 496 Honors in Educational Ministries

## ENGINEERING PROGRAM, DUAL-DEGREE

Department of Physics and Earth Science: Mark Yuly, chair
Faculty: Ronald Rohe, Mark E. Yuly
General Information:Students desiring to enter the profession of engineering can begin their education at Houghton College by means of the dual-degree engineering program. 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 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.

While there are many advantages to the dual-degree program, one of its greatest strengths is that it combines the breadth and variety of a liberal arts education with the expertise and specialization of an engineering education. Another advantage to the student is the opportunity to take many introductory courses in math and science in the small-college, Christian environment provided at Houghton. These courses would be taken during the three years that a dual-degree student is at Houghton.

A typical course load during that time would include
MATH 181 Calculus I........................................................... 4
MATH 181 Calculus I............................................................................................................ 4
PHYS 170 Introduction to Engineering .................................... 1
PHYS 151 General Physics I + Lab ............................................ 4
PHYS 152 General Physics II + Lab .......................................... 4
CHEM 151 Chemistry I + Lab ..................................................... 4
CHEM 152 Chemistry II + Lab .................................................. 4
CSCI 211 Programming I ............................................................ 3
MATH 241 Differential Equations ............................................ 3
MATH 321 Multivariate Calculus ............................................. 3
Other courses may include
PHYS 175 Engineering Mechanics: Statics ............................... 4
PHYS 258 Analog Electronics ................................................... 4
PHYS 251 Mechanics I ................................................................. 4
PHYS 252 Mechanics II ................................................................ 3
BIOL 151 General Biology I + Lab .............................................. 4
BIOL 152 General Biology II + Lab ........................................... 4
CHEM 241,242 Organic Chemistry ........................................... 8
CSCI 221 Data Structures ............................................................ 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.

There are a number of other options available to the student interested in pursuing an engineering degree by way of Houghton College. Any questions should be directed to the Department of Physics and Earth Science.

## ENGLISH (MAJOR)

Department of English and Communication: Douglas Gaerte, chair
Faculty: Bruce Brenneman, Charles Bressler, Laurie Dashnau, Douglas Gaerte, John Leax, James Wardwell, Linda Mills Woolsey, Stephen Woolsey, James Zoller

Major: (30 hours in the major; 6 in pre/co-requisites)
This major 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 for the major but without major credit:
English Literature (ENGL 203, 204) ...................................... 3, 3
Required courses: ................................................................................. 21
Advanced Composition: Writing about Literature (WRIT 213)
3
English Literature (WRIT 203, 204) ........................................ 3,3
American Literature (ENGL 215, 216) .................................... 3,3
Literary Criticism (ENGL 412) .................................................... 3
Senior Seminar: Problems of Literary Study (ENGL 418) ..... 3
An additional 5 courses of electives are to be selected as follows:
Choose 2 or 3 courses from:
English Renaissance (ENGL 311) ............................................... 3
Restoration and Eighteenth Century (ENGL 312) ................... 3
Romanticism and Nineteenth Century (ENGL 313) ............... 3
British Fiction (ENGL 321) ......................................................... 3
Shakespeare (ENGL 350) ..... 3
Choose 2 or 3 courses from any ENGL course between 221 and 361 not listed above (except 353):
Children's Literature (ENGL 221) ..... 3
Modern Drama (ENGL 315) ..... 3
Modern American Poetry (ENGL 319) ..... 3
Modern British Poetry (ENGL 320) ..... 3
American Fiction (ENGL 322) ..... 3
American Short Story (ENGL 334) ..... 3
Contemporary World Literature (ENGL 361) ..... 3
Introduction to Linguistics (LING 220) ..... 3
Special Topics in Literature (ENGL 390) may be included in either category its subject matter suggests; the major advisor will provide approval.

## Course Descriptions

## ENGL 101 Principles of Writing

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.

## ENGL 201 Literature of the Western World

An introduction to literature especially designed for the non-major. Emphasis on how to read poetry, drama, and fiction for better comprehension and interpretation as well as for enjoyment.

## ENGL 203 English Literature I

Surveys major works and literary movements in England from Beowulf to Neoclassicism. Provides biographical, historical, and ideological information to enhance understanding. Integrative studies requirement for English majors.

## ENGL 204 English Literature II

Surveys major works and literary movements of the romantic, Victorian, and modern periods in their biographical, historical, and ideological contexts. Integrative studies requirement for English majors.

## ENGL 205 English Grammar

(1, OD)
Intensive review of English grammar emphasizing practice in punctuation, parts of speech, syntax, usage, and sentence construction. Elective credit only.
ENGL 215 American Literature I
Emphasis on Puritan thought, deism, romanticism, transcendentalism. Close reading of primary texts. Required of English majors.

## ENGL 216 American Literature II

Emphasis on emerging realism, the development of naturalism, and new directions in the 20th century. Close reading of primary texts. Required of English majors.
ENGL 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).
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.

## ENGL 311 The English Renaissance

Poetry and prose from Sidney to Milton (excludingShakespeare). Attention given to political, historical, religious background. Emphasis on Spenser, Milton, and the 17th century devotional poets.
ENGL 312 Restoration and Eighteenth Century
$(3, \mathrm{S03})$
Major figures of English letters 1660-1800. Attention given to satire, comedy of manners, literary criticism, and the rise of the novel.

## ENGL 313 Romanticism and Nineteenth Century

Problems and topics in nineteenth century life, culture, and letters. Readings in selected major figures from Wordsworth to Swinburne. Emphasis on the relationship of literary tastes and critical opinions to the intellectual and spiritual crisis of the age.

## ENGL 315 Modern Drama

(3, F01)
Emphasis on American and English drama of the twentieth century. Beckett and O'Neill as progenitors of significant theatrical trends such as realism, expressionism, and the absurd.
ENGL 319 Modern American Poetry
American poetry from 1900 to present. Emphasis on trends and selected major figures: Eliot, Frost, Pound, Stevens, Williams.

ENGL 320 Modern British Poetry
British poetry from 1900 to present. Emphasis on trends and selected major figures: Hopkins, Hardy, Yeats, Auden, Thomas.

ENGL 321 British Fiction
History and development of the English novel. Emphasis on E. Bronte, Eliot, Hardy, Wilde, Conrad, Forster, Joyce.

ENGL 322 American Fiction
History and development of the American novel. Emphasis on Melville, James, Dreiser, Cather, Fitzgerald, Hemingway, Faulkner, Baldwin.
ENGL 334 The American Short Story
$(3$, SOD $)$
Development of the American short story from its beginnings with Irving, Poe, and Hawthorne to modern practitioners such as Malamud, O'Conner, and Updike.

ENGL 350 Shakespeare
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.
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

Selections from world masterpieces of the 20th century, especially novels since World War II from the non-English-speaking world.
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).

## 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 Seminar: Problems of Literary Study

Original research and study into selected literary topics. Integration of faith and learning. Intensive library work. Required of all majors. Prereq: 21 hours of literature plus Literary Criticism (ENGL 412)
ENGL 291, -2; 391, -2; 491, -2 Independent Study
ENGL 496 Honors in English

## ENVIRONMENTAL STEWARDSHIP (MINOR)

Department of Biology: James M. Wolfe, chair
Faculty: David Odell, James Wolfe
The environmental stewardship minor provides background for students who plan careers that intersect with environmental issues. The minor is supradisciplinary with courses from biology, physics and earth science, recreation, and English.

Required courses:
BIOL 214 Wildlife Biology or
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 (POLS 242) or World Regional Geography (POLS 220).

Recommended courses: BIOL 103 Fundamentals of Biology: Environmental Emphasis (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: William R. Swanson, chair Faculty: Catherine Daggett, Thomas Kettelkamp, Jo-Anne Young

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 6 hours of equestrian studies electives (HRSM, 211 level or above). Note: no more than 8 hours of HRSM courses may be counted towards graduation.

## Course Descriptions

## 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.)
HRSM 223 Horsemanship II (Activity Lab)
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
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

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

Fundamentals of dressage and introduction to eventing (three-phase horse trials; includes dressage, cross-country galloping and jumping, stadium jumping techniques). Prereq: REC 223 or permission.
HRSM 324 Breaking and Training
Foundations of breaking and training the young horse. Students work with the actual training of a young horse, utilizing classical principles, philosophy, methodology. Prereq: REC 223 or permission.

## HRSM 325 Horsemanship: Jumping I

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

Building skills, refining techniques, and expanding technical knowledge learned in HRSM 325. Prerequisite: HRSM 223 or permission.

## HRSM 327 Mini-Prix Jumping Equitation

Riding hunt seat equitation and showing hunters or jumpers; learning principles, practices, and philosophy of course design for the various classes and competitions for jumpers.
HRSM 328 Horsemanship: Judging
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: Richard D. Stegen, chair
Coordinators: Michael Lastoria, Jayne Maugans
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:
SOC 101 Principles of Sociology
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 394 Internship in Family Studies
SOC 297 Special Topics Courses (preapproved by a coordinator of Family Studies)
SOC 394 Internship in Family Studies
(NOTE: No minor may include more than six hours of field experience credit.)
Course Descriptions (see Sociology and other areas)

## FOREIGN LANGUAGES (MAJORS AND MINORS)

Department of Foreign Languages: Jean-Louis Roederer, chair
Faculty: Richard Gould, Horacio Hernandez, Rebecca Loaiza, Jean-Louis Roederer, Carl Schultz, Gudrun Stevenson, Angela Tudorii

## General Information:

Normally, native speakers of French or Spanish are not admitted to the conversation courses for credit.

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 and meets the second semester foreign language requirement as per guidelines. Consult the Foreign Language Department for specific guidelines and eligibility requirements. Applicable CDRP courses are identified by "CDRP" in departmental course listings. Collaborating departments are listed below. Three hours of CDRPs will not automatically substitute for the prerequisite of Foreign Language 201 for students wishing to take additional language courses. Collaborating departments: 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: (27-33 hours), Spanish Major: (27-33 hours)
French, German, \& Spanish Minors: (9 hours beyond intermediate level)
Greek Minor: (9 hours beyond GREK 321)

Hebrew and Latin coursework
AA Concentration: (15 hours in the chosen language)

## FRENCH and SPANISH

The French and Spanish majors are divided into three tracks. Students wishing to pursue a major in French or Spanish must first choose which track they wish to follow in order to determine the appropriate courses to take for their major.
(1) Literature ( 27 hours): Students take 27 hours of classes denoted as FREN or SPAN depending on their language. Students must take the following from the courses noted in the sections below: 2 Conversation and Grammar courses; 4 Literature courses, 1 Civilization course and 2 Foreign Language electives. At least 21 hours of these courses must be taken in the foreign language, e.g., FREN 301 but not FREN 323 (in Engl.).
(2) Linguistics: (33 hours): Students following the Linguistics track must take: LING 220; LING 312 or LING 432; and two of the following: LING 322, LING 323, LING 333 (a total of 12 hours).

Students must also take the following from the courses noted in the sections below: 6 hours of Conversation and Grammar; 9 hours of Civilization \& Culture or 6 hours of Civilization and Culture and 3 hours of Literature (at least 6 hours of Civilization \& Culture must be taken in the foreign language, e.g., SPAN 301 but not SPAN 323 (in Engl.)); and 6 hours from Foreign Language Linguistics.
(3) Cross Cultural Communications: (33 hours): Students following the cross-cultural communications track must take a total of 12 hours of selected Communications Courses from the English and Communication department. No more than 6 of these hours may be taken at the 200 level and at least 3 of these hours must be taken at the 400 level. These courses should be selected from: COMM 245, 246, $251,303,310,312,316,320,325,350,351,353,415,417,496$. For details on these courses please refer to the English and Communication section of this catalog.

Students must also take the following from the courses noted in the sections noted below: 6 hours of Conversation and Grammar; 6 hours of Literature; and 9 hours of Civilization and Culture (at least 3 hours of Civilization \& Culture must be taken in the foreign language, e.g., SPAN 301 but not SPAN 323 (in Engl.)

NOTE 1: Students wishing to pursue two majors in foreign language must choose a separate track for their second language major, unless they choose the literature track for both languages. For example, students cannot be both French-linguistics and Spanish-linguistics, but may be French-linguistics and Spanish-literature or Spanish-Cross Cultural Communications.

NOTE 2: INDS 211 Intercultural Transition and Adjustment is required of all language majors/ minors taking a semester abroad, and highly recommended for all other students studying abroad for Houghton credit.

Section Requirements: The course below are divided into four sections. Pay close attention to the requirements for the track you wish to pursue.

1. Conversation and Grammar:

## French (FREN)

301-Con \& Reading
302-Con \& Reading
452-Adv. Gram \& Comp. 461-Advanced Con.

## 2. Literature:

French (FREN)
321-Survey of literature
407-Drama of 20th cent
408-Novel of 20th
409-Novel of 19th century 395-Special Topics
3. Civilization and Culture French (FREN) 315-Mayterm

Spanish (SPAN)
301-Con \& Reading
302-Con \& Reading
452-Advanced Span Composition

## Spanish (SPAN)

401-Survey of Span literature
402-Survey of Span literature
423-Masterp. of Span-Amer lit
424-Masterp. of Span-Amer lit

Spanish (SPAN)
341-Mayterm in Spain

317-Mayterm
421-French Civ
395-Special Topics
323-Politc'l Cinema (in Engl)
324-Crossing Cultures (in Engl)
(up to 3 hours of CDRP)
4. Foreign Language Linguistics:

French (FREN)
305-French Phonetics
307-Romance Linguistics (in Engl)
318-Romance Syntax (in Engl)
319-Romance Phonology (in Engl)

342-MesoAmerican Civ.
344-Latin American Mayterm
211-Ecotour in Honduras
323-Politcal Cinema (in Engl)
324-Crossing Cultures (in Engl)
326-La Voz Popular
405-Spanish American Civ
406-Civilization of Spain
HIST 223 or HIST 224
(by Span. faculty permission only)
(up to 3 hours of CDRP)

Spanish (SPAN)
305-Spanish Phonetics
307- Romance Linguistics (in Engl)
318- Romance Syntax (in Engl)
319- Romance Phonology (in Engl)
5. Courses which may be applied to one of several tracks:

French (FREN)
395-Special Topics*
481-French Honors Intrnshp

Spanish (SPAN)
481-Spanish Honors Internship
*Depending on the course of study, this course may be applied as 3 hours of Literature or Civilization \& Culture credit. Consult the professor of this course for further clarification on the nature of the course.

## French/ Spanish Courses

The following courses may be taken for either French or Spanish credit. NOTE: Your final paper in any of these classes must have as its subject the language of the major which you are pursuing if you wish for credit in that subject area, i.e., for Spanish credit the final paper must be on an aspect of Hispanic culture or language; for French credit the final paper must be on an aspect of Francophone culture or language.

## Course Descriptions

FREN 307/SPAN 307 Introduction to Romance Linguistics (in Engl)
This course is designed to introduce students to the phonetics and phonology (sound systems), morphology (word-formation rules), semantics (word meaning), and syntax (sentence structures) of Romance languages. It will also address how Romance languages have evolved from Latin and continue to evolve as they come into contact with languages outside of Europe (historical linguistics and sociolinguistics).
FREN 318/SPAN 318 Romance Syntax (in Engl.)
$(3, \mathrm{~S} 04)$
The analysis of sentence formation rules in Romance languages, with the application of traditional and modern syntactic theories and methodologies. Prerequisite: FREN /SPAN 307, or LING 220.

FREN 319 / SPAN 319 Romance Phonology (in Engl.)
The analysis of the principles that underlie the organization of the sound systems of Romance languages. Prerequisite: FREN /SPAN 307, or LING 220.
FREN 323/SPAN 323 Political Cinema (in Engl.)
In this course, students will view one film per week which examines society from the insider's point of view of a variety of cultures. This course is taught in English, and the films will have English sub-titles.
FREN 324/SPAN 324 Crossing Cultures (in Engl.)
$(3, S 04)$
Linguistic, cultural, economic, and historical customs will be surveyed. The course will in part make use of invited guest speakers from various professional backgrounds. Students develop awareness of similarities and differences between cultures with a view to developing a sensitivity and understanding of the people of the language studied.

## FRENCH

FREN 101, 102 Beginning French
(4/4, F\&S)
Development of the skills of comprehending, speaking, reading, and writing French. One hour of inclass lab and additional lab practice required.

Grammar review, selected literary readings and oral practice. Laboratory experience may be required. Prereq: FREN 102, or placement exam.

## FREN 301, 302 Conversation and Readings

(3/3, F\&S)
Intensive practice in speaking French. Oral discussions and reports based on contemporary readings. Laboratory practice required. Prerequisite: FREN 201 or equivalent. Students who have completed FREN 305 and above must obtain permission of instructor.

## FREN 305 French Phonetics

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 201 or equivalent.

## FREN 204 or 315 Paris: Capital of French Culture

(3, May03)
A field trip course in Paris of three weeks duration. Daily lecture-visits and excursions to places of cultural interest both in Paris and its environs. A long and a short paper required for integrative studies or major/minor credit. Approximately $\$ 1950$ above tuition.

## FREN 321 Survey of French Literature <br> (3, F03, 06)

Masterpieces of French literature from its beginnings to the present. Prereq: FREN 301 or equivalent.
FREN 395 Special Topics
$(3, O D)$
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 301 or equivalent.
FREN 407 French Literature of the 20th Century: Drama
Masterpieces of the French drama since 1900. Prerequisite: FREN 301 or equivalent.
FREN 408 French Literature of the 20th Century: Novel
(3, F02, 05)
Masterpieces of the French novel since 1900. Prerequisite: FREN 301 or equivalent.
FREN 409 French Novel of the 19th Century
A study of selected masterpieces of the French romantic and realistic novel. Prereq: FREN 301 or equiv.
FREN 421 French Civilization
(3, F04)
Historical backgrounds and major contributions of France to contemporary culture. Prerequisite: FREN 301 or equivalent.
FREN 452 Advanced French Grammar and Composition
$(3, \mathrm{SO6})$
A study of advanced grammar and style. Practice in writing compositions. Prereq: FREN 301 or equiv.
FREN 461 Advanced French Conversation: Current Events
(3, S02, 05)
Intensive oral practice with a focus on current issues in Francophone countries. Prerequisite: FREN 301 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 intermediate 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 391, -2; 491, -2 Independent Study
(1, 2, or 3 )
FREN 496 Honors in French
SPANISH
SPAN 101, 102 Beginning Spanish
(4/4, F\&S)
Audio-lingual approach to speaking, reading, and writing. One hour of in-class lab and additional laboratory practice required.
SPAN 201 Intermediate Spanish
Grammar, conversation, and civilization. Reading ability stressed. One hour of in-class lab and additional practice required. Prerequisite: SPAN 102 or placement by examination.

SPAN 204 or 341 May in Spain
(3, May03)
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

Tour of ancient 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, then eastward 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, May05)
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 207 or 346 Aspects of Costa Rica: Language, Culture and People

(SPAN 207 fulfills SPAN 201; 346 fulfills conversational language requirement for Intercultural Studies majors.)
Four-week immersion experience in Costa Rica. Students will be hosted in the homes of nationals as they undergo two weeks of intense language instruction at S4S Spanish school 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 $\$ 1800$ above tuition.
SPAN 211 Ecotour in Honduras
Students will have a third-world experience including a service project with Christian Camping International. Visits are made to national parks and Mayan Indian ruins. Activities include hiking, snorkeling, and attending cross-cultural classes. Check with professor for cost above tuition.
SPAN 301, 302 Spanish Conversation and Readings
(3/3, F/S)
Development of skill in oral comprehension and expression through the discussion of contemporary life issues and of selected readings in Hispanic literature. Prerequisite: SPAN 201 or equivalent.
SPAN 305 Spanish Phonetics
$(3, \mathrm{~S} 03)$
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 201 or equivalent.

## SPAN 326 La Voz Popular

This course examines the music, popular poetry and folklore to furnish students with the tools necessary to understand the effect of the mass media on life in Latin American society. Prereq: SPAN 302 or perm.
SPAN 401, 402 Survey of Spanish Literature
(3/3, F01/S02)
Representative works, El Cid to contemporary times. Prerequisite: SPAN 302 or permission.
SPAN 405 Spanish-American Civilization
(3, F02, 04)
Survey of Spanish-American culture, pre-Colombian to the present. Socioeconomic problems and relationships with the United States. Prerequisite: SPAN 302 or permission.
SPAN 406 Civilization of Spain
(3, F01, 03)
Geography and cultural history of Spain. Present political situation, education, art, music, everyday life. Prereq: SPAN 302 or permission.
SPAN 423, 424 Masterpieces of Spanish-American Literature
(3/3, F02/S03)
Selected readings from outstanding Spanish-American authors representing different countries, periods and genres. Prerequisite: SPAN 302 or permission.
SPAN 452 Advanced Spanish Composition
A comprehensive course in structure and usage. Prerequisite: SPAN 302 or permission
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.

## GERMAN

GERM 101, 102 Beginning German
(4/4, F\&S)
Audio-lingual approach to speaking, reading, and writing. One hour of in-class lab and additional lab practice required.

## GERM 201 Intermediate German

(4, F\&S)
Review and expansion of grammatical patterns, composition and conversation; modern fiction, biography, and cultural-historical material. Laboratory practice required. Prereq: GERM 102 or placement by exam.
GERM 295, 395, 495 Special Topics
GERM 301 German Conversation \& Readings
Intensive practice in speaking German. Oral discussions and reports based on contemporary readings. Laboratory practice required. Prerequisite: German 201 or equivalent.
GERM 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
$(1,2$, or 3$)$

## GREEK

GREK 101, 102 Beginning Greek
(4/4, 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.

## GREK 321 New Testament Greek

Grammatical readings and exegetical study of Gospel of John and two epistles. Prerequisite: GREK 102.
GREK 191, -2; 291, -2; 391, -2; 491, -2 Independent Study (1, 2, or 3)
GREK 301 Classics in Translation
$(3, \mathrm{~S} 03)$
This course surveys the major authors of Greek and Roman epic and classical drama to determine the variety of treatments given to some significant mythological figures. Individual authors, writing in different centuries, according to differing cultures and genres, portray such figures as Odysseus, Agamemnon, Jason and Medea both in traditional and strikingly original ways. (in Engl.)
GREK 302 The Classical Hero in Ancient Mythology
In addition to examining how myth is defined and used in various academic disciplines, this course investigates the broad spectrum of Greek and Roman mythology through reading primary sources and observing how artists and musicians have been influence by particular mythical heroes.
HEBREW (Supervised by the Department of Religion and Philosophy)
HEBR 101, 102 Beginning Hebrew
(4/4, F01/S02)
Elements of Biblical Hebrew. Reading from Old Testament.
HEBR 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
$(1,2$, or 3$)$

## LATIN

LATN 101, 102 Beginning Latin
(4/4, F01/S02)
Elements of the Latin language. Stress on facility in reading. Cultural backgrounds in Roman civilization. Current relevancy.

## LATN 221 Intermediate Latin

(4, F02)
Grammar review and introduction to Latin literature. Prerequisite: Beginning Latin $(101,102)$ or two entrance units of Latin.

## FRENCH (SEE FOREIGN LANGUAGES)

## GENERAL SCIENCE (MAJOR)

Department of Physics and Earth Science: Mark Yuly, chair
Major (BA, BS): (46 hours)
General Information: The general science major is made up of six (6) hours in mathematics, eight (8) hours each in biology, chemistry, physics, and earth science (which must include geology [ESCI 101], and eight (8) or more hours additional concentration in one of the four science areas in courses numbered

200 or above.
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.

## GERMAN (SEE FOREIGN LANGUAGES)

## GREEK (SEE FOREIGN LANGUAGES)

## HEBREW (SEE FOREIGN LANGUAGES)

## HISTORY (MAJORS AND MINOR)

Department of History and Political Science: William Doezema, chair
Faculty: Cameron Airhart, William Doezema, David Howard
History Major: (27 hours)
This major consists of 27 hours in history above the 210 course level, including the Senior History Seminar (HIST 481).

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)
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 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 Politics Seminar ............................................. 3
Total ............................................................................. 9

Minor: (12 hours above the 210 level)

## Course Descriptions

HIST 101 Western Civilization I: Ancient Civilization to 1650
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. Upperclass transfer students may take this course during Mayterm.)

## HIST 102 Western Civilization II: 1650 to the Present

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. Upperclass students may take this course during Mayterm.)

## AMERICAN HISTORY

## HIST 213 American Economic History

$(3, O D)$
Economic and business development of the United States, colonial period to the present. May be counted toward history major/minor or economics minor.
HIST 220 American History Survey
Overview of American history to the present.
HIST 226 New York State History
(May, 02)
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.
HIST 359 Colonial America, 1600-1788
Settlement of North America with emphasis upon religious and social developments as well as upon the American Revolution.
HIST 360 Early National Period, 1788-1850
Establishment of national political institutions and ideologies. Manifest Destiny, institution of slavery, antebellum revivalism and reforms, nascent industrialization.

HIST 361 Civil War and Industrial America, 1850-1920
$(3, \mathrm{~F} 01)$
Sectionalism and Civil War, Reconstruction, and adaptation to accelerating industrialization and urbanization, and World War I.
HIST 362 Recent American History, 1920 to Present(3, S02)
Immigration, Depression and New Deal, World War II, Cold War, and resurgence of Evangelicalism.

## EUROPEAN HISTORY

HIST 325 Europe in the 19th Century (CDRP, see Foreign Language)
(3, F01)
Growth of liberal democracy, influence of industrial revolution and impact of nationalism. French Revolution to 1890.
HIST 326 Europe, 1890-1945
$(3, \mathrm{~S} 03)$
The changing intellectual climate, World War I, problems of inter-war period, challenges to democracy, background of World War II.

HIST 332 History of Rome
(3, F01)
Survey of Roman history and cultures from the beginning of the republic until the disintegration of the empire, emphasizing political and religious developments.
HIST 368 The Reformation
A survey of the continental, English, and Roman Catholic reformation of the sixteenth century.
HIST 430 English History to 1714
$(3, O D)$
Roman England to the Stuarts, with attention to constitutional and religious developments.
HIST 431 English History since 1714
Hanoverian Britain to the present, with attention to political and social developments.

## REGIONAL HISTORY

HIST 223 Latin American History to 1800
An introductory survey, with attention to cultural interaction during the colonial period.
HIST 224 Latin American History since 1800
(3, F02)
An introductory survey of Latin America from the revolutionary era to the present.
HIST 249 African History
$(3$, S03 $)$
Sub-Saharan Africa from earliest times. Medieval empires of western Sudan, colonial rule, emergence of national states.
HIST 251 East African History
(See Special Studies section for course description.)
HIST 355 East Asia: History and Politics
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 nineteenth and twentieth centuries leading to founding of Communist China and new Japan.

HIST 357 Russia and the USSR: History and Politics
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.
HIST 381 Historiography
History of historical writings and methods; theories of history. HIST 295, 395, 495 Special Topics (CDRP, see Foreign Language)
(2 or 3, OD)
Group study of selected topics; open only by permission.

## HIST 481 Senior History Seminar

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
HIST 496 Honors in History
CROSS-LISTED COURSES
HIST 453, 454 History of Christianity
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. (Cross-listed with Theology.)

HUM 401 Pagans and Christians: Ancient and Medieval Texts
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.

## HUMANITIES (MAJOR)

Department or Religion and Philosophy: Harold E. Kingdon, chair
Program director: W. Christopher Stewart

## 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 frgn lang) ........ 9
History ........................................................................................... 9
Philosophy .................................................................................... 9
Additional course in one of above ......................................................... 3
Art History or
Music History ............................................................................... 3
Elective (with consent of advisor) ............................................. 3
Humanities Seminar ..................................................................... 1

## HUM 395 Special Topics

HUM 481 Humanities Seminar
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.

INTERCULTURAL STUDIES (MAJOR AND MINOR)
Faculty: Andrew F. Gallman (Director); Jonathan E. Arensen; Richard K. Eckley; Sherry W. Gallman; Rebecca C. Loaiza; Ronald J. Oakerson; David O'Brien; David Pollock; Paul W. Shea

Major: (35-44 hours which includes a 26 -hour core plus either 9 hours of electives or one 18 -hour concentration. The three concentration options are linguistics, missions, or urban studies.)

General Information: The Intercultural Studies major seeks to prepare students to serve effectively as scholar-servants in cross-cultural communities. 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:

INCL/SOC 243 Cultural Anthropology .................................. 3
INCL/MISS 231 Global Relief and Development................... 3
INCL/COMM 325 Cross-Cultural Communication .............. 3
INCL/INDS 211 Intercultural Transition and Adjustment ... 2
INCL (FREN, SPAN 301) Conversation-level Frgn Lang ...... 3
(Or substitute a spoken language: Swahili, Arabic, Thai)
INCL/INDS 311 Intercultural Experience ............................... 4
INCL 482 Senior Intercultural Seminar ..................................... 2 One of these three not in concentration: .............................................. 3

INCL/LING 220 Introduction to Linguistics
INCL/MISS 222 Modern Missions
INCL/URMN 212 Urban Ministry One of these two: .3
INCL/POLS 320 Community Organization and Development INCL/POLS 336 Governance and Politics in Developing Countries

Optional Linguistics Concentration - 18 hours
Basic Core: ( $\mathbf{1 2}$ hours)
LING 220 Introduction to Linguistics ........................................ 3
LING 322 Phonetics ...................................................................... 3
LING 323 Phonology ................................................................... 3
LING 333 Grammar ...................................................................... 3
Special Interests: (choose any two)
LING 312 Sociolinguistics .......................................................... 3
LING 351 TESOL .......................................................................... 3
LING 355 Theory and Practice of Bilingual Education .......... 3
LING 432 Theory and Practice and Language Learning ....... 3
Optional Missions Concentration - 18 hours
Basic Core: (6 hours)
MISS 221 History of Missions ..................................................... 3
MISS 222 Modern Missions ......................................................... 3
Biblical/Religion Core: (6 hours)
Bible Core3

Any Bible Course Level 200 or above.
Highly recommended:
BIBL 221 Biblical Interpretation or
MISS 395 ST: Biblical Theology of Missions
Theology/Religion 3
Additional course in theology or religion.
Highly recommended:
MISS 321 World Religions
THEL 214 The Cults and New Age
THEL 215 Christian Apologetics
Skills/Tools Core: ( 6 hours any two)

Choice of courses in EDMN or REL 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
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 Ministry Concentration - 18 hours
Urban Ministry Core: (6 hours)
URMN 212 Urban Ministry ......................................................... 3
URMN 250 Evang. and Social Action in the Urban Context. 3
Urban Studies Core: (6 hours)
SOC :295 Urban Policy
SOC 361 Race and Ethnicity (Majority Minority Relations) .. 3
Skills/Tools Core: (6 hours)
Similar to missions concentration, through counsel and advisement, students be allowed to sharpen their skills in appropriate areas of ministry or interest from administration to ministry.

Electives 9-hours: (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 351 Individual and Society
Social Science Methodology SOC 309 Statistics SOC 312 Social Science Research Methods

Minor in Intercultural Studies: (15 hours)
INCL/SOC 243 Cultural Anthropology .................................. 3
INCL/COMM 325 Cross-Cultural Communication ............... 3
INCL/INDS 211 Intercultural Transition and Adjustment ... 2
INCL/INDS 311 Intercultural Experience ............................... 4
Chose from: ............................................................................................... 3
INCL/URMN 212 Urban Ministry
INCL/LING 220 Introduction to Linguistics
INCL/MISS 222 Modern Missions

Course Descriptions (or see specific course under appropriate listing)

## INCL/INDS 211 Intercultural Transition and Adjustment

(2, F\&S\&M)
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 INCL/INDS 311.

## INCL/URMN 212 Urban Ministry

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.
INCL/LING 220 Introduction to Linguistics
(3, F\&S\&M)
An introduction to the basic elements of linguistics. Emphasis on phonology, morphology, syntax, and semantics.

## INCL/MISS 222 Modern Missions

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.
INCL/MISS 231 Global Relief and Development
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 /SOC 243 Cultural Anthropology (CDRP, see Foreign Language)
Cultural and social aspects of human behavior; comparison of cultures.
INCL/INDS 311 Intercultural Experience
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, on-going 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 211.

## INCL/POLS 320 Community Organization and Development

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. Prerequisite: INCL 231.

INCL/COMM 325 Cross-Cultural Communication
Theory and practice in communication across cultural boundaries. Pre- or Co-requisite: INCL 243
INCL/POLS 336 Governance and Politics in Developing Countries
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 482 Senior Intercultural Seminar
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.

## INTERNATIONAL RELATIONS (MAJOR AND MINOR)

Department of History and Political Science: William Doezema, chair
Program Director: B. David Benedict
Faculty: B. David Benedict, Robert Black
Major: (38-39 hours, 3 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.

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    Prerequisite:
        ECON 210 Microeconomics3(but it counts for 1 of 2 social science choices for first level IS credit)The major consists of 38 hours.Foundational Course:
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POLS 230 Introduction to International Relations ..... 3
Skills Courses:
COMM 325 Cross-Cultural Communication ..... 3
Foreign Language (Conversation and Readings) ..... 3
(Students must have language instruction or demonstrate ability

```at the conversation and readings level in one foreign language)POLS 312 Social Science Research Methods3
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INDS 211 Intercultural Transition and Adjustment ..... 2
(is a prerequisite for the Intercultural Experience)
Core Courses: Students must complete six core courses.
Choose two International Politics courses:

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POLS 240 Comparative Government
POLS 395 International Relations Theory
POLS 395 International Law and Organization

```POLS 316 American Foreign Policy
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POLS 395 Governance and Politics in Developing Countries

```6
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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 357 Russia and USSR: History and Politics ..... 3
HIST 355 East Asia: History and Politics ..... 3
HIST 325,326 Modern European History ..... 3,3
HIST 223,224 Latin American History ..... 3, 3
HIST 249 African History .....  3
HIST 251 East African History ..... 3
Or a regional history taught during the Intercultural Exp .... 3
(If needed, choose a sixth course from the above Core Course offerings or an equivalent

```taught during the Intercultural Experience.)
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Capstone Courses:

```INDS 311 Intercultural Experience (Internship)4-6
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(Only four hours count toward the major, but as many as six can be

```brought back for credit on the transcript)
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Senior Intercultural Seminar (pending approval) or

```2
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POLS 480 Senior Politics Seminar ..... 3
Minor: (15 hours; 3 prerequisite)
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 Economics3
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(choose one course from list of Int'l Economics courses in major)
And both these courses:
INDS 211 Intercultural Transition and Adjustment ..... 2
INDS 311 Intercultural Experience ..... 4
Course Descriptions

## INDS 211 Intercultural Transition and Adjustment

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. It is required of all language major/minors taking a semester abroad, and highly recommended for all other students studying abroad for Houghton credit.

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Required for international studies major or intercultural relations minor; open to others. No student may enroll in this course until a written proposal for the experience, internship, or study program is approved by the office of intercultural affairs and international studies. Written guidelines are available in that office. Enrollment in Intercultural Transition and Adjustment (INDS 211) is a prerequisite.

\section*{LATIN (SEE FOREIGN LANGUAGES)}

\section*{LINGUISTICS (MINOR)}
(see also Intercultural Studies linguistics concentration)
Department of Foreign Languages: Jean-Louis Roederer, chair
Faculty: Andrew Gallman, Sherry Gallman
Minor: (15 hours) This minor is taught in conjunction with the Summer Institute of Linguistics (Wycliffe Bible Translators).

Required courses:
LING 220 Introduction to Linguistics ...................................... 3
LING 322 Phonetics ..................................................................... 3
LING 323 Phonology I ................................................................ 3
LING 333 Grammar I ................................................................... 3
One additional course from LING ............................................. 3
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 TESL 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.

\section*{Course Descriptions}

\section*{LING 220 Introduction to Linguistics}
(3, F,S,M)
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).

\section*{LING 312 Sociolinguistics}

Focuses on language use patterns in multilingual societies: language maintenance and death; language attitudes; language planning; Pidgins and Creoles.

\section*{LING 322 Phonetics}
(3, F\&S)
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.

\section*{LING 323 Phonology I}

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

\section*{LING 333 Grammar I}

Principles and techniques of the analysis of morphological and syntactic structures of language.
LING 351 TESOL (Teaching English to Speakers of Other Languages)
Review of second language teaching methodologies and learning theories. Examination of some of the unique challenges of English structure (phonological, morphological and syntactical) and the transfer problems that non-native speakers may have. Recommended prereq: LING 220.

\section*{LING 355 Theory and Practice of Bilingual Education}

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 432 Theory and Practice of Language Learning
Introduction in principles and techniques of linguistic field research with application to a non-IndoEuropean language. Lectures on practical aspects of work in a field situation. Prerequisite/co-requisite: LING 322 Phonetics, LING 323 Phonology.

\section*{LING 295, 395, 495 Special Topics}

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, or 3 )

\section*{LITERATURE (MINOR)}

Department of English and Communication: Douglas Gaerte, chair
Faculty: Charles Bressler, Laurie Dashnau, Douglas Gaerte, John Leax, James Wardwell, Linda Mills Woolsey, Stephen Woolsey, James Zoller

Minor: (18 hours)
Students electing a minor in literature are required to take either both semesters of English Literature (ENGL 203, 204) or both semesters of American Literature (ENGL 215, 216). An additional twelve 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. Literature of the Western World (ENGL 201) may be substituted for one semester of English or American Literature.

> Course Descriptions (See English or Writing sections.)

\section*{MATHEMATICS (MAJOR AND MINOR)}

Department of Mathematics and Computer Science: Richard Jacobson, chair
Faculty: Wei Hu, Richard Jacobson, David Perkins, Paul Watson
Major: (28 hours)
Required courses:
MATH 181, 182 Calculus I, II ................................................. 6
MATH 261 Linear Algebra .................................................... 4
MATH 482 Mathematics Seminar ......................................... 3
Other courses 181 or above ................................................. 15
Highly recommended for teachers of math:
MATH 251 Modern Geometries
MATH 462 Algebra
MATH 291 History of Mathematics
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.

\section*{Course Descriptions}

\section*{MATH 107 Pre-Calculus}

A contemporary approach to precalculus mathematics, including linear, quadratic, exponential and trigonometric functions as well as introductory probability concepts. Incorporation of peer group work with a strong emphasis on graphic technology. Meets math integrative studies requirement as well as
preparing students for calculus.

\section*{MATH 181 Calculus I}

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.

\section*{MATH 182 Calculus II}

Areas, volumes, centroids, integration techniques, calculus of transcendental functions, infinite series. Prerequisite: MATH 181.

\section*{MATH 190 Mathematical Applications and Issues}
\((2, S)\)
A survey of various problems encountered in present day mathematics as well as vocational opportunities available to mathematicians. Prerequisite: MATH 181 or permission.
MATH 231 Probability
(3, F01)
Combinatorics, independence, conditional probability, discrete and continuous random variables, expected value and variance. Prerequisite: MATH 182.
MATH 232 Mathematical Statistics
(3, F02)
Probability theory, random variables, sampling, estimation, hypothesis testing and linear regression. This course emphasizes the mathematical rather than the applied features of statistics. Pre: MATH182.
MATH 241 Differential Equations
(3, F\&S)
Methods of solution and applications of principal types of differential equations. Prereq: MATH 182.

\section*{MATH 251 Modern Geometries}

A survey of geometry including advanced Euclidean geometry and an introduction to non-Euclidean geometries. Prerequisite: MATH 182.

\section*{MATH 261 Linear Algebra}

Linear algebra: vector spaces, linear mappings, inner products and matrices. Prereq: MATH 182.

\section*{MATH 281 History of Mathematics}

A contextual study of the history of mathematics and some of the classical problems. Pre: MATH 182

\section*{MATH 321 Multivariate Calculus}
\((3, F)\)
Infinite series, space geometry, vectors, vector function, function of several variables, partial differentiation, multiple integration. Prerequisite: MATH 182.
MATH 331 Numerical Analysis
\((3, \mathrm{~S} 02)\)
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. Prerequisites: MATH 261.

\section*{MATH 422 Advanced Calculus}

Structure of the real number system, theory of limit, continuity, differentiation, Riemann integration, and infinite series. Prerequisites: MATH 321 and MATH 261, or permission.

\section*{MATH 452 Point Set Topology}
\((3, \mathrm{~S} 02)\)
Open and closed sets. Connected, compact, and metric topological spaces. Prereq: MATH 261.
MATH 462 Algebra I
Groups, Sylow theorems, rings and fields. Prerequisite: MATH 261.
MATH 471 Complex Analysis
Complex number system, limits, differentiation and integration in the complex plane, complex series. Prerequisites: MATH 321 and MATH 261, or permission.

\section*{MATH 482 Mathematics Seminar}

For seniors, except by permission. Required of all math majors.
MATH 391, -2; 491, -2 Independent Study
MATH 295, -6; 395, -6; 495 Special Topics in Mathematics
MATH 496 Honors in Mathematics

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
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 .......................................... 8
CHEM 221 Contemporary Organic Chemistry ....................... 4
CHEM 277 Analytical Chemistry ............................................... 4
MATH 107 Pre-Calculus or ......................................................... 3
MATH 181 Calculus I................................................................... 4
If a student plans to attend a nonaffiliated 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.

\section*{MINISTRY - SEE THE FOLLOWING HEADINGS:}
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Christian Ministries (AAS)
Church Ministries
Educational Ministries (incl. Youth Concentration option)
Missions
Pastoral and Church Ministries Program (AAS), in Adult Learning Opportunities section
Religion (incl. Ministerial Concentration option)
Urban Ministry

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MISSIONS (MINOR, SEE ALSO INTERCULTURAL STUDIES MISSION CONCENTRATION) Department of Religion and Philosophy: Harold Kingdon, chair
Faculty: Paul Shea
Minor: (12 hours) Most students minoring in missions will include the highly recommended CrossCultural Field Experience in addition to the 12 hours of regular course work.
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Required courses:
MISS 221 History of Missions ................................................ }
MISS 222 Modern Missions .................................................... }
Minor elective credit chosen from: ..................................................... }
MISS 231 Global Relief and Development
MISS 311 Cross-Cultural Field Experience
MISS/PHIL 321 World Religions
MISS }395\mathrm{ Special Topics in Missions
THEL }214\mathrm{ The Cults and New Age
COMM 325 Cross Cultural Communication

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\section*{Course Descriptions}

\section*{MISS 221 History of Missions}

Missions from apostolic days to present. Changing concepts of missions. Contributions of outstanding leaders. (Liberal arts credit)

\section*{MISS 222 Modern Missions}

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.

\section*{MISS 231 Global Relief and Development}

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 311 Cross Cultural Field Experience
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
Background, major teachings of Eastern religious and philosophical thought. Emphasis on understanding and evaluating non-Western ideas, practices.
MISS 395 Special Topics in Missions
Topics offered according to interest and demand.
MISS 191, -2; 291, -2; 391, -2; 491, -2 Independent Study (1, 2 or 3 hours)

\section*{MUSIC (MAJORS AND MINORS)}

Faculty: Ben R. King (director), Bruce C. Brown, Shirley Close, Judy A. Congdon, Robert J. Galloway, Mark Hartman, Mark D. Hijleh, Harold E. McNiel, B. Jean Reigles, Mark L. Taylor
Part-time: Jane Allen, Dolores Gadevsky, Nan Gullo, Virginia Halberg, Kelley Hijleh, Ed Wadin, and others as appropriate from the Buffalo and Rochester Philharmonic orchestras

\section*{Email: music@houghton.edu}

Majors: Music (BA: 36-37 hours), Church Ministries (BA/BS: Bible major +37 hour music concentration); Performance (BMus: hours variable), Music Education (BMus: hours variable), Composition (BMus: hours variable)

Minors: Performance and contract minors available

\section*{Accreditation}

The School of Music is a full member of the National Association of Schools of Music, and its curricula conform to NASM published standards.

\section*{Mission}

Within a Christ-centered, challenging, liberal arts education the Houghton College School of Music 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.

\section*{Liberal arts study in the School of Music}

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 8 hours of applied music may count toward graduation for students who are not majoring or minoring in music.

\section*{Liberal Arts Music Major (BA)}
Course requirements are:
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-228 Aural Skills I-II ..... 2
MTH 225-226 Theory I-II ..... 6
MHS 211 Music \& Listening: an introduction ..... 3
MHS 231-234 Music History and Literature I-IV (any 2) .... 5-6
MAP - Applied Music (6 hours above level-220) ..... 12
- Electives in Music (211 or above) ..... 6
MUS - Ensembles (4 sem., with or w/o credit) ..... 0
Total: ..... 35-37

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 for entrance.

During four semesters in the BA music curriculum, the student 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.

\section*{Church Ministries (BS)}

In cooperation with the Department of Religion and Philosophy, the School of Music offers a music concentration to complement a major in Bible or educational ministries for BS in church ministries. The objective is to provide a basic musical background for the pastor and/or Christian education director who must handle the service music in a small church setting.

Course requirements for music concentration in church ministries major:
MUS 250 Music \& Christian Perspective ................................. 2
MTH 225 Theory I-II ................................................................... 6
MTH 227 Aural Skills I-II ............................................................ 2
MHS 211 Music \& Listening: an introduction ......................... 3
MUS 229, 329 Basic, Choral Conducting ................................. 4
MAP 764 Voice level 220+ .......................................................... 6
MAP 754, 752 Piano or Organ any level .................................. 5
MUS - Ensemble (4 semester req.) ...................................... 0-2
CHMU 216 Introduction to Hymnology ................................. 2
CHMU 301 Church Music Administration ............................. 2
CHMU 351 Music \& Worship ................................................... 3
Total: .....................................................................35-37
A music audition is required for entrance into this program. Contact the director of the School of Music.

For further information regarding the Bible or educational ministries majors, contact the Department of Religion and Philosophy.

Recital attendance and ensemble participation policies conform to those for BA music majors (above).

\section*{Contract minor in music}

A 16-hour contract minor as determined by arrangement with the director of the 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.

\section*{Performance minor}

Sixteen hours in one specific area (eight hours above level 230 and one year in an appropriate ensemble). Audition and permission of the director of the School of Music required. Limited enrollment in some areas based on teacher load availability.

Instrumental voice, violin, viola, violoncello, double bass, guitar,
and Vocal: trumpet, french horn, trombone, euphonium, tuba, flute, oboe, clarinet, saxophone, bassoon, percussion.
14 hours of applied music
2 hours of ensemble
Keyboard: \(\quad\)\begin{tabular}{l}
14 hours of piano (10 hours above level 227) \\
14 hours of organ (6 hours of piano above level 117 and \\
10 hours of organ level 230 and above, or 14 hours of organ level \\
230 and above) \\
2 hours of ensemble
\end{tabular}

\section*{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.)

\section*{Summer School}

Applied music lessons and composition may be taken for credit during summer school, depending on instructor availability.

\section*{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 School of Music. A tape-recorded audition may be sent, by permission of the director of the School of Music, in cases where an in-person audition is not possible. All appropriate forms, guidelines, supplemental information, and scholarship information is available through the music office. Call 1-800-777-2556 or send email to request these.

\section*{Transfer students}

Students transferring to Houghton 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.

\section*{Integrative Studies - Bachelor of Music Curricula}

As part of all bachelor of music curricula, students are required to have at least 33 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*) ............................................4-12
Literature of the Western World ............................................ 3
Western Civilization .............................................................. 4
Lifetime Wellness or Activity course ..................................... 1
Advanced Bible or Christian Theology ................................. 3
*The minimum requirement for Music Education-Instrumental, Music Education-Combined, and Composition majors is 4 hours of beginning foreign language. The minimum requirement for Music Education-Voice majors, and for Instrumental Performance majors, is 8 hours of foreign language, normally either French or German. The minimum requirement for Vocal Performance majors is 8 hours of beginning language in either French or German, and 4 hours of beginning language in the other language. Music majors may satisfy these requirements via placement exam, CLEP, or AP exam. [The School of Music may advise additional foreign language study for some B.Mus. students.]

Music Education majors add:
Introduction to Psychology ......................................................... 3
Physics of Music ................................................................... 2
Plus electives to equal 36 hours, or 32 hours for combined curricula

\section*{Composition}

The composition curriculum 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 twentiethcentury 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.
Music course work: 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 358 Sixteenth Century Counterpoint (3) or MTH 375 Synthesizer Computer Applications (2) or MTH 463 Form and Analysis (3) or MTH 467 Theory and Analysis of 20th Century Music (3) MAP 775 Applied Composition ..... 16
MHS 231-334 Music History and Literature I-IV ..... 10
MAP - Applied Music (Required piano level-- 236) ..... 18
MED 214 Woodwind Instruments ..... 1
MED 215 String Instruments ..... 1
MED 217 Brass Instruments ..... 1
MED 218 Percussion Instruments ..... 1
MUS 229 Basic Conducting ..... 2
MUS 329 Choral Conducting or ..... 2
MUS 430 Instrumental Conducting ..... 2
MTH 465 Advanced Keyboard ..... 2
MED 356 Vocal Pedagogy (Voice majors, only) ..... (2)
MUS 485 Senior Recital .....  0
MUS - Ensembles (with or without credit-8 semesters) ..... 0
Total: ..... 78-80

Entering Composition majors are expected to have piano proficiency equivalent to at least level 225, and level 230 in the major applied area. Required graduation levels are Piano 236 and 245 in the major applied area.

Performance curricula prepare 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 performance is expected.
Bachelor of Music in Performance - Voice
MAP 764 Voice (levels 230-475) ..... 28
MED 356 Vocal Pedagogy ..... 2
MUS 219-220 Foreign Language Diction ..... 2
MUS 250 Music and Christian Perspective ..... 2
MTH 227-328 Aural Skills I-IV ..... 4
MTH 225-326 Theory I-IV ..... 12
MHS 231-334 Music History and Literature I-IV ..... 10
MHS 229 Basic Conducting ..... 2
MHS 329 Choral Conducting ..... 2
Advanced theory, chosen from: ..... 6
MTH 358 Sixteenth Century Counterpoint (3)
MTH 375 Synthesizer Computer Applications (3)
MTH 463 Form and Analysis (3)
MTH 467 Theory \& Analysis of 20th Century Music (3)MTH 367 Elementary Composition and Orchestration orMAP 775 Applied Composition2
CHMU 216 Hymnology ..... 2
MAP 754 Piano (level 220-237) ..... 0-12
MUS - Junior and Senior Recitals ..... 0
MUS - Ensembles (with or without credit-8 semesters) ..... 0
Total: ..... 74-86
Bachelor of Music in Performance - Brass, Woodwinds, or StringsMAP - Major Applied Studies (levels 240-487)30
MED 241 Brass Techniques (2) or
MED 242 Woodwind Techniques (2) orMED 227 String Techniques (2)2
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-328 Aural Skills I-IV ..... 4
MTH 225-326 Theory I-IV ..... 12
MTH 467 Theory \& Analysis of 20th Century Music .....  3
MHS 231-334 Music History and Literature I-IV ..... 10
MUS 229 Basic Conducting ..... 2
Advanced theory, chosen from: ..... 6
MTH 358 Sixteenth Century Counterpoint (3)MTH 375 Synthesizer Computer Applications (3)MTH 463 Form and Analysis (3)MTH 467 Theory and Analysis of 20th Century Music (3)MTH 367 Elementary Composition and Orchestration orMAP 776 Applied Composition2
MAP 754 Piano (level 220-227) ..... 0-6
MAP - Applied minor in major family ..... 4
MUS - Ensembles (with or without credit - 8 semesters) ..... 0
MUS - Junior and Senior Recitals ..... 0
Total: ..... 74-80
Bachelor of Music in Performance - Piano
MAP 754 Piano (level 240-487) ..... 30
MUS 477 Piano Pedagogy I ..... 2
MUS 478 Piano Pedagogy II ..... 2
MUS 479 Piano Literature ..... 2
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-328 Aural Skills I-IV ..... 4
MTH 225-326 Theory I-IV ..... 12
MHS 231-334 Music History and Literature I-IV ..... 10
MUS 229 Basic Conducting ..... 2
Advanced theory, chosen from: ..... 6
MTH 358 Sixteenth Century Counterpoint (3)MTH 375 Synthesizer Computer Applications (3)MTH 463 Form and Analysis (3)MTH 467 Theory and Analysis of 20th Century Music (3)
MTH 367 Elementary Composition and Orchestration orMAP 775 Applied composition2
MTH 465 Advanced Keyboard ..... 2
MAP - Applied Minor (usually organ) ..... 5
MUS - Ensembles (with or without credit-8 semesters) ..... 0
MUS - Junior and Senior Recitals ..... 0
Total: ..... 81
Bachelor of Music in Performance-Organ
MAP 752 Organ (level 240-487) ..... 30
CHMU 476 Service Playing ..... 2
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-328 Aural Skills I-IV ..... 4
MTH 225-326 Theory I-IV ..... 12
MTH 231-334 Music History and Literature I-IV ..... 10
Advanced theory, chosen from: ..... 6
MTH 358 Sixteenth Century Counterpoint (3)MTH 375 Synthesizer Computer Applications (3)MTH 463 Form and Analysis (3)MTH 467 Theory and Analysis of 20th Century Music (3)
MTH 367 Elementary Composition and Orchestration orMAP 775 Applied composition2
MUS 229 Basic Conducting ..... 2
MTH 465 Advanced Keyboard ..... 2
MUS - Junior and Senior Recitals ..... 0
MUS - Ensembles (with or without credit-8 semesters) ..... 0
MAP 754 Piano (level 240-351) ..... 8
MUS 480 Organ Literature and Pedagogy ..... 2
Total: ..... 82

\section*{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 Univ. of the State of NY.

\section*{Bachelor of Music in Music Education - Instrumental emphasis}
Music Courses:
MUS 250 Music \& Christian Perspective ............................................. 2
MTH 227-328 Aural Skills/Ear Training I-IV ..................................... 4
MTH 225-326 Music Theory I-IV ....................................................... 12
MHS 231-334 Music History and Literature I-IV .............................. 10
MUS 229 Basic Conducting .................................................................... 2
MUS 430 Instrumental Conducting ...................................................... 2
MTH 367 Elementary Composition and Orchestration ..................... 2
MED 214-218 WW, St, Br, Prc Instruments .......................................... 4
MED 249-50 Keyboard Skills (Keyboard majors only) ...................... 4
MAP - Applied Major ......................................................................... 19
CLPI 110-216 Class Piano I-III (Instr. maj. only) .............................. 0-3
MAP 764 Voice (level 116-221) ........................................................... 0-3
MUS - Ensembles (7 sem., with or w/o credit) ................................ 0
MUS 485 Senior Recital ............................................................................ 0
MED 210 Field Experience in Music Education ................................... 2
Total: ...................................................................... 63-69
Professional Education:
MED 405 Student Teaching ..................................................................... 9
MED 419 Student Teaching Seminar ..................................................... 3
MED 351 Elementary School Methods or
MED 352 Secondary School Methods ................................................... 2
MED 354 Instrumental Methods .......................................................... 2
MED 227-242 St, Br, Prc, WW Techniques ............................................ 7
MUS 223 Jazz Workshop ........................................................................ 1
EDUC 201 Instructional Psychology and Research ............................ 3
EDUC 217 History and Philosophy of Education ................................ 3
EDUC 350 Instructional Environments for Diverse Learners or
EDUC 414 Educating Exceptional Children or ................................... 3
Total: ............................................................................................ 33
Bachelor of Music in Music Education - Vocal emphasis
Music Courses:
MUS 250 Music \& Christian Perspective ............................................. 2
MTH 227-328 Aural Skills/Ear Training I-IV ...................................... 4
MTH 225-326 Music Theory I-IV .......................................................... 12
MHS 231-334 Music History and Literature I-IV ............................... 10
MUS 229 Basic Conducting .................................................................... 2
MUS 329 Choral Conducting ................................................................ 2
MTH 367 Elementary Composition and Orchestration ..................... 2
MED 214-218 WW, St, Br, Prc Instruments ........................................... 4
MED 249-250 Keyboard Skills (Keyboard majors only) or ............. (4)
MUS 219-220 Foreign Language Diction (Voice majors only) ....... (2)
MAP - Applied Major .......................................................................... 19
CLPI 110-226 Class Piano I-VI (Voice maj. only) ............................. 0-6
MAP 764 Voice (level 116-227; maj. only) ......................................... 0-3
MUS - Ensembles (7 sem., with or w/o credit) ................................ 0
MUS 485 Senior Recital ........................................................................... 0
MED 210 Field Experience in Music Education .................................. 2
Total: ......................................................................66-67
Professional Education:
MED 405 Student Teaching ..... 9
MED 419 Student Teaching Seminar .....  3
MED 351 Elementary School Methods ..... 2
MED 352 Secondary School Methods ..... 2
MED 353 Opera Workshop ..... 1
MED 356 Vocal Pedagogy ..... 2
EDUC 201 Instructional Psychology and Research ..... 3
EDUC 217 History and Philosophy of Education ..... 3
EDUC 350 Instructional Environments for Diverse Learners or EDUC 414 Educating Exceptional Children ..... 3
Total: ..... 28
Bachelor of Music in Music Education - Instrumental combined emphasis
Music Courses:
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-328 Aural Skills/Ear Training I-IV ..... 4
MTH 225-326 Music Theory I-IV ..... 12
MHS 231-334 Music History and Literature I-IV ..... 10
MUS 229 Basic Conducting ..... 2
MUS 430 Instrumental Conducting ..... 2
MTH 367 Elementary Composition and Orchestration ..... 2
MED 214-218 WW, St, Br, Prc Instruments ..... 4
MED 249-250 Keyboard Skills (Keyboard majors only) ..... 4
MAP - Applied Major ..... 19
CLPI 110-220 Class Piano I-IV (Instr. maj. only) ..... 0-4
MAP 764 Voice (level 116-222) ..... 0-4
MUS - Ensembles (7 sem., with or w/o credit) ..... 0
MUS 485 Senior Recital ..... 0
MED 210 Field Experience in Music Education ..... 2
Total: ..... 67-71
Professional Education:
MED 405 Student Teaching ..... 9
MED 419 Student Teaching Seminar ..... 3
MED 351 Elementary School Methods or
MED 352 Secondary School Methods ..... 2
MED 354 Instrumental Methods ..... 2
MED 227-242 St, Br, Prc, WW Techniques ..... 7
MUS 223 Jazz Workshop ..... 1
EDUC 201 Instructional Psychology and Research ..... 3
EDUC 217 History and Philosophy of Education ..... 3
EDUC 350 Instructional Environments for Diverse Learners or EDUC 414 Educating Exceptional Children or ..... 3
Total: ..... 33
Bachelor of Music in Music Education - Vocal combined emphasis
Music Courses:
MUS 250 Music \& Christian Perspective ..... 2
MTH 227-328 Aural Skills/Ear -training I-IV ..... 4
MTH 225-326 Music Theory I-IV ..... 12
MHS 231-334 Music History and Literature I-IV ..... 10
MUS 229 Basic Conducting ..... 2
MUS 329 Choral Conducting .....  2
MTH 367 Elementary Composition and Orchestration ..... 2
MED 214-218 WW, St, Br, Prc Instruments ..... 4
MED 249-250 Keyboard Skills (Keyboard majors only) ..... 4
MUS 219-220 Foreign Language Diction (Voice majors only) ..... 2
MAP - Applied Major ..... 19
CLPI 110-226 Class Piano I-VI (Voice maj. only) ..... 0-6
MAP 764 Voice (level 116-227; Kbd. maj. only) ..... 4-7
MUS - Ensembles (7sem., with or w/o credit) ..... 0
MUS 485 Senior Recital ..... 0
MED 210 Field Experience in Music Education ..... 2
Total: ..... 65-72
Professional Education:
MED 405 Student Teaching ..... 9
MED 419 Student Teaching Seminar ..... 3
MED 351 Elementary School Methods ..... 2
MED 352 Secondary School Methods ..... 2
MED 227,241,242 String, Brass, WW Techniques ..... 6
MED 353 Opera Workshop ..... 1
EDUC 201 Instructional Psychology and Research ..... 3
EDUC 217 History and Philosophy of Education ..... 3
EDUC 350 Instructional Environments for Diverse Learners or EDUC 414 Educating Exceptional Children or ..... 3
Total: ..... 32

\section*{Alternate Concentration in Theory/Composition}

An alternate curricular plan in Music Education (either vocal or instrumental emphasis) with a concentration in theory/composition is available for qualified students. The Bachelor of Music in Music Education curricula outlined above form the core, with the following changes: ....
\[
\begin{aligned}
& \text { Music Courses: } \\
& \text { MAP -- Applied Music .......................................................................................................................................................................................................................................................................................... }
\end{aligned}
\]

Students pursuing this major must meet the entrance and graduation proficiency requirements cited under the BMus Composition major.

\section*{Church Music}

CHMU 216 Introduction to Hymnology
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.

\section*{CHMU 301 Church Music Administration}

Principles and administration of church music including resources, recruitment, children's choirs, handbell choirs, and working with pastoral staff and congregation.
CHMU 351 Music and Worship
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.

CHMU 476 Service Playing
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.

\section*{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 1 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. Small ensembles are also formed according to demand, with or without credit.

Non-music majors may satisfy the 3-credit integrative studies requirement in fine arts by several semesters' participation in a major ensemble. Ensembles which carry integrative studies credit include Women's Choir (MUS 145), Chapel Choir (MUS 147), Symphonic Winds (MUS 137), Philharmonia (Orchestra) (MUS 143), and College Choir (MUS 149). Completion of the IS fine arts requirement normally requires 2 years' participation in a major ensemble.

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 with permission of the conductor. However, ensembles other than the five major ones listed above (with 100-level course numbers) will count only as elective credit, and not for integrative studies credit.

\section*{Ensembles for music majors}

One major ensemble (MUS 245, MUS 247, MUS 337, MUS 343, or MUS 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 department chair.

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.
\(\dagger\) Denotes major ensemble; counts for integrative studies credit.

MUS 255 Brass Ensemble
MUS 457F Woodwind Quintet
MUS 089, 090 Choral Union MUS 223 Jazz Workshop
\((0,1)\)
No credit
( \(0,1, \mathrm{~F} / \mathrm{S}\) )

Three hours in rehearsal per week. To receive credit, membership must be with concurrent participation in band, orchestra, or symphonic winds.
\begin{tabular}{ll} 
MUS 226 Flute Ensemble & \((1, \mathrm{~F} \& S)\) \\
MUS 457A String Ensemble & \((1, \mathrm{~F} \& S)\) \\
MUS 457C Handbell Choir & \((0,1, \mathrm{~F} / \mathrm{S})\) \\
MUS 145 Women's Choir \(\dagger\) & \((1 / 1, \mathrm{~F} / \mathrm{S})\) \\
MUS 245 Women's Choir & \((0,1, \mathrm{~F} / \mathrm{S})\)
\end{tabular}

Three hours in rehearsal each week. Some touring.
MUS 147 Chapel Choir (Touring) \(\dagger \quad(1 / 1, \mathrm{~F} / \mathrm{S})\)
MUS 247 Chapel Choir (Touring) (*0, 1, 2, F/S)
*Ordinarily one credit first semester; 2 credits second semester. Five hours in rehearsal per week.
MUS 137 Symphonic Winds (Touring) † (1/1, F/S)
MUS 337 Symphonic Winds (Touring) ( \(0,1, \mathrm{~F} / \mathrm{S}\) )
Membership by permission only. Four hours in rehearsal per week.
MUS 143 Philharmonia (Orchestra) \(\dagger \quad(1 / 1, F / S)\)
MUS 343 Philharmonia (Orchestra) (0,1, F/S)
Four hours in rehearsal per week.
MUS 149 College Choir (Touring) \(\dagger \quad(1 / 1, \mathrm{~F} / \mathrm{S})\)
MUS 349 College Choir (Touring) (*0, 1, 2, F/S)
*Ordinarily one credit first semester; 2 credits second semester. Five hours in rehearsal per week.
MUS 353 Opera Workshop (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 rehearsal per week; some outside rehearsal. Permission of instructor.

MUS 447, 448 Piano Ensemble
(1/1, F/S)
Performance of keyboard ensemble repertoire, Renaissance to 20 th century. Duet and multi-piano literature. Emphasis on style and special ensemble problems. Fulfills ensemble requirement for junior and senior applied piano majors. Four hours outside practice.

\section*{MUS 455 Chamber Singers}

Practical experience singing in a small group of 12 to 16 performers. Three hours in rehearsal per week. May be taken for credit or for requirement. Permission of instructor.
MUS 457, 458 Chamber Ensemble
(1/1, F/S)
Ensembles, organized to include interested students. Small groups rehearse three hours per week. Standard literature for handbells, percussion, strings, etc., is studied with a view toward public performance during the year.

\section*{Music Education: Instrumental and Piano Classes \\ 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 String 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
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
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
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
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
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 214.

MED 242 Woodwind Techniques
Preparation for teaching woodwind instruments through the high school level. Development of playing and demonstration abilities. Survey of methods and materials, 2 class hours, 3 hours of practice. Prerequisite: MED 214.
MED 249, 250 Keyboard Skills
(2/2, F/S)
Functional piano class required of music ed piano and organ majors; two-semester sequence. Emphasis: sight reading, harmonization, transposition, accompaniment, score reading, improvisation. Jury exam. Six hours weekly practice. Prerequisite: Piano level 237.

\section*{Music History and Literature}

MHS 113 Masterworks of Sight and Sound
Introduction of art and music from classic age to present; concert and gallery attendance included. Satisfies fine arts requirement.
MHS 211 Music and Listening: An Introduction
Introduction to the study and enjoyment of classical masterpieces in music: recordings, outside biographical readings, reports on current musical events.
MHS 222 Film Music
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.
MHS 231 Music History and Literature I
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
Continues MHS 231, from late Renaissance through Baroque (1750).
MHS 254 Music of World Cultures
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.

MHS 333 Music History and Literature III
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.

\section*{MHS 334 Music History and Literature IV}

From late romantic through 20th century styles. Emphasis on individual research, writing, and class presentations. Evaluation of musical-cultural trends from a Christian perspective.

\section*{Music Methods and Techniques \\ MAP 789 Advanced Conducting, Choral}
(1-3, OD)
Preparation of material for a major choral ensemble and actual experience directing the ensemble. One class hour and one ensemble per week (per credit). Prerequisites: MUS 229,329 and agreement of ensemble director.

\section*{MAP 790 Advanced Conduction, Instrumental}
(1-3, OD)
Preparation of material for a major choral ensemble and actual experience directing the ensemble. One class hour and one ensemble per week (per credit). Prerequisites: MUS 229,430 and agreement of ensemble director.

\section*{MED 203 Music in Therapy}
\((3, O D)\)
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
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 American, in lieu of this course. (See School of Music Handbook for detailed explanation of Field Experience and other Certification requirements.)

\section*{MED 351 Elementary School Methods}

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
Preparation for directing secondary school (grades 7-12) 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.

\section*{MED 354 Instrumental Methods}

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 upon preparation to teach according to the New York State Learning Standards for the Arts.

\section*{MED 356 Voice Pedagogy}
(2, S03)
Methods of voice production and development as preparation for teaching; emphasis on teaching and evaluation. Attention to proper selection of music. Two class hours per week; junior and senior year.

\section*{MED 405 Student Teaching in Music}

Practical experience teaching music in public schools. Two placements of approximately seven weeks each, one on the elementary level (grades K-6), and one on the secondary level (grades 7-12). 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 Study Teaching Committee.

MED 419 Student Teaching Seminar
Seminar during and following student teaching, dealing with effective teaching practices including problems of motivation, group management, curriculum development, and musical education goals.
MUS 219, 220 Foreign Language Diction
(1/1, F/S)
Basic diction facility in English, Italian, German, French. Required of voice majors (any curriculum);
elective for others. Two class meetings per week.
MUS 229 Basic Conducting
Basic conducting, rhythmic development, baton technique, 3 hours per week. Prereq: MTH 225.

\section*{MUS 329 Choral Conducting}

Elements of choral conducting; training of choirs; rehearsal techniques; preparation of choral scores. Three hours per week. Prereq: MUS 229.

\section*{MUS 430 Instrumental Conducting}

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.
MUS 477 Piano Pedagogy I
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.

\section*{MUS 478 Piano Pedagogy II}

Practicum for teaching community students, with presentation of a public recital for children and a masterclass for adults at end of the semester. Class Piano 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.

\section*{MUS 479 Piano Literature}
\((2, \mathrm{~S} 03)\)
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.
MUS 480 Organ Literature and Pedagogy
\((2, O D)\)
A survey of organ repertoire from the middle ages to the present, and an examination of teaching methods, materials, and technical approaches for the organ. Guided teaching in private and class settings. Required for organ performance majors.

MAP 789 Advanced Conducting, Choral
(1-3, F, S)
Preparation of material for a major choral ensemble and actual experience directing the ensemble. One class hour and one ensemble per week (per credit). Prerequisites: MUS 229, 329 and agreement of ensemble director.
MAP 790 Advanced Conducting, Instrument
(1-3, F, S)
Preparation of material for a major instrumental ensemble and actual experience directing it. One class hour and one ensemble per week (per credit). Prereq: MUS 229, 430 and agreement of ensemble director.

MUS 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
MUS 395 Special Topics

\section*{Theory}

MTH 225 Theory I
Basic materials of tonal music. Correlated keyboard, musical analysis and original composition. Corequisite: MTH 227 or permission of instructor.

\section*{MTH 226 Theory II}

Continuation of tonal musical materials. Correlated keyboard, musical analysis and original composition. Prerequisite MTH 225; Corequisite: MTH 228, or permission of instructor.

\section*{MTH 227 Aural Skills I}

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 of instructor.

\section*{MTH 228 Aural Skills II}

Continued work in diatonic sight singing, ear training, and dictation. Two hours per week, plus independent computer- and tutorial-assisted instruction. Prerequisite: MTH227; corequisite: MTH 226, or permission.

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.

\section*{MTH 325 Theory III}

Analysis and composition of eighteenth-century counterpoint. Harmonic materials of the nineteenth century. Analysis of literature to Debussy. Form study and original composition. Prerequisite: MTH226; co-requisite: MTH 327, or permission of instructor.

\section*{MTH 326 Theory IV}

Music of the twentieth century. Prereq: MTH 325; co-requisite: MTH 328, or permission of instructor.

\section*{MTH 327 Aural Skills III}

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.

\section*{MTH 328 Aural Skills IV}

Sight singing, ear-training and dictation using advanced chromatic and twentieth century materials. Two hours per week, plus independent computer- and tutor-assisted instruction. Prerequisite: MTH 327; corequisite: MTH 326, or permission of instructor.

\section*{MTH 358 Sixteenth Century Counterpoint}
\((3, \mathrm{~F} 01)\)
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. Prereq: MTH326 or permission.

\section*{MTH 463 Form and Analysis}
(3, F02)
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 465 Advanced Keyboard
\((2, \mathrm{OD})\)
Keyboard drill in prepared and sight work: melody harmonization, realization of basses, modulation, transposition, score reduction. Emphasis on extemporization in the styles of composers for keyboard.

\section*{MTH 467 Theory and Analysis of Twentieth Century Music}
(3, OD)
Study of techniques for the analysis of 20th century music, including set theory and serialism. Introduction to analytical systems of Schenker, Hindemith, Forte, and others. Prereq: MTH 326.

\section*{Composition}

MAP 775 Composition
(1-3, F\&S)
Composition and orchestration in a variety of forms and media. Public performance expected.

\section*{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. Prereq: MTH 326 or permission.

\section*{MTH 375 Synthesizer/Computer Applications}
\((3, \mathrm{OD})\)
Introduction to electronic musical aesthetics, synthesis, and MIDI techniques. Hands-on composition projects utilizing computers and synthesizers. Prerequisite: MTH 367.

\section*{Applied music}

Information on the numbering system, credit assignment, and graduation requirements in applied music for BMus majors is contained in the Music Student Handbook.

The following descriptions of technique and repertoire are representative, indicating general outlines for study which may be adjusted to meet the needs of each student. Only listings for the first year are given, as follows: Level 230- is for first year music education majors, 240 - for first year performance majors. Repertoire for Level 220-represents prerequisite attainment for entrance into the major. Any deficiencies must be made up in the first year of study. Representative repertoire for the remaining levels is outlined in the Music Student Handbook.

\section*{KEYBOARD}

\section*{Class Piano}

Elementary and intermediate piano, taught in six semesters of Class Piano. One hour class, six
hours practice weekly. Emphasis: 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.
CLPI 110 Class Piano 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.

\section*{CLPI 112 Class Piano II}
(1, F\&S)
Basic work as in CLPI 110-111; pedaling and phrasing. Easier major scales, 2 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.
CLPI 216 Class Piano III
(1, F\&S)
Easier major scales, hands together, 2 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.

\section*{CLPI 220, 221 Class Piano IV}
(1, F\&S)
Major/minor scales, arpeggios, triads; hands together. Major/minor progressions, harmonization; byear 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.
CLPI 222, 225 Class Piano V
(1, F\&S)
All major/minor scales and arpeggios, hands together, three rhythms. Progressions, harmonization; byear work using secondary chords and dominants in expanded patterns. Grade 3 sight reading; 4-part transposition. Repertoire: easier Bach inventions, allegro sonatina movement.
CLPI 226, 227 Class Piano 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.

\section*{Private Piano}

\section*{MAP 754 (220-227) Private Piano}

Review basic technique, rhythm, fingering, articulation, pedaling, tone conception, and practice technique. Major/minor scales and arpeggios, 4 rhythms. Clark technique; Czerny, op. 299; Heller studies. Bach short preludes and fugues, easy 2-part Inventions. Sonatinas and easy classic sonatas. Short pieces by Chopin, Mendelssohn, Bartok, Kabalevsky.

MAP 754 (230-237) Private Piano
Develop goals and techniques of 220 to 227. Voicing, phrasing, intelligent reading of composer's score. "Hanon Revisited," Cramer studies. Bach 2-part and easier 3-part Inventions; easier preludes and fugues, WTC I. Haydn, Mozart, easier Beethoven sonatas (e.g. op. 14 no. 1, 2; op. 10 no. 1). Short pieces by Chopin, Schumann, Bartok.

\section*{MAP 754 (240-247) Private Piano}

Scales (including melodic minor) and arpeggios (including 7th chords) in various rhythms, dynamics, articulations. "Hanon Revisited," Clementi Gradus. Bach 3-part Inventions, WTC. Classic sonatas such as Beethoven, op. 2 no. 1, Schubert, Chopin, Schumann, Bartok, Prokofiev; pieces or easier cycles.

\section*{Organ}

Organ study should begin only after a piano technique adequate for Bach Inventions and easier Beethoven, Haydn, or Mozart sonatas has been acquired. Works of composers listed below are appropriate. Specific repertoire requirements will be determined individually.

\section*{MAP 752 (230-237) Organ}

Instruction books such as Davis. Basic study of organ touch, phrasing, articulation, score preparation, practice. Simpler pieces in various styles including Dupre chorale preludes; Rheinberger trios; Bach chorale preludes; little preludes and fugues.
MAP 752 (240-247) Organ
More advanced pedal and manual studies, trios, hymn and chorale preludes, preludes, fugues. Easier
pieces of Buxtehude, Bach, Brahms, Langlais, Near, Walcha, Willan. Registration; performance practice and historical styles; hymn playing with transposition.

\section*{Harpsichord}

Harpsichord study should begin only after a piano technique adequate for Bach Inventions and easier Beethoven, Haydn, or Mozart sonatas has been acquired.

\section*{MAP 749 (230-237) Harpsichord}

Instruction books such as L'Art de toucher Le Clavesin by Couperin and A First Harpsichord Book by Ignor Kipnis. Basic study of harpsichord touch, phrasing, and articulation. Easier pieces by Rameau, Scarlatti, Byrd, and others.

\section*{MAP 749 (240-247) Harpsichord}

Simple figured bass realization, Bach WTC, Scarlatti Sonatas and other repertoire of comparable difficulty, performance practice and historical styles.

\section*{VOICE}

\section*{Class Voice}

CLVO 112 Class Voice
(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. 6 hours practice.

\section*{CLVO 116 Class Voice}

Continued study of basic vocal techniques. Emphasis on individual singing of vocalises and songs in English. Introduction to Italian diction. Hearing required. 6 hours practice.

\section*{Private Voice}

MAP 764 (220-227) Private Voice
Refinement of vocal technique, including posture, breath control, tone production, and diction. English art songs and easier Italian art songs.

MAP 764 (230-237) Private Voice
Study of English and Italian art songs. Use of folk, Renaissance, Baroque, classical, and contemporary literature. Vocal techniques such as Vaccai and Sieber.

MAP 764 (240-247) Private Voice
Addition to the German repertory, especially from the classical and romantic periods. Such composers as Mozart, Schubert, Beethoven, Schumann, and Brahms. Concentration on vocal technique emphasizing maximum agility, flexibility, and velocity.

\section*{STRING INSTRUMENTS}

\section*{Violin}

MAP 762 (220-227) Violin
Scales; Sevcik, op. 4 and op. 40; Kayser, op. 20; recital pieces and sonatas (e.g. Beethoven, Romances; Grieg, Sonata in F Major); concertos by Nardini; Viotti, Vivaldi.

MAP 762 (230-237) Violin
Scales; Sevcik, op. 8; Kreutzer; Mazas; recital pieces and sonatas (e.g. Kreisler, Schubert, Handel); concertos: Bach, Haydn, Vaughn Williams.
MAP 762 (240-247) Violin
Scales; Schradiek, Fiorillo, Mazas; orchestral excerpts; recital pieces, sonatas, and concertos: Bach, Haydn, Mozart, Kabalevksy.

\section*{Viola}

MAP 760 (220-227) Viola
Scales; Sevcik, op. 8; Kreutzer; Mazas; recital pieces, sonatas, concertos: Handoshkin, Vivaldi.
MAP 760 (230-237) Viola
Scales;Sevcik, op. 8; Kreutzer;Mazas; recital pieces, sonatas, concertos: Bloch, C.P.E. Bach,Handel, Lalo.
MAP 760 (240-247) Viola
Scales; Mogill, advanced studies; Schradiek; Fiorillo; recital pieces, sonatas, concertos: Mozart, Reger, Haydn, Hovhaness.

\section*{Violoncello}

MAP 744 (220-227) Violoncello
Scales; Klengal, Technical Studies; Popper, op. 76; recital pieces, sonatas, concertos: Vaughan Williams, Davidoff, Goltermann, Romberg.
MAP 744 (230-237) Violoncello
Scales; Klengal, Technical Studies, bk. 2; Popper, op. 73; recital pieces, sonatas, concertos: Beethoven, Mendelssohn, Boccherini, Vivaldi.

\section*{MAP 744 (240-247) Violoncello}

Scales; Cossman etudes; Duport; orchestral excerpts; recital pieces, sonatas, concertos: Schumann, Dohnanyi, Tartini, J.S. Bach.

\section*{String Bass}

MAP 768 (220-227) String Bass
Nanny or Simandl; Storch-Hrabe, 57 Studies; Sturm, op. 20; recital pieces and sonatas: Massanet, Marcello, Zimmerman.
MAP 768 (230-237) String Bass
Nanny or Simandl; Hrabe, 86 Etudes; Sturm, op. 20; recital pieces and sonatas: Faure, Corelli.
MAP 768 (240-247) String Bass
Nanny or Simandl; orchestral excerpts; recital pieces and sonatas: Koussevitsky, Bach, Eccles.

\section*{Guitar}

Lessons will be tailored to each student's individual needs and goals with emphasis on reading skills, techniques, repertoire development, tone development, performance, and personal/objective evaluation. A recording scholarship (the recording and production of a professional compact disc) will be awarded, through jury selection, to guitar performance and music education majors who have demonstrated excellence in achievement at the completion of their studies.

\section*{MAP 763 (220-227) Private Guitar}

Scales, arpeggios, sight-reading skills, basic improvisation, methods from Giuliani, Sor, and Brouwer.
MAP 763 (230-237) Private Guitar
Scales, arpeggios, sight-reading skills, intermediate improvisation, Villa-lobos preludes, Brouwer studies, Ponce preludes.

\section*{MAP 763 (240-247) Private Guitar}

Bach suites, Villa-lobos etudes, Sor sonatas, Ponce sonatas.

\section*{BRASS INSTRUMENTS}

\section*{Trumpet}

MAP 758 (220-227) Trumpet
Arban; Bousquet, Celebrated Studies; Clarke, Technical Studies, Clodomir, 20 Studies; Lillya, Trumpet Technique; Williams; solos by DeBoeck, Goeyens, Klein, Whitney, others.

\section*{MAP 758 (240-247) Trumpet}

Arban Bordogni, 24 Vocalises; Brandt, Studies for the Orchestral Trumpeter; Chavanne, 25 Etudes Characteristics; daily drills and technical studies; Clarke; solos by Delmas, Hummel, L. Mozart, Purcell, Thome, Vivaldi, others; transposition.

\section*{French Horn}

MAP 748 (220-227) French Horn
Pottag-Andraud melodious and technical studies. Additional exercises from Maxime-Alphonse, Gallay, Kopprasch; solos from the Mason Jones collection or similar editions. Mozart, "Concert Rondo"; Handel sonatas; Saint-Saens, "Romance"; Glazounov, "Reverie."

MAP 748 (230-237) French Horn
Pottag-Andraud book II; Gallay and Cugnot; discussion and review of "The Art of French Horn Playing," Farkas. Solos on a level with Schumann, "Adagio-Allegro"; Mozart, Concerti Nos. 1 and 3; "Dukas Villanelle." Study of transposition in selected orchestra excerpts.

\section*{MAP 748 (240-247) French Horn}

Kopprasch, 60 Studies, completed. Transposition studies; solos by Strauss, Mozart, Heiden, Francaix,

Glazounov; Pottag orchestral excerpts.

\section*{Trombone}

MAP 756 (220-227) Trombone
Remington continued. Arban-Randall method. Etudes of Slama, Kopprasch. Rochut-Bordogni etudes, book I. Solos from a level of difficulty comparable to Barat, "Andante and Allegro." Pryor and Clarke easier solos.

MAP 756 (230-237) Trombone
Bordogni etudes continued; legato studies. Arban, Blazhevich, Slama and Kopprasch continued. Blume studies, F-attachment studies ofFote and Fink. Solos by Bozza, Vivaldi, Handel, Galliard. Jazz duets and studies.

MAP 756 (240-247) Trombone
Legato studies from Bordogni etudes, book II. Clef studies continued. Ostrander F-attachment studies. Solos by Bach-Beversdorf, Barat, Cimera, Handel and others. Duets by Blazhevich and others. Bass trombone supplemental.

\section*{Baritone Horn-Euphonium}

MAP 740 (220-227) Baritone Horn-Euphonium
Arban studies continued. Mantia, Trombone Virtuoso. Rochut-Bordogni book I. Blazhevich clef studies. Transcription of solos by Berlioz, Bach, Handel, Cowell. Double and triple tonguing studies.
MAP 740 (230-237) Baritone Horn-Euphonium
Continued emphasis on clef studies. Rochut-Bordogni book II. Solos by Sanders, Barat, Balay, Galliard; solo material adapted from wind sonatas.

\section*{MAP 740 (240-247) Baritone Horn-Euphonium}

Completion of Rochut legato studies; Clarke characteristic studies or similar treble clef work; solos by Bach, Blazevich, Clarke, Mozart, Vivaldi, others; study of trombone technique supplemental.

\section*{Tuba}

MAP 759 (220-227) Tuba
Cimera etudes. Scale studies. Slama etudes. Solos from works of Bernstein, Mussorgsky, Handel, Wagner, Bach.
MAP 759 (230-237) Tuba
Tyrrel advanced studies for tuba. Bell-Colin routines. Hartley sonatina. Solos by Barat, Bozza. Transcriptions from works of Bach, Mozart, Beethoven.

MAP 759 (240-247) Tuba
Kopprasch studies. Blazhevich studies. Velocity studies of scales, arpeggios, intervals. Solos by Bach, Handel, Hartley, McKay, Bottje, Nelhybel, others. Multiple tonguing studies.

\section*{WOODWIND INSTRUMENTS}

\section*{Flute}

MAP 746 (220-227) Flute
Major scales. Hugues, 40 Studies, op. 101; Koehler, 12 Medium Studies, op. 33, bk. 1 and 2; repertoire: Handel Sonatas III, V; Bach, Polonaise and Badinage; Mozart, Andante; Gluck, Minuet and Dance.

MAP 746 (230-237) Flute
All major and minor scales. Maquarre, daily exercises; Andersen, etudes, op. 33; Berbiguier, 18 Etudes for Flute. Repertoire: Handel, Sonatas I-VII; Boehm, Souvenir Des Alpes; Godard, Legend Pastorale; Mozart, sonatas; Debussy, Syrinx.
MAP 746 (240-247) Flute
Major and minor scales and arpeggios. 25 flute concert studios from J.S. Bach's works and famous flute solos; Moyse, De La Sonorite; Andersen, 18 Studies for Flute, op. 41. Repertoire: Hindemith, sonata; Bach, Sona-tas II, III, IV; Mozart, Concerto in D; Faure, Fantasie; Honegger, Danse de la Chevre.

Oboe
MAP 750 (220-227) Oboe
Consolidation of basic technique, tone and tone control. Major and minor scales, 2 octaves, 4 rhythms. Fundamentals of reed making. Barrett method. Repertoire: Telemann, concerto in F minor; Albinoni,

Concerto in Bb; Geminiani, Sonata in E minor.
MAP 750 (230-237) Oboe
Continuation of fundamentals in previous level. Major and chromatic scales. Gekeler, Studies. Repertoire: Handel, Bouree; Rameau, Regaudon; Amani, minuet.

\section*{MAP 750 (240-247) Oboe}

Refinement of technique; tone and tone control. Reedmaking. Major and minor scales and arpeggios. Barrett method. Repertoire: Marcello, sonatas; Schumann, Three Romances; Jacob, concerto.

\section*{Clarinet}

MAP 745 (220-227) Clarinet
Tone, tone control, alternate fingers, intonational control. Major scales, 2 octaves, 4 rhythms, moderate speed. Repertoire: Vaughan Williams, Six Folk Songs; Wanhall, sonatas; Debussy, Petite Piece.

MAP 745 (230-237) Clarinet
Consolidation of basic technique, tone and tone control, balance of registers. Klose: major, minor, chromatic scales, thirds. Rose, 40 Etudes. Repertoire: classical concerti; Handel, Sonata, op. 1 no. 8; Schumann, Fantasy Pieces; Finzi, Five Bagatelles.

\section*{MAP 745 (240-247) Clarinet}

Refinement of tone, tone control and technique, control of partials. Reed adjustment. Interval and arpeggios. Jeanjean, Graduated Melodic Studies bk. II and III or comparable studies. Repertoire: Hindemith, sonata; Rimsky-Korsakov, concerto; Weber, concerti.

\section*{Saxophone}

\section*{MAP 770 (220-227) Saxophone}

Tone and tone control, alternate fingerings, intonational control. Major and chromatic scales, full normal range, four rhythms at moderate speed. Rossari, 53 Melodious Etudes, bk. 1. Repertoire: Lane, Suite; Rameau-Rascher, Regaudon; Bach-Rascher, Two Preludes.
MAP 770 (230-237) Saxophone
Consolidation of basic technique, tone and tone control. Commence work on altissimo register. Teal, Saxophonist's Workbook. Repertoire: Handel, Sonata no. 3 (Violin); Tuthill, sonata.
MAP 770 (240-247) Saxophone
Refinement of tone, tone control and technique. Usable range to altissimo G. Jazz studies. Rascher, 24 Intermezzi or comparable etudes. Repertoire: Eccles, sonata; Heiden, sonata.

\section*{Bassoon}

MAP 742 (220-227) Bassoon
Tone and tone control, principal alternate fingerings, intonational control. Major scales, 2 octaves, 4 rhythms moderate speed. Weissenborn method or Vaulet, 20 Studies. Repertoire: Falliard, 6 Sonatas; Benson, Song and Dance; Merci, Sonata in G minor.

\section*{MAP 742 (230-237) Bassoon}

Consolidation of basic technique, tone and tone control. Tenor clef. Reed adjustment. Jancourt, 26 Melodic Studies, op. 15; Milde, Concert Studies, op. 26. Repertoire: Vivaldi, concerti; Hertel, concerto; Burrill Phillips, concert piece.

\section*{PERCUSSION INSTRUMENTS}

\section*{Percussion}

\section*{MAP 753 (220-227) Percussion Instruments}

Snare drum emphasis. Basic mallet studies. Introduction to timpani. Study of tone production and tuning. Solo and studies by Harr, Ostling, Gardner, others.

\section*{MAP 753 (230-237) Percussion Instruments}

Snare drum studies from Goldenberg, Pare, Stone. Timpani studies from Goodman, Ludwig. Mallet studies from Gornston, Goldenberg. Etudes of Firth. Solos by McKenzie, Schinstein, Handel, others.

\section*{MAP 753 (240-247) Percussion Instruments}

Continuation of Goldenberg and others. Emphasis on tone production, mallet selection. Introduction to drum set studies from Beck, Dahlgren, Morello. Solos and etudes by Tilles, Kraft, Peters, Bach, Brahms, Colgrass, others.

\title{
PASTORAL AND CHURCH MINISTRIES PROGRAM (AAS)
}
(See Adult Learning Opportunities section.)

PASTORAL MINISTRY (see Religion, Ministerial Concentration)

\author{
PHILOSOPHY (MAJOR AND MINOR) \\ Department of Religion and Philosophy: Harold Kingdon, chair \\ Faculty: Bradley Beach, Carlton Fisher, Paul Shea, W. Christopher Stewart \\ Part-time: Jane Bristol
}

Major: (24 hours in the major; plus 4 in IS requirements, PHIL 200, 201)
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
Additional hours in philosophy ........................................................... 8
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 in addition to the 4 hours completed to satisfy Integrative Studies requirements, and must include at least 4 hours of history of philosophy (either PHIL 241 or 242).

\section*{Course Descriptions}

PHIL 200 Knowledge and Reality
(2, F, S)
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.

PHIL 201 Ethics
(2, F, S)
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.

\section*{PHIL 223 Critical Thinking}
(2, F,S)
Introduction to basic argument analysis and informal fallacies, with special emphasis on how to recognize, analyze, and evaluate arguments expressed in everyday, ordinary language.

\section*{PHIL 224 Formal Logic}

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
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.

\section*{PHIL 242 History of Philosophy II: Modern and Contemporary}

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 move ments from the 19th and 20th centuries. Readings include both primary and secondary sources.

\section*{PHIL 250 Aesthetics}

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.

\section*{PHIL 315 Theory of Knowledge}

Examination of contemporary perspectives on the nature and limits of human knowledge, as well as the concept of truth.

\section*{PHIL 321 World Religions}

Background, major teachings of Eastern religious and philosophical thought. Emphasis on understanding and evaluating non-Western ideas, practices.
PHIL 326 Ethical Theory
Analysis of traditional normative theories (formalism, consequentialism, and virtue ethics) through the reading of primary sources. Also explores developments in contemporary moral theory.

\section*{PHIL 350 Reason and Religious Belief}

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.

\section*{PHIL 360 History and Philosophy of Science}

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 412 Special Topics
\((2,3\), or \(4, O D)\)
Examination of specific movements or particular problems in philosophy, or themes in the history of ideas.

\section*{PHIL 414 Major Figures}
\((2,3\), or \(4, O D)\)
In-depth study of the thought of one or more figures with an emphasis on critical analysis and evaluation of primary source material.
PHIL 191, -2; 292, -2; 391, -2; 491, -2 Independent Study
PHIL 496 Honors in Philosophy

\section*{PHYSICAL EDUCATION (MAJORS AND MINORS)}

Department of Physical Education/Exercise Studies \& Recreation/Leisure: William R. Swanson, chair Faculty: Dwight Hornibrook, Sandra Johnson, Thomas R. Kettelkamp, Trini Rangel, Patty-Jeanne Slaughter, Sue Stephens, William R. Swanson Timothy S. Trezise

Majors: Physical Education (teaching K-12: 38 hours in the major; 30 in education; 12 hours in pre/corequisites),

Physical Education (non-teaching: 24 hours; 8 hours in pre/co-requisite)
Physical Education (athletic training: 53-55 hours; 19 hours in pre/co-requisites)
Physical Education (physical fitness: 37 hours; 18 hours in pre/co-requisites)
Minor: Physical Education (16 hours)

\section*{Teaching Option}

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 Introduction to Athletic Training ..... 3
PHED 248 Adaptive Phys. Education and Fitness Program. 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
PHED 261, 262 Teaching Team Sports ..... 2
PHED xxx Swimming (PHED 102, 228, or 265) ..... 1
PHED 221 Educational Gymnastics ..... 1
PHED 226A Movement \& Rhythmic Fundamentals ..... 3
An Outdoor Component (1 credit hr.) chosen from the following: REC 102A Initiatives ..... 1
REC 227 Outdoor Leadership Training ..... 3
REC 266 Outdoor Living Skills ..... 2
REC 330 Methods/Mat'ls of Outdoor Educ ..... 3
PHED 220 Adventure Sports .....  3
And PHED 251 or 252 Teaching Lifetime Sports ..... 1 or
PHED 220 Adventure Sports .....  3
Total: ..... 9
Education Requirements
EDUC 217 History and Philosophy of Education ..... 3
EDUC 240 Teaching in Urban America ..... 3
EDUC 313 Language \& Literacy in the Content Area or EDUC 328 Foundations of Language and Literacy ..... 3
PHED 225 Teaching Elementary Physical Education ..... 3
PHED 302 Teaching Secondary Physical Education ..... 3
EDUC 226 Multimedia Technologies ..... 1
PHED 411 Issues Seminar In Physical Education ..... 2
PHED 405 and 407 Student Teaching ..... 12
Total: ..... 30

\section*{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 Education2
PHED 226 Teaching Elementary Physical Education ..... 3
PHED 237 Holistic Health ..... 3
PHED 302 Teaching Secondary Physical Education ..... 3
(Plus 7 hours from any of the courses listed under ..... 7
"core requirements" for the physical education teaching option.)Total:18
Activities6
Six hours are required from any of the courses listed under "activities" for the physicaleducation teaching option.

Minor: The physical education minor (16 hours) requires Lifetime Wellness (PHED 101) and Physical Education (PHED 102) as prerequisites to all other courses, plus Holistic Health (PHED 237), Foundations of Physical Education (PHED 212), and 11 additional hours from courses numbered above 211. Not less than 2 of these 11 or more than 5 may be in activity laboratories. Fundamentals of Biology (BIOL 103) is highly recommended.

Athletic Training (53-55 hours; 19 in pre/co-requisites)
Students specializing in athletic training must log 600 hours of practical work with the certified trainers prior to the senior internship.

Students must file a formal application for acceptance into the athletic training program with the Athletic Training Education Program Director during the second semester of the freshman year or during the sophomore year. Prerequisites for applying include the following:
1) A minimum 2.0 GPA must be maintained while in the AT program, with at least a 2.5 GPA to start the internship
2) 50 hours of clinical observation in the athletic training room
3) completion of Introduction to Athletic Training
4) completion of Recognition and Evaluation of Athletic Injuries
5) current certifications in standard First Aid and CPR

Houghton's athletic training education program is currently an "internship program," but is working to seek CAAHEP accreditation which will allow students to continue to sit for the NATABOC certification examination upon completion of the athletic training major. Students graduating prior to 2004 are eligible to sit for the NATABOC exam regardless of accreditation status. After 2004, to be eligible for the exam, students must either complete an accredited program or may complete a nonaccredited program, then continue into graduate study in an accredited program.
Pre-/Co-requisites
BIOL 103 Fundamentals of Biology ..... 4
BIOL 217, 218 Human Anatomy and Physiology ..... 8
BIOL 195 Medical Terminology ..... 1
CHEM 207 Nutrition ..... 3
PSY 111 Introduction to Psychology ..... 3
Total: ..... 19
Core Requirements
PHED 212 Foundations of Physical Education ..... 2
Either:
PHED 220 Adventure Sports, or ..... (3)
PHED 251 Lifetime Sports I, or ..... (1)
PHED 252 Lifetime Sports II ..... (1)
Either:
PHED 102 Swimming, or ..... (1)
PHED 228 Lifeguarding, (highly recommended) or ..... (1)
PHED 265 Lifeguard Instructor (highly recommended) ..... (1)
PHED 237 Holistic Health .....  3
PHED 246 Introduction to Athletic Training ..... 3
PHED 247 Recognition \& Evaluation of Athletic Injuries ..... 3
PHED 223 Athletic Training Practicum I ..... 2
PHED 224 Athletic Training Practicum II ..... 2
PHED 320 Measurement and Evaluation in Physical Educ ..... 3
PHED 330 Physiology of Exercise ..... 3
PHED 341 Kinesiology ..... 3
PHED 349 Advanced Athletic Training ..... 2
PHED 347 Therapeutic Modalities ..... 3
PHED 348 Therapeutic Exercise Mgmt. of Injuries ..... 3
PHED 311 Athletic Training Practicum III ..... 2
PHED 312 Athletic Training Practicum IV ..... 2
PHED 401 Organization and Management of Phys. Ed. ..... 3
PHED 422 Internship: Athletic Training ..... 12
Total: ..... 53 to 55

Minor: (16 hours) A student who is interested in a physical education minor with a focus in athletic training is advised to take the courses listed below. This minor is designed to enhance the student's skills
in preventing, evaluating and treating various athletic injuries.
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Required classes
PHED 212 Foundations of Physical Education ...................... }
PHED 246 Introduction to Athletic Training ........................ }
PHED 247 Recognition and Evaluation of Athletic Injuries . }
6 hours from the following courses:
PHED }347\mathrm{ Therapeutic Modalities or
PHED }348\mathrm{ Therapeutic Exercise Mgmt. of Injuries ................ }
PHED }330\mathrm{ Physiology of Exercise or
PHED }341\mathrm{ Kinesiology3

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Choose 2 hours of electives from any Physical Education theory course 211 or above ..... 2
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The ideal learning progression would take 41/2-5 years to complete. This leaves room to also have a PE teaching major or Pre-PT major which are valuable for the profession of athletic training. This provides students better acquisition and mastery of the information and allows for an extra year of maturity before entering the program. Electives could be taken when they are convenient.

Following is a sequence of Pre-/Co-requisites and Core Requirements for Athletic Training:
\begin{tabular}{lll} 
& \begin{tabular}{l} 
FALL SEMESTER
\end{tabular} & SPRING SEMESTER
\end{tabular}

Fifth Year Internship : AT (fall or spring) (2nd sem. only if necessary for finishing Gen eds or Student Teaching for PE Teaching majors)

To graduate in 4 years (a difficult option): Electives could be taken when they are convenient.

\section*{FALL SEMESTER}

First Year Fundamentals of Bio I
Human A \& P I
Intro to Athletic Training
Second Year (ACCEPTANCE into AT Program)
AT Practicum I
Holistic Health or
Measurement \& Eval (if offered)

\section*{SPRING SEMESTER}

Human A \& P II
Recognition \& Evaluation
(APPLICATION made to the AT program)

\section*{AT Practicum II}

Therapeutic Exercise or Modalities
Kinesiology (if offered)
Foundations of PE


\section*{Course Descriptions}

PHED 101 Lifetime Wellness (integrative studies)
Health-related physical fitness, self-evaluation, and individualized exercise programs.
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 gen. ed. credit.

PHED 103, 104 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.

PHED 105, 106 Physical Education
(1/1, F\&S)
Designed for students repeating PHED 102 in a section offering activities not included under credit previously received.
PHED 212 Foundations of Physical Education
Basic philosophical principles, history, scientific foundation, and contemporary significance of physical education; educational aims and objectives; physical education in the modern school curriculum.

\section*{PHED 220 Adventure Sports}
\((3, \mathrm{M})\)
Experiential learning of a variety of adventure sports (backpacking, climbing, mountain biking, kayaking/rafting) in canyons and mountains of the Adirondack or Rocky Mountain region; 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.)
PHED 221 Educational Gymnastics I (Activity Lab)
(1, F02)
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, S03)
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.

\section*{PHED 223 Athletic Training Practicum I}

Practical application of the many aspects of athletic training through simulated and "live" experiences that occur with working with athletes in the training room, at practices, and contests under the supervision of clinical instructors. Further development of knowledge and competence with anatomy, function, and injuries of the foot, ankle, and knee as well as skills for treating emergencies and common injuries. This course is necessary for acceptance to the athletic training program - refer to prerequisites for application to athletic training program.

PHED 224 Athletic Training Practicum II
Practical application of the many aspects of athletic training through simulated and "live" experiences that occur with working with athletes in the training room, at practices, and contests under the supervision of clinical instructors. Further development of knowledge and competence with anatomy, function, and injuries of the shoulder girdle and joint, elbow, forearm, wrist and hand, and injuries to the head and face. Prerequisite: Athletic Training Practicum I
PHED 225 Teaching Elementary Physical Education
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
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 leap-up experiences, skills, and rhythms in games and teaching methods. Three hours lecture and applied.

PHED 227 Adventure Program Methods (Activity Lab)
(1, May)
Skills and methods of teaching initiatives, ropes course, and adventure activities in physical education and outdoor education programs in school systems. Two hours applied.

\section*{PHED 228 Lifeguarding (Activity Lab)}

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.

\section*{PHED 237 Holistic Health}

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. (May be used to meet PHED 101.)

\section*{PHED 239 Principles and Practices of Coaching}

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.

\section*{PHED 244 Instructor's Course in Red Cross Water Safety}

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)

\section*{PHED 246 Introduction to Athletic Training}

Orientation to the sports medicine team, the NATA, and Houghton Athletic Training Program. Professional roles, responsibilities, and code of ethics, documentation, legal issues and concerns. Prevention, treatment, and management of common injuries, illnesses and disorders of the head, trunk and extremities. Basic anatomy, taping and wrapping techniques. American Red Cross CPR and first aid course included.

\section*{PHED 247 Recognition and Evaluation of Athletic Injuries}

History; observation; palpation; active and passive range of motion; muscle, neurological, and functional tests; postural assessment.

\section*{PHED 251 Teaching Lifetime Sports I (Activity Lab)}

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)
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 261 Teaching Team Sports I (Activity Lab)
(1, F01)
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)
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.

\section*{PHED 265 Lifeguard Instructor (Activity Lab)}

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 yrs old with current lifeguard training and CPR certification. Prereq: PHED 228 or equivalent.

\section*{PHED 276 Motor Development and Learning}

Introductory study of nature, scope, process of human movement. Emphasis: motor development, motor patterns, movement exploration; relationships of genetics and the environment to the learning process and overall well being.

\section*{PHED 281 Pre-Physical Therapy Field Experience I}

Mastery of competencies in injury prevention, recognition, and assessment, and taping and bracing techniques, understanding of the lower extremity and medical documentation. Requires 20 hours of observation in each of three settings: orthopedics, pediatrics, and geriatrics, with an additional 40 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 Contemporary Issues in Sport
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.

\section*{PHED 302 Teaching Secondary Physical Education}

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.

\section*{PHED 311 Athletic Training Practicum III}

Practical application of the many aspects of athletic training through simulated and "live" experiences that occur with working with athletes in the training room, at practices, and contests under the supervision of clinical instructors. Further development of knowledge and competence with anatomy, function and injuries of the spine, hip and thorax. Prerequisite: Athletic Training Practicum II. Strongly recommended: Advanced Athletic Training, Therapeutic Modalities and Therapeutic Exercise Management of Injuries.

\section*{PHED 312 Athletic Training Practicum IV}

Practical application of the many aspects of athletic training through simulated and "live" experiences that occur with working with athletes in the training room, at practices, and contests under the supervision of clinical instructors. Further development of knowledge and competence with wellness, general medical conditions and treatments. Administrative and managerial responsibilities of an athletic trainer, inventory, budget, training room design, liability issues. Prerequisite: PHED 311. PHED 401 must be taken concurrently.

\section*{PHED 315 Psychosocial Aspects of Physical Education and Sport}

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
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.

\section*{PHED 330 Physiology of Exercise}

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.

\section*{PHED 341 Kinesiology}
\((3, S 02)\)
The analysis of the musculoskeletal system and its interrelationship with human movement. Prerequisites: BIOL 103 and BIOL 217, 218.

\section*{PHED 347 Therapeutic Modalities}
\((3, \mathrm{~S} 02)\)
Analysis of the physiological effects produced by various modalities and their application. For musculoskeletal rehabilitation.

\section*{PHED 348 Therapeutic Exercise Management of Injuries}
\((3, S 03)\)
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 349 Advanced Athletic Training
(2, F02)
Advanced medical issues, surgical procedures, diagnostic imaging and techniques, sport and exercise pharmacology, general medical conditions and disabilities, pathology of injuries and illnesses, psychosocial intervention and referral, health care administration, professional development and administrative responsibilities.

\section*{PHED 350 Health and Physical Fitness for Senior Adults}

Holistic health and wellness of adults 55 years and older. Emphasis: physical fitness, program planning, development, evaluation; principles and practices of leadership.

PHED 381 Pre-Physical Therapy Field Experience II
Mastery of competencies in injury prevention, recognition, and assessment, and taping and bracing techniques, understanding of the back, upper extremity and developing rehabilitation programs.

Requires 15 hours of observation in each of four settings: orthopedics, cardiac, respiratory, and neural rehabilitation with an additional 40 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 347 or 348.
PHED 401 Org. \& Mgmt. of Physical Education and Athletics
Theories, philosophy, and systems of management; program development, finance, purchasing and care of equipment, public relations, facility and personnel management, and legal liability.

\section*{PHED 405 Student Teaching in Physical Education N-6}

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 2.5.

\section*{PHED 411 Issues Seminar in Physical Education}

Critical analysis and synthesis of student teaching experience and of crucial issues in education.
PHED 420 Internship: Physical Fitness
(1-12, F\&S)
Observation and practical experience in a public or private agency. Off-campus assignment under the direction of skilled professionals. NOTE: Students doing the Physical Fitness Option must complete a total of 4 credit hours in PHED 420, or a total of 4 credit hours from PHED 423, PHED 424, and PHED 426. The 4 credit hours in PHED 420 includes one credit hour of topics in current issues. Overall GPA of 2.5 required.
PHED 422 Internship: Athletic Training
(12, F\&S)
The "capstone experience" of the athletic training major. Extensive experience in a high-contact sport: football, ice hockey, and/or lacrosse, observation and assistance in a physical therapy and orthopedic clinic. Experience with advanced rehabilitation equipment and techniques, research legal concerns and other issues with athletic training. Professional preparation \& development, prepare for the NATABOC exam. GPA of 2.5 and good standing in the athletic training program required for the internship.
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 2 or more agencies, sites to be negotiated. Overall GPA of 2.5 required.

\section*{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 2 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
PHED 295, 395, 495 Special Topics
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

\section*{PHYSICS (MAJOR AND MINOR)}

Faculty: Mark Yuly (chair), Ronald Rohe
Adjunct: John M. Andrews, Jr.
Physics Major (BS): (31 hours in the major; 16 in prerequisites)
General Information: The BS physics major at Houghton 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 for advanced courses: ................................................... 16
PHYS 151 General Physics I + Lab ............................................. 4
MATH 181 Calculus I................................................................. 4
PHYS 152 General Physics II + Lab ........................................... 4
MATH 182 Calculus II ................................................................. 4
Required courses: .................................................................................. 14
PHYS 251 Mechanics I ............................................................... 4
PHYS 252 Mechanics II ................................................................ 3
PHYS 353 Electricity \& Magnetism I ......................................... 4
PHYS 471, 472 Advanced Projects Laboratory ....................... 2
PHYS 482 Physics Seminar .......................................................... 1
Required supporting courses: ............................................................... 10
MATH 241 Differential Equations ............................................ 3
MATH 321 Multivariate Calculus ............................................. 3
CHEM 151 General Chemistry I +Lab ...................................... 4
Recommended supporting courses: ...................................................... 7
MATH 261 Linear Algebra ......................................................... 3
CHEM 152 General Chemistry II + Lab .................................... 4
CSCI 211 Programming I ............................................................ 3
CSCI 221 Data Structures (C++) ................................................ 3
PHIL 360 History and Philosophy of Science .......................... 4
Advanced courses may be supplemented by independent study courses in topics such as quantum mechanics, solid state physics, semiconductor physics, spectroscopy, physical optics, and particle physics.

Physics Major (BA): (24 hours in major; 16 in prerequisites)
A major leading to a BA in physics requires a minimum of 24 hours in physics courses numbered 200 or above, including two courses with labs, two hours in laboratory, and one in seminar. 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 BS in physics are as follows:
Prerequisites for advanced courses: .................................................. 16
PHYS 151 General Physics I + Lab ............................................ 4
MATH 181 Calculus I................................................................... 4
PHYS 152 General Physics II + Lab ......................................... 4
MATH 182 Calculus II ................................................................. 4
Required courses: .................................................................................... 1
PHYS 482 Physics Seminar ......................................................... 1
Recommended supporting courses: .................................................... 7
PHYS 251 Mechanics I ................................................................. 4
PHYS 258 Analog Electronics .................................................... 4
PHYS 353 Electricity \& Magnetism I ........................................ 4
PHYS 355 Thermal Physics ........................................................ 3
PHYS 361 Atomic and Molecular Physics ................................ 3
PHYS 471, 472 Physics Project Lab ........................................... 2
Minor: (12 hours of credit in physics courses numbered 211 or above)

\section*{Course Descriptions}

\section*{PHYS 101 College Physics I}

An examination of the field of physics focusing on central concepts and problem solving. Topics include motion, energy and waves. Three lecture and three laboratory hours each week. Prerequisite: concurrent enrollment in MATH 181.
problem solving. Topics include thermodynamics, electricity, magnetism and optics. Three lecture and three laboratory hours each week. Prerequisite: PHYS 101.

\section*{PHYS 140 Physics of Music}

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 General Physics I
A comprehensive calculus-based examination of the field of physics. Designed for science students whose career goals are in engineering, physics, chemistry or biology. Topics covered include mechanics, energy, oscillations and waves, and heat. Three lecture and three laboratory hours each week. Prerequisite: MATH 181 or evidence of adequate preparation in calculus.
PHYS 152 General Physics II
Continuation of PHYS 151. A comprehensive calculus-based examination of the field of physics. Designed for science students whose career goals are in engineering, physics, chemistry or biology. Topics covered include thermodynamics, electricity, magnetism, and modern physics. Three lecture and three laboratory hours each week. Prerequisite: PHYS 151 and MATH 182 or evidence of adequate preparation in calculus.

PHYS 170 Introduction to Engineering
An introduction to the theory and practice of engineering. The course will address the branches of engineering, requirements of the engineering professions, economics of engineering, and moral and ethical dimensions of engineering as a field of study and as a profession. An introduction to computer software for engineering, such as CAD programs, will be included. This course is required for all dualdegree, engineering students.

\section*{PHYS 175 Engineering Mechanics: Statics}

A study of basic mechanics as it relates to the static stability of structures and other objects. Topics to be covered include the equilibrium of a particle and a rigid body, structural analysis, friction, center of gravity, and moment of inertia. This course is required or strongly recommended for most dual-degree, engineering students.
PHYS 251 Mechanics I
(4, F02)
A development of classical mechanics beyond the introductory physics level. The course will focus on the dynamics of particles and rigid bodies in 1,2 and 3 dimensions. Topics to be covered 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. MATH 241 is a recommended pre/corequisite. Three lecture and three laboratory hours each week.
PHYS 252 Mechanics II
\((3, \mathrm{~S} 03)\)
Analytical and numerical methods applied to systems of particles, rigid bodies, rotation, inertia tensor, Lagrange's equations, fluid mechanics, and chaos. MATH 261 recommended pre/co-requisite.

\section*{PHYS 258 Analog Electronics}

Basic linear and analog circuits used in scientific instruments including DC, AC, filters, transformers, power supplies, amplifiers, and oscillators. Analysis by Kirchoff's laws and simulations using computer software. Additional topics include the operation of diodes, transistors, linear integrated circuits, and operational amplifiers. Prerequisite: PHYS 152. Three lecture and 3 laboratory hours each week.
PHYS 260 Optics
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. MATH 241 is a recommended pre/co-requisite. Three lecture and three laboratory hours each week.

Analysis of laws of thermodynamic equilibria in solid, liquid, and gaseous phases; low temperature phenomena; introduction to statistical mechanics. Prerequisite: PHYS 152.
PHYS 361 Atomic and Molecular Physics
Chemical foundations of atomic theory, quantum mechanical treatment of radiation, atomic and molecular spectra, including effects of electric and magnetic fields. Prerequisite: PHYS 251.
PHYS 362 Nuclear and Particle Physics
(3, OD)
Topics from nuclear and particle physics. Quantum mechanical techniques will be applied to nuclear and sub-nuclear systems. The course will include an examination of the latest advances in these fields. Prerequisite: PHYS 251.
PHYS 471, 472 Physics Project Laboratory
(1/1, F/S)
Selected projects in experimental physics to familiarize the student with current literature and research techniques.

\section*{PHYS 482 Physics Seminar}

Oral presentation of topics of interest in current physics journals. Prereq: junior or senior physics major.
PHYS 295, 395, 495 Special Topics in Physics
(1, 2, 3 or 4 )
Introduction to areas of physics not treated in other courses. Topics have included superconductivity and IC technology.
PHYS 391, 392, 491, 492 Independent Study
PHYS 496 Honors in Physics

\section*{POLITICAL SCIENCE (MAJOR AND MINOR)}

Department of History and Political Science: William Doezema, chair
Faculty: B. David Benedict, Peter Meilaender, Ronald Oakerson
Major: (27 hours; 3 prerequisites)
Minor: (12 hours of POLS courses above POLS 101)
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:
> POLS 222 The American Political System............................. 3

POLS 230 Introduction to International Relations .................. 3
POLS 312 Social Science Research Methods ............................ 3
(prerequisite is Statistics [POLS 309])
POLS 364 Political Thought
3
POLS 480 Senior Politics Seminar ......................................... 3
Political science electives above the 210 level ...................... 12
(Majors may fulfill up to 6 of these 12 hours by participating in an internship in local, state, or national domestic politics or in an international intercultural setting.)

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.

\section*{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.

\section*{POLS 220 World Regional Geography}
(3, May)
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
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
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, and interdependence, and issues such as foreign policy decision making, causes of war, and nuclear arms control.

POLS 240 Comparative Government
\((3, \mathrm{SO})\)
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 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. It is a prerequisite for POLS 312. Does not count toward either major or minor.

POLS 312 Social Science Research Methods
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.

\section*{POLS 316 American Foreign Policy}
(3, F01)
Formulation and execution of US 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.

\section*{POLS 320 Community Organization and Development}

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.

\section*{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, F01)
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, F02)
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
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.
POLS 336 Governance and Politics in Developing Countries
A study of patterns of governance and politics typical of developing countries with an emphasis in relationships between governance and development.

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.

\section*{POLS 357 Russia and the USSR: History and Politics}

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.

\section*{POLS 364 Survey of Political Thought}

Introduction to Western political thought and ideas in political dialogue from the Greeks to recent critical theories. Provides foundation for understanding political action in society. Considers issues of order, equality, justice, freedom.

\section*{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 3 hours of credit may be counted toward the major or minor. May be combined with an additional 3 hours of credit for POLS 391 Independent Study.
POLS 295, 395, 495 Special Topics in Political Science
\((3, O D)\)
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
\((3, \mathrm{~F} 01)\)
Development of the Constitution through practice and leading court decisions from 1787 to the present. Emphasis on case studies.
POLS 480 Senior Politics Seminar
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, OD)
POLS 496 Honors in Political Science

\section*{PRE-HEALTH PROFESSIONS}

Dental, medical, optometry, osteopathy, physician's assistant, and podiatry:Students who desire to attend one of these schools after graduation from Houghton usually major in biology or chemistry, although schools do admit students with majors other than these. Regardless, a balanced selection of courses in several disciplines is strongly encouraged as well as those required by the professional school and by the choice of major and minor.

While at Houghton the student has a curriculum advisor from the major area. Dr. Timothy Leonard, chairman of the Health Professions Advisory Committee, can supply more information about any of these programs. Biennially a practicum is offered during Mayterm for further experience in these areas to help provide guidance and confirmation of career.

Most of these 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. Each area publishes an annual book that gives details on requirements of specific schools.

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 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 Kenneth Boon, pre-veterinary advisor, for further information.

\section*{PRE-LAW}

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 (Professor Chris Stewart or Professor Peter Meilaender), 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 in this catalog section.

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.

\section*{PRE-PHYSICAL THERAPY (BIOLOGY BA MAJOR)}

Department of Biology: James M. Wolfe, chair
Faculty: Sandra Johnson, Davis McGuirt, Sue Stephans, Tim Trezise
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 physical therapy tract.

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 Seminar ............................................................. 1
PHED 330 Exercise Physiology ................................................. 3
PHED 341 Kinesiology ................................................................ 3
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 PrePhysical Therapy program.

\section*{Required classes}

PHED 247 Recognition and Eval of Athletic Injuries ............. 3
PHED 347 Therapeutic Modalities ............................................ 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
Highly recommended but not required (preferably taken before those listed above):
PHED 246 Introduction to Athletic Training
3
Total: .......................................................................... 13

\section*{Course Descriptions}

\section*{PHED 281 Pre-Physical Therapy Field Experience I}

Mastery of competencies in injury prevention, recognition, and assessment, and taping and bracing techniques, understanding of the lower extremity and medical documentation. Requires 20 hours of observation in each of three settings: orthopedics, pediatrics, and geriatrics, with an additional 40 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.

\section*{PHED 381 Pre-Physical Therapy Field Experience II}

Mastery of competencies in injury prevention, recognition, and assessment, and taping and bracing techniques, understanding of the back, upper extremity and developing rehabilitation programs. Requires 15 hours of observation in each of four settings: orthopedics, cardiac, respiratory, and neural rehabilitation with an additional 40 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 347 or 348.
(For other descriptions, see the appropriate section (Biology, Physical Education, etc.)

\section*{PRE-SEMINARY}
(Consult the chair of the Department of Religion and Philosophy, Dr. Harold Kingdon)
For those who expect to attend seminary after college, The Association of TheologicalSchools 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.
\(\S\) 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.

\section*{PSYCHOLOGY (MAJOR AND MINOR)}

Department of Psychology and Sociology: Richard Stegen, chair
Faculty: Richard Stegen, Daryl Stevenson, Cynthia Symons, John Van Wicklin, Paul Young
Major: (31 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 31 hours (of which at least 3 must be 400 level PSY) beyond that course. Psychology majors complete 7 hours of core requirements and then at least one course from each of the 5 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 6 Internship hours may count toward the minimum 31 hours for the major.

Co-requisite with the major is 4 hours of laboratory biology.
Students with a double major may take a minimum of 25 hours of psychology coursework, meeting all the major's regular requirements and reducing electives to 3 hours.
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Primary Core Requirements
PSY 309 Statistics .................................................................. }
PSY 310 Experimental Methods ........................................... }
PSY 48X Senior Seminar ........................................................ }
Secondary Core Areas (minimum of one course from each area)
I. Developmental
PSY 214 Child Psychology, or
PSY 215 Adolescent Psychology, or
PSY 230 Lifespan Development of the Family3
II. Social/Personality
PSY 218 Social Psychology or
PSY 301 Psychology of Personality ........................................ }
III. Learning/Physiological
PSY 335 Drugs and Behavior, or
PSY }336\mathrm{ Cognitive Psychology, or
PSY 403 Physiological Psychology, or
PSY 451 Learning and Memory .
3 or 4
IV. Clinical
PSY 305 Abnormal Psychology, or
PSY }315\mathrm{ Psychological Assessment, or
PSY 402 Counseling and Psychotherapy .............................. }
V. Integrative Issues
PSY }302\mathrm{ Psychology and Christianity, or
PSY }306\mathrm{ Psychology of Religion, or
PSY 401 History and Systems of Psychology ........................ }
PSY xxx Psychology electives ................................................ }
Total: .................................................................. }3

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Minor: A minor in psychology consists of any 12 semester hours above PSY 111, excluding Statistics (PSY 309), but may not include more than six hours of field experience credit.

\section*{Course Descriptions}

\section*{PSY 111 Introduction to Psychology}

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.
PSY 214 Child Psychology
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
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
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 219 Educational Psychology
The individual in the teaching/learning process. Focus on developmental theory, learning models and theories, cognition, individual differences, motivation, and instructional psychology. (Also listed as EDUC 219.)

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.

\section*{PSY 252 Exceptional Child}

Introduction to special education; special needs of gifted, learning and emotionally disabled, and culturally disadvantaged children.

\section*{PSY 301 Psychology of Personality}
(3, F\&S)
Description, development, dynamics, and determinants of the normal personality. Emphasis on contemporary theories. Prerequisite: 6 hours in psychology.

\section*{PSY 302 Psychology and Christianity}

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.

\section*{PSY 305 Abnormal Psychology}

Etiology, dynamics, and treatment of abnormal behavior. Prerequisites: six hours in psychology.

\section*{PSY 306 Psychology of Religion}

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)

\section*{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
Principles of construction, validation, and use applied to a variety of ability and personality tests. Selected tests administered with guided interpretation. Prerequisite: PSY 309.

\section*{PSY 325 Human Sexuality}

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.

\section*{PSY 326 Introduction to Family Systems}

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.

\section*{PSY 335 Drugs and Behavior}

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 336 Cognitive Psychology
\((3, S)\)
Covers the historical development of cognitive psychology and its emergence as a paradigm; current and traditional theories of memory; judgment and decision making; and problem solving. Analysis of new and classic psychological studies. Focus on understanding how experimental methods are used to answer questions, and on understanding the logic of studies.

\section*{PSY 401 History and Systems of Psychology}

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
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, F02)
Physiology of nervous and glandular systems as they relate to behavior, including sensation, emotion, aggression, learning, and mental disorders. Prerequisite: four hours of biology.

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 413 Professional Issues and Techniques in Psychology
Taken in conjunction with the Internship; emphasis is on professional and ethical issues, inter-viewing skills, and developing various research and practice skills. (West Seneca only)
PSY 415 Internship in Psychology (West Seneca Campus only)
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
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 482 Senior Seminar
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 413 may be substituted by instructor's permission.)

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, Israel Seminar, Cross-cultural Psychology, and other topics. Prerequisites vary with the course.

PSY 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
PSY 496 Honors in Psychology

\section*{RECREATION (MAJOR AND MINOR)}

Department of Physical Education/Exercise Studies \& Recreation/Leisure: William R. Swanson, chair Faculty: Thomas R. Kettelkamp, Patty-Jeanne Slaughter, Robert Smalley

Recreation/Leisure (Therapeutic Option - 31 hours; 11 hours in pre/co-requisites)
All students will take a core consisting of REC 220,221,300, and 406 plus 3 hours of elective within the REC offerings.

The practicum 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.)

\section*{Co-requisites}

PSY 111 Introduction of Psychology .......................................... 3
BIOL 103 Introduction to Biology ............................................. 4
BIOL 217 Anatomy and Physiology ......................................... 4
\(\qquad\)
Theory Requirements
REC 248 Foundations of Therapeutic Recreation .................... 3
REC 303 Methods and Materials of Therapeutic Rec ............. 3
REC 412 Seminar: Issues in Therapeutic Recreation .............. 3
REC xxx Applied labs (as approved by dept. chair) .............. 7
Core requirements 15
Total: .......................................................................... 31
Recreation/Leisure (Outdoor Education/Camp Administration Option - 32 hours; 8 hours in pre/corequisites)

\section*{Co-requisites}

BIOL 215 Local Flora and Vegetation ........................................ 3
REC 102B Backpacking ............................................................... 1
XXX xxx (4-hr. science course with environmental emph. .... 4
Total: ............................................................................ 8
Theory Requirements
REC 301 Methods \& Mat'ls for Camps \& Outdoor Educ. ..... 3 ..... 3
REC 240 Administration of Organized Camps
REC 227 Outdoor Leadership Training ..... 3
REC 266 Outdoor Living Skills ..... 2
REC 401 Natural Resources Management .....  3
REC 411 Seminar: Recreation and Leisure ..... 2
REC 412 Seminar: Recreation and Leisure ..... 1
Core requirements ..... 15
Total: ..... 32

\section*{Minor (14 hours)}

Courses numbered 211 or above, including REC 220, REC 221, and REC 411. The remaining 6 hours may be selected from any REC courses, with at least 2 hours and not more than 5 taken in activity labs.

\section*{Course Descriptions}

REC 102A Initiatives/REC 102B Backpacking (IS alternative)
(1, F\&S)
Physical skills and carry-over values of recreational activities. Place of recreation and leisure in Christian Life (also meets PHED 102 requirement.)

REC 109 Highlander Adventure Program (Activity Lab) (IS alternative)
(2, Special)
Two to 3 days on the initiatives course and a 7-day trip into the wilderness. Develop skills in 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).
REC 211 Eco-tour in Honduras
Students will have a third-world experience including a service project with Christian Camping International. Visits are made to national parks and Mayan Indian ruins. Activities include hiking, snorkeling, and attending cross-cultural classes. (Meets PHED 102 requirement.)

REC 212 Eco-tourism in Africa
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.)

REC 218 Winter Ski Outing (Activity Lab)
(1, Special)
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.

\section*{REC 220 Recreation, Leisure and Society}

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
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
(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).
REC 240 Administration of Organized Camps
(3, F02)
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, F02)
Conditions which characterize and produce atypical individuals; diagnosis of strengths and weaknesses of the individual; prescription of procedures for appropriate activities. Prereq: BIOL 103, 217.
REC 252 Teaching Lifetime Sports (Activity Lab)
Skills and methods of teaching. Student notebooks including methods, mechanical analysis of skill for each sport: skiing, canoeing, archery.

\section*{REC 266 Outdoor Living Skills (Activity Lab)}

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).

\section*{REC 300 Program Planning and Evaluation}

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
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
Overview of all aspects of church recreation. Bases for recreation in local church; methods and designs for implementing programs; recreation activities for churches without specialized recreation facilities.

\section*{REC 303 Methods \& Materials in Therapeutic Recreation}

Pre-practicum experience. Participation in observation, needs assessment, program planning, and leadership of special population groups in appropriate therapeutic recreation settings.

\section*{REC 311 Special Topics}

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
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 \(6, \mathrm{OD}\) )
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 Seminar: Issues in Therapeutic Recreation
(3, F01)
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, 412 Seminar: Issues in Recreation and Leisure
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 \(3, O D)\)

\section*{RELIGION (MAJOR, MAJOR WITH MINISTERIAL CONCENTRATION, AND MINOR) \\ Department of Religion and Philosophy: Harold Kingdon, chair}

Faculty: Bradley Beach, Richard Eckley, Carlton Fisher, Harold Kingdon, Kristina LaCelle-Peterson, Terence Paige, Carl Schultz, Paul Shea, W. Christopher Stewart, John Tyson, J. Michael Walters Part-time: David O'Brien

Major (BA): (38 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 38 hours in a specified core of religion courses and 16 hours in the ministerial concentration.
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Specific requirements are:
BIBL xxx Bible12

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BIBL 221 Biblical Interpretation .....  3
THEL 351, 352 Biblical Theology ..... 6
THEL 453, 454 History of Christianity ..... 6
PHIL 350 Reason and Religious Belief .....  2
6 hours from the following 3 hour courses
```THEL 315 Wesleyan Tradition (required for Wesleyan ordination)MISS 222 Modern Missions (required for Wesleyan ordination)
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MISS 321 World Religions
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
EDMN 431 Leadership in Ministry

Students electing the comprehensive major in religion must satisfy all normal integrative studies requirements, except that Greek must be taken to satisfy the language requirement. 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 Greek must be taken to satisfy the language requirement. A curriculum plan for this program is available through the Department of Religion and Philosophy. The concentration curriculum is as follows:
MIN 316, 317 Pastoral Theology I, II ..... 6
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)
Select courses from the following (at least one course each in PHIL and THEL):
PHIL 321 World Religions
PHIL 350 Reason and Religious Belief
THEL 351 Biblical Theology: Old Testament
THEL 352 Biblical Theology: New Testament
THEL 215 Christian Apologetics
THEL 453, 454 History of Christianity
Other courses with approval of department chair:
Philosophy
Theology

## Course Descriptions

## MIN 210 Introduction to Christian Ministries

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.
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 Pastoral Theology II
(3, S03 \& 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

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 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 on West Seneca Campus.

## SOCIOLOGY (MAJOR AND MINOR)

Department of Psychology and Sociology: Richard Stegen, chair
Faculty: Jonathan Arensen, Jayne Maugans, Richard Perkins
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 prerequisite to all additional coursework in the disciplines except anthropology.

> Required courses: SOC 282 Sociological Theory ........................................................................................................................................................................................................................................................

Minor: (12 hours above SOC 210, including at least three hours numbered 300 or above - except 309 Statistics)
(NOTE: No minor may include more than six hours of field experience credit.)

## Course Descriptions

SOC 101 Principles of Sociology
Introduction to the sociological perspective; development and systematic use of concepts. Satisfies integrative studies requirement in the social sciences. NOTE: SOC 101 is prerequisite to all other sociology coursework, except anthropology.

SOC 222 Social Problems
Survey of contemporary social problems in American society. Analysis based on conflict and labeling
theories, emphasizing ideological origins whereby certain behaviors are defined as problems.
SOC 231 Criminology
$(3, \mathrm{OD})$
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 Language)
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 Language)
Cultural and social aspects of human behavior; comparison of cultures.

## SOC 275 The Criminal Justice System

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
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
Intensive study of East African ethnic groups - their beliefs, behaviors, work, societies. Lectures, which include foundational anthropological theory as well as ethnic descriptions, augmented by observations and home stays amongst the Maasai, Kalenjin, Murle and other peoples.

## SOC 295 Special Topics in Sociology

Topics offered according to interest and demand.
SOC 296 Special Topics in Anthropology
Topics offered according to interest and demand.

## SOC 297 Special Topics in Family Studies

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

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

Major theories and evidence relating to the origin, nature, and social consequences of stratification systems of social inequality in contemporary United States.
SOC 330 Culture and Family (CDRP, see Foreign Language)
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
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 sociopolitical dimensions of aging. Multicultural perspectives included.
SOC 351 The Individual and Society
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.

Study of the principles and processes shaping relations between racial, ethnic, and other groups.

Analysis of diversity and stratification in contemporary society.
SOC 362 Gender Relations
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 9 hours in the Family Studies minor and permission of the department. Contact: Dr. Maugans.
SOC 394 Internship in Family Studies
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 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
SOC 496 Honors in Sociology

## SPANISH (SEE FOREIGN LANGUAGES)

## THEOLOGY (MINOR)

Department of Religion and Philosophy: Harold Kingdon, chair
Faculty: Richard Eckley, Harold Kingdon, Kristina LaCelle-Peterson, John Tyson, J. Michael Walters
Minor: (12 hours)
The theology minor provides concentrated study in Christian doctrine, apologetics and church history.

> Minor required courses:
> THEL 313 Systematic Theology ...........................................................................................................................................
> Remaining hours ........
> (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.
THEL 214 The Cults and New Age
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, S02 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 313 Systematic Theology
(3, F01 and alternate years)
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

Study of the Wesleyan movement from the Wesleys to the present. Emphasis on the history of The Wesleyan Church and the doctrine of holiness.

THEL 320 Spiritual Formation
Spiritual Formation 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. Prerequisite: THEL 209.
THEL 333 Major Figures in Theology
$(3, O D)$
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, F02/S03 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
$(3, O D)$
(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. (Liberal arts credit)
THEL 191, -2; 291, -2; 391, -2; 491, -2 Independent Study
(1,2 or 3 hours)
THEL 496 Honors in Theology

## URBAN MINISTRY (MINOR)

(see also Intercultural Studies urban ministry concentration)
Department of Religion and Philosophy: Harold Kingdon, chair
Faculty: Richard Eckley, Paul Shea
Minor: (15 hours)
It includes the four courses listed below and Foundations of Educational Ministry (EDMN 231), or Introduction to Christian Ministry (MIN 210).

## Course Descriptions

## URMN 212 Urban Ministry

$(3, O D)$
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 on West Seneca Campus.
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.

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 211, and declaration of minor.

## WRITING (MAJOR AND MINOR)

Department of English and Communication: Douglas Gaerte, chair
Faculty: Charles Bressler, Laurie Dashnau, John Leax, James Zoller
Major: (30 hours in the major; 6 of them 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 and 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.

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Required courses
9
    Advanced Composition: Rhetorical Patterns (WRIT 212)
    Writer's Workshop (WRIT 401,402)
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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
A course in the informal essay based on personal experience. Emphasis on descriptive and narrative techniques, craftsmanship, style. Introduction of the first person article.
WRIT 212 Advanced Composition: Rhetorical Patterns
A course in formal expository and persuasive writing in patterns such as process analysis, definition, comparison and contrast, cause and effect. Includes library research.

WRIT 213 Advanced Composition: Writing about Literature
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.
WRIT 301 Writing of Fiction
Techniques of the traditional short story.
WRIT 302 Writing of Poetry
Techniques of open and closed verse.
WRIT 303 Periodical Writing
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
Keeping a writer's field journal, the experience in nature essay, feature articles, the personality profile, reporting environmental stories. Survey of environmental journals and internet resources.
WRIT 307 Creative Nonfiction: Writing about Spiritual Experience
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
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
$(3, O D)$
Opportunity for study of issues and problems of writing not covered elsewhere in the curriculum.

Approaches to creativity. Integration of faith and learning. Intensive work in genres selected by students. For senior writing majors and minors.
WRIT 412 Literary Criticism
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
WRIT 496 Honors in Writing

## YOUTH MINISTRY

(see Educational Ministries, Youth Concentration)

## Off-campus programs director: Dr. Paul Shea

These programs are under the general direction of the academic dean and are staffed by the faculty assigned to various academic departments.

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. Information is available through the off-campus programs office located in the academic building.

## HOUGHTON-SPONSORED PROGRAMS:

First-Year Honors Program - Program director, Dr. Cameron Airhart; associate director, Dr. Chris Stewart

This course of study in the spring semester for selected first year students 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.

Houghton in London - Program director, Dr. Cameron Airhart; associate director, Dr. Chris Stewart
In this fall semester program upperclass students select a regular load of courses from a pool of eight options. Although intentionally unique, the courses are designed to meet Houghton integrative studies requirements. The adjunct 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 study.

## Houghton in Tanzania- Program director, Dr. Jon Arensen

An intensive fall 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 Maasai, Hehe, and other tribes, observe dozens of animal species in natural habitat, and soak up the history, language and culture of East Africa. (Course list follows.)

During the semester in Tanzania, a student may earn between 12 and 17 hours selected from the following:

## Core courses

HIST 251 East African History
East African history: 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 the issues and challenges of today.
SOC 293 East African Cultures
Intensive study of East African ethnic groups - their beliefs, behaviors, work, societies. Lectures, which include foundational anthropological theory as well as ethnic descriptions, augmented by observations and home stays amongst the Maasai, Hehe and other peoples.

Ethology of East African wildlife including the principles of feeding and social behavior, mate selection, migration and communication. Lectures and two weeks of field observations at the Tanzania Field Station. Daily field notes in a journal are required. Only BIOL 212 may be used for major credit. Additional work will be required.

## Optional courses <br> INCL/INDS 311 Intercultural Experience

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, on-going 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 211.

LING 295, 395 or 495 Special Topics in Linguistics
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.
REC 212 Ecotourism: East Africa
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.

Independent studies also available

## OREGON EXTENSION

Houghton College's Oregon Extension Program, based at Ashland, Oregon, offers students a major change of pace and locale through studying for a fall semester in the Pacific Northwest. Courses are presented seminar-style in short blocks, interspersed with unique and personal encounters with all aspects of the environment of the campus and region.

During the semester at Oregon Extension, a student may earn 15 credit hours selected from among the following:

## Segment no. 1: Contemporary Society

## History 395 The Contemporary World

Selected contemporary social, political, and economic issues in American and world civilization, with special concern for those which give individual and social life their distinctive characteristics or spirit and provide insight into the underlying dynamics of modern history.
Sociology 395 Contemporary Social Criticism
An examination of selected contemporary social issues in American and world civilization, with special concern for those which give contemporary individual and social life their distinctive characteristics or spirit and provide insight into the underlying dynamics of modern history.
Note: all Oregon 396, 397 and 398 courses are individualized studies which also include lectures and readings in related disciplines.

## Segment no. 2: Social Analysis and Theory

Bible 396 Selected Social Topics in Biblical Perspective
Biblical texts of relevance to current social issues and of help in understanding the underlying dynamics of human society.
Education 396 Topics in Educational Theory
Theories and practices of selected educational thinkers or movements, with special concern for their insights into or reflections of the dynamics of modern social life, and their implications for social change. English 396 Literary Perspectives on Modern Society
Examine a specific major author or several authors in a literary period or style, with special concern for their insights into the shape and meaning of their own social milieu and of human society in general. History 396 Topics in the History of Social Thought
Examine the contributions of major selected social (including economic and political) thinkers to an
understanding of modern social life and the nature of or necessity for social change.
Philosophy 396 Social Issues in Philosophical Perspective
Examine the ways in which selected philosophers have thought about specific social issues as well as human society in general.
Political Science 396 Selected Topics in Modern Political Thought
Examine the contributions of selected political thinkers to an understanding of the dynamics of human political organization and the implications of their theoretical perspectives for political change.
Psychology 396 Social Issues in Psychological Perspective
Examine the ways in which selected psychological theorists have thought about specific social issues and human society in general.
Science 396 Topics in the Relationship of Science and Society
The place of science in the modern world and of the scientific method in modern thinking with special attention to the impact of science and technology on the social and natural environment.
Sociology 396 Topics in Social Issues and Theory
Contributions of major selected social thinkers to an understanding of the dynamics of human social life and the nature of specific social issues.
Theology 396 Christian Theology and Current Social Thought
Contributions of selected theologians to an understanding of specific current social issues and of the underlying dynamics of human society.

## Segment no. 3: The Human Condition

Bible 397 Biblical Perspectives on the Human Condition
Examine the human condition by means of careful, detailed exegeses of selected, pertinent Biblical texts. English 397 Literary Perspectives on the Human Condition
Examine the human condition by reference to the works of one or several major authors, supplemented by pertinent biographical and critical sources.
History 397 Historical Perspectives on the Human Condition
Examine the human condition in light of selected significant historical events and/or thinkers.
Philosophy 397 Philosophical Perspectives on the Human Condition
Examine the human condition as understood by selected major philosophical thinkers or systems of thought.
Psychology 397 Psychological Perspectives on the Human Condition
Examine the human condition as understood by selected major psychological thinkers or systems.
Science 397 Biological Perspectives on the Human Condition
Examine the human condition as understood by selected major scientific (particularly biological) thinkers or systems.

Sociology 397 Sociological Perspectives on the Human Condition
Examine the human condition in light of the scientific study of human social behavior and social theory. Theology 397 Theological Perspectives on the Human Condition
Examine the human condition as understood by selected major theological thinkers or systems.

## Segment no. 4: The Christian Faith

Bible 398 Selected Topics in Biblical Exegesis
The nature and meaning of the gospel, the core issues of Christian faith, and the human religious phenomenon, by means of careful, detailed exegesis of selected, pertinent biblical texts.
English 398 Religion and the Christian Faith in Literary Perspective
The nature of Christian faith and the human religious phenomenon by reference to the works of selected major literary figures or movements.
History 398 Topics in Religious and Church History
Selected major themes, persons, or events in the history of religion and of Christianity, with special reference to a Biblical critique of human religious behavior.
Philosophy 398 Selected Topics in the Philosophy of Religion
The nature of Christian faith and the human religious phenomenon as seen by selected major philosophers or world religions.
Psychology 398 Selected Topics in the Psychology of Religion
Selected significant religious doctrines, experiences or sensibilities from a psychological point of view, with special reference to a Biblical critique of human religious behavior.
Science 398 Modern Science and Christian Faith
The historical and philosophical interactions between scientific theory, knowledge and patterns of religious belief, and experience in history.

## Sociology 398 Selected Topics in the Sociology of Religion

Selected significant religious doctrines, experiences or sensibilities from the sociological point of view, with special reference to a Biblical critique of human religious behavior.
Theology 398 Selected Topics in Christian Theology
Nature and meaning of the gospel, the core issues of Christian faith, and the human religious phenomenon, from the perspective of selected major Christian theologians.

Running through all segments for all students:

## Composition and Rhetoric 399

Individualized and group instruction in discussion participation, research skills, essay writing, and formal oral presentation.

## SCHOOL OF MEDICAL TECHNOLOGY AT ROBERT PACKER HOSPITAL

A cooperative program has been established with the School of Medical Technology at Robert Packer Hospital in which three years at Houghton plus a twelve-month clinical program at the hospital leads to a BS degree in biology from Houghton College and eligibility to take the national certifying examination in medical technology. Houghton students enrolled in this affiliate program are considered full-time students at Houghton College and have the same status as students enrolled in programs on the main campus. More specific requirements of this program are listed under the biology department in this catalog. Additional information may be obtained from the medical technology program advisor, Dr. Matthew Pelletier.

## COUNCIL-SPONSORED PROGRAMS:

## Opportunities in the CCCU

Because Houghton is a member of the Council for Christian Colleges \& Universities, an association of more than 90 private liberal arts Christian colleges and universities, a number of off-campus learning opportunities (and some course descriptions) are available as listed below:

## AMERICAN STUDIES PROGRAM

Founded in 1976, the American Studies Program has served hundreds of students from member institutions as a "Washington, D.C. campus." ASP uses Washington as a stimulating educational laboratory where collegians gain hands-on experience with an internship in their chosen field. Internships are tailored to fit the student's talents and aspirations and are available in a wide range of fields. They also explore pressing national and international issues in public policy seminars which are issue-oriented, interdisciplinary and led by ASP faculty and Washington professionals. ASP bridges classroom and marketplace, combining biblical reflection, policy analysis and real-world experience. Students are exposed to on-the-job learning that helps them build for their future and gain perspective on the calling of God for their lives. They are challenged in a rigorous course of study to discover for themselves the meaning of Christ's lordship in putting their beliefs into practice. The aim of the program is to help Council schools prepare their students to live faithfully in contemporary society as followers of Christ. Students earn 16 semester hours of credit.

## Course Descriptions

## AS320 American Studies Internships

(8 hrs, upper division)
Part-time work experience in Washington, D.C., in a professional setting within student's major field. Students select placements in communication arts, urban ministries, marketing and corporate enterprises, law firms, trade associations, federal agencies, or political offices. Limited enrollment. Credit granted at the discretion of major department.
AS340 American Studies Seminars
( 8 hrs , upper division)
Interdisciplinary examination of selected topics in American political, historical, and cultural context. Includes four 2-credit study modules: Foundations for Public Involvement, Domestic Policy Issues, Economic Policy Issues, and International Policy issues. Limited enrollment. Credit granted as electives or for major if approved by major department.

## CHINA STUDIES PROGRAM

The China Studies Program enables students to engage this large and intriguing country from the inside. While living in, and experiencing Chinese civilization firsthand, students participate in seminar courses on the historical, cultural, religious, geographical and economic realities of this strategic and populous nation. In addition to the study of standard Chinese, students are given opportunities such as assisting Chinese students learning English or working in an orphanage, allowing for one-on-one interaction. The program introduces students to the diversity of China, including Hong Kong, Beijing, Shanghai, Xi'an and Xiamen. This interdisciplinary, cross-cultural program enables students to deal with this increasingly important part of the world in an informed, Christ-centered way. Students earn 16 semester hours of credit.

## LATIN AMERICAN STUDIES PROGRAM

Students of CCCU colleges have the opportunity to live and learn in Latin America through the Latin American Studies Program, based in San Jose, Costa Rica. The program introduces students to as wide a range of experiences through the study of the language, literature, culture, politics, history, economics, ecology and religion of the region. Living with a Costa Rican family, students experience and become a part of the day-to-day lives of typical Latin Americans. Students also take part in a service opportunity and travel for three weeks to nearby Central American nations. Students participate in one of four concentrations: Latin American Studies (offered both fall and spring terms); Advanced Language and Literature (limited to Spanish majors and offered both fall and spring terms); International Business and Management (offered only in fall terms); and Tropical Sciences (offered only during spring terms). Students in all concentrations earn 16 semester credits.

## Course Descriptions

LS320 Latin American Studies Service/Travel
(4 hrs, upper division)
A two-week, hands-on experience working in a servant role in the Third World. Opportunities available in education, economic development, health, agriculture, and environmental stewardship. Three weeks of travel in other Central American countries exposes students to rich diversity of countries and cultures.
LS340 Latin American Studies Seminars
(6 hrs, upper division)
Explore many of the challenges facing Latin America in the light of biblical truth. Seminars are nontraditional, interdisciplinary, and allow personal interaction with experts on Latin American history, politics, economics, and religious life. Spring semester: tropical science and global sustainability seminar offers study of the unique physical resources of Central America.
LS360 Latin American Studies Spanish Classes
(6 hrs)
The Instituto de Lengua Espanola (The Spanish Language Institute) in San Jose places students according to ability and provides daily language classes for the first six weeks. Interaction with host families and local Costa Ricans develops language skills.

## LOS ANGELES FILM STUDIES CENTER

The Los Angeles Film Studies Center is designed to train students of Council institutions to serve in various aspects of the film industry with both professional skill and Christian integrity. Students live, learn and work in the LA area near major studios. The curriculum consists of two required seminars focusing on the role of film in culture and the relationship of faith to work in this very influential industry. In addition, students choose two elective courses from a variety of offerings in film studies. Internships in various segments of the film industry provide students with hands-on experience. The combination of the internship and seminars allow students to explore the film industry within a Christian context and from a liberal arts perspective. Students earn 16 semester hours of credit.

## Course Descriptions

## LAFSC Internship

(6 semester credits)
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.
Inside Hollywood
(1 semester credit)
An overview of the creative and operational aspects of the Hollywood film business, including the Christian's role in working within the entertainment business.
Faith, Film and Culture
(3 semester credits)
A study of the relationship between film and popular culture, with emphasis on Christianity's role in
these arenas. Examines how faith, film and culture mutually influence one another. Gives overview of historical relationship between the church and the movies, an understanding of a theology of the arts, a cultural studies approach to the nature of the arts in popular culture, and the Christian's role in identifying, discerning, and ultimately influencing movie content.
(And two of the following)

## Introduction to Filmmaking

(3 semester credits)
Introduction to the theory and practice of motion picture filmmaking. Topics: familiarity with filmmaking equipment; basic motion picture techniques; converting idea to image; use of lighting, editing and sound in film; and the role of acting, directing and good storytelling in the filmmaking process. Students make several short films that manifest their faith in content and process.
Seminar in Producing the Independent Film
(3 semester credits)
An introduction to the process of producing an independent feature film. Topics include legal structures, business plans, preproduction activities such as scheduling and budgeting, and an overview of the producer's role in production, post-production, and distribution. Attention is given to the Christian's unique contribution to producing.

## MIDDLE EAST STUDIES PROGRAM

This program, based in Cairo, Egypt, allows Council students to explore and interact with the complex and strategic world of the modern Middle East. The interdisciplinary seminars give students the opportunity to explore the diverse religious, social, cultural and political traditions of Middle Eastern people. In addition to seminars, students study the Arabic language and work as volunteers with various organizations in Cairo. Through travel to Israel, Palestine, Jordan, Syria and Turkey, students are exposed to the diversity and dynamism of the region. MESP encourages and equips students to relate to the Muslim world in an informed, constructive and Christ-centered manner at a time of tension and change. Students earn 16 semester hours of credit.

## OXFORD SUMMER SCHOOL PROGRAM

This program allows students to spend a summer term studying at the Centre for Medieval and Renaissance Studies (CMRS) in Oxford, England. The program includes multi-disciplinary study of the Renaissance and Reformation through examination of philosophy, art, literature, science, music, politics and religion of early modern Europe in a choice of lectures, seminars and field trips. Students earn 6-9 semester credits, which are administered directly to member institutions by CMRS. Worth 69 hours of credits.

## RUSSIAN STUDIES PROGRAM

RSP students are exposed to the depth and diversity of the culture during a semester spent in Russia's three largest cities: Moscow,St. Petersburg and Nizhni Novgorod. In addition to three seminar courses entitled History and Sociology of Religion in Russia; Russian Peoples, Cultures and Literature; and Russia in Transition, students receive instruction in the Russian language, choosing either 4 or 6 semester hours of language coursework. For those choosing 4 hours of Russian, a seminar course, International Relations and Business in Russia, is available. RSP strives to give students as wide an experience as possible in this complex nation, beginning with time in Moscow, the heart of both medieval and modern Russia. Students then spend 12 weeks in Nizhni Novgorod, a strategic city on the Volga River. After six weeks of language instruction, students live with a Russian family for the remainder of their stay in this city. Students also participate in a service opportunity in Nizhni Novgorod. The program concludes with time in the complex and intriguing city of St. Petersburg, the Russian "window to the West." Students earn 16 semester hours of credit.

## COUNCIL-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 Professor J. Kenneth Boon.
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

## INTERNATIONAL BUSINESS INSTITUTE

Houghton College is affiliated with the International Business Institute of King College in Bristol, TN. The eleven-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 the former Soviet Union. 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

Economic systems, their underlying ideological foundations and institutional arrangements. Historical and political context of various systems are analyzed, along with central organizational features of each. BI-339 International Marketing
Theory and practice of contemporary international marketing management: context or environment of international marketing, marketing in a variety of national domestic markets with distinct cultural settings.
BI-350 International Trade and Finance
Survey of analytical and institutional aspects of international trade and finance; includes current theoretical and empirical approaches to international economic and business relations.

## BI-390 Topics in International Business

Covers major issues related to international business, including international aspects of organizational management and behavior.

## Additional Off-Campus Opportunities

The college has affiliation agreements with Central College (Pella, IA), Brethren College (IN), Shanghai Language Institute in the People's Republic of China, the International Business Institute of King College (Bristol, TN), the Center for Cross Cultural Studies (Seville, Spain), Edu-Venture (Irian Jaya), Laval University (Quebec), and the CCCU programs. 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 affected or barred by participation in some study-abroad programs.

## Consortium Visitor

Houghton has agreements with most of the other twelve 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 <br> Catalog <br> Courses | Grades <br> on <br> Trnscrpt | $\mathrm{HC}$ <br> Fin Aid | Qualifies Mayterm |
| :---: | :---: | :---: | :---: | :---: |
| Houghton Programs |  |  |  |  |
| Oregon Extension | Yes | Yes | No | Yes |
| First Year Honors | Yes | Yes | Yes | Yes |
| Houghton in Tanzania | Yes | Yes | Yes | Yes |
| Houghton in London | Yes | Yes | Yes | Yes |
| Houghton-affiliated programs |  |  |  |  |
| Amer. Inst. of Forgn. Studies | No | No | No | No |
| AuSable Inst. of Environmental Studies (MI) | Yes | Yes | No | No |
| Brethren College (IN) | No | Yes | No | No |
| Center for Cross-Cultural Studies (Seville) | No | Yes | No | No |
| Central College (IA) | No | Yes | No | No |
| CCConsortium Visitor | No | Yes | No | No |
| Council for Christian Colleges \& Universities |  |  |  |  |
| ASP (Wash., DC) | Yes | Yes | No | Yes |
| CSP | Yes | Yes | No | Yes |
| LAFS (Los Angeles) | Yes | Yes | No | Yes |
| LASP (Costa Rica) | Yes | Yes | No | Yes |
| MESP | Yes | Yes | No | Yes |
| Russian Studies | Yes | Yes | No | Yes |
| Edu-Venture | No | Yes | No | Yes |
| Int'l Business Instit. of King College (TN) | 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 | No | Yes | No | No |
| School of Music and Goethe Institute) |  |  |  |  |
| Shanghai Language Inst. (China) | No | Yes | No | No |
| Study Abroad Program of | No | Yes | No | No |
| Central College (IA) |  |  |  |  |
| WNY College Consortium | No | Yes | NA | No |

## P.A.C.E. ADULT DEGREE COMPLETION PROGRAM (BS IN MANAGEMENT)

## Administrator: John Durbin

Houghton College offers at its West Seneca Campus, in Olean, in Arcade and possibly other sites in the future an adult degree completion program leading to a bachelor of science degree in management. Known by the acronym P.A.C.E. (Program for Accelerating College Education), this program serves those who had 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:
a. Transfer of a minimum of 64 semester hours from approved institutions to Houghton College.
b. Completion of all non-core credit requirements as determined after initial transcript review (up to 24 hours of credit).
c. Completion of an advanced-level, interdisciplinary core of 36 semester hours, comprised of twelve 3-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 prior to beginning the core courses. These general education minimum requirements are:

$$
\begin{array}{ll}
\text { Religion and philosophy } & 6 \\
\text { Communication (written and spoken) } & 6 \\
\text { Humanities (foreign language, cross-cultural studies, } & * 18 \\
\quad \text { history, literature, fine arts and social science) } & \\
\text { Mathematics/computer science } & 3 \\
\text { Science } & \\
& \text { Total ............................. } 36 \text { hours }
\end{array}
$$

*at least 6 hours in humanities and 3 in social sciences, but not 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).

A fully matriculated student in the core P.A.C.E. program may take four (4) 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.

For more information, write to P.A.C.E., Houghton College at West Seneca, 910 Union Road, West Seneca, NY 14224, or call (716) 674-6363 or (888) 874-PACE.

## Course Descriptions

## TERM I

ADC 321 Adult Development
Overview of adulthood in context of life span: biological change, cognitive characteristics, personality, moral reasoning; also, issues of gender, interpersonal relations, ethnicity, aging. Impact of theory on organizational development.
ADC 322 Specialized Writing
Emphasis on improving ability to communicate effectively via writing, identification of audience and purpose, clear reasoning and rational organization, suitable wording, and effective rewriting.
ADC 323 Work-Team Dynamics
Emphasis on dynamic processes affecting task-orientated work groups: formation, development, maturity, effectiveness; consideration of goals, interactions, problem recognition, interventions and team meetings.

## ADC 324 Fundamentals of Management

Effective reasoning and decision-making for organizational managers. Assessment and development of leadership styles, ethical perspectives, problem solving, stating goals and objectives, strategic and tactical planning. Assessing, developing individual managerial competencies.

## TERM II

## ADC 441 Judeo-Christian Values in the Workplace

Biblical basis of Judeo-Christian ethics; social and cultural workplace myths; development of ethical awareness and accountability; individual contributions to work world ethics.

## ADC 442 Human Resources Management

Perspectives on traditional, current, emerging practices in human resource management; relationship to economics, law, psychology, sociology; programs and policies used in employee management.
ADC 443 Personal and Professional Ethics
Examination of ethical theories and specific moral issues in the workplace, with small-group analysis of selected rules and cases.
ADC 444 Accounting and Finance for Non-Financial Managers
Study of and practice using the accounting and finance concepts needed by all managers. An introduction to the basics of accounting for organizations, cost control, understanding and analysis of financial statements, budgeting, working capital management, and financing alternatives.

## TERM III

ADC 451 Quantitative Decision-Making
Statistics as a tool in solving real-world problems: 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.
ADC 452 Persuasive Presentation
The preparation, presentation and evaluation of persuasive, or problem solving, presentations. Emphasis on content, structure and extemporaneous delivery. Topics include attention getting, motivation and strategy, audience analysis, decision making, cause and effect and pro and con reasoning, effective closure.
ADC 453 Diversity in the Workplace
Sociological approach to examining the marketplace's diversity, stratification, stereotyping, and misunderstandings; cultural, gender, ethnic, racial differences; issues/problem solving.
ADC 454 Organizational Development
The development of theory and innovative practice relevant to leadership and organization change. Major topics include: change processes within organizations; active attempts to intervene in organizations to improve their effectiveness, and studies of such interventions; the roles of change agents, and problems of self-awareness, responsibility, and the political consequences of OD theory and practice.

## OPTIONS COURSES

The Birth and Maturation of Western Culture/Western Culture in the Age of Science
This pair of courses comprises a connected narrative of western culture from ancient Greece to the twentieth century. While 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 characterized the past and equip participants to evaluate critically the worldview options available.

## Biblical Literature

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.

## Masterworks of Sight and Sound

Introduction of art and music from classic age to present. Satisfies fine arts requirement.
Computer Applications \& Issues
Introduction to personal computer applications: spreadsheet and database software, and webpage creation and publishing. Student teams work on real business computing projects. Discussion of current issues in computing.

## P.A.C.E. FINANCIAL INFORMATION

Costs for the current academic year (cohorts which begin May 1, 2001 to April 30, 2002):
Application fee ............................................................................ \$ 25
Enrollment deposit .................................................................. \$ 100
Tuition per term (12 credit hours) ........................................... \$ 5,064
Tuition for program ( 36 credit hours) ........................................ \$ 15,192

* OPTIONS courses ................................................................ \$0 or 300

Experiential learning credits, per credit hour awarded ........... \$ 35
Experiential learning application fee ........................................ \$ 35
Graduation fee ....................................................................... \$ 25
*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.

Costs for the P.A.C.E. program are billed in three installments, at the beginning of each term. Payment is due in full at the beginning of each term unless a monthly 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 sign a promissory note for the term's expenses. This note, which bears an interest rate of six percent per annum, is due within 30 days of the end of the term if for any reason the employer fails to pay.

Tuition covers the use of textbooks, supplemental readings, software, and the computer lab, as well as the cost of student manuals and other services. Student manuals and any consumable textbooks may be kept by the student. 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. Laptops may be purchased through the college if students so choose.

## 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 2001-02 academic year is $\$ 1,666$.

## Federal Stafford Loan

The borrowing limit is $\$ 5500$ for students who qualify based on a completed FAFSA. Interest rate is variable, capped at $8.25 \%$, based on the 91 -day Treasury Bill rate plus $3.1 \%$. 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 end of program completion. Loan applications may be obtained through the financial aid office on the main campus, the P.A.C.E. offices on the West Seneca Campus, or through your local lender.

## 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. The maximum combined borrowing limit is $\$ 10,500$.

## Houghton College Aid

Limited funds are available each academic year from an endowed scholarship fund established for the benefit of Buffalo Campus students. Recommendations for the awarding of these funds may be made by the P.A.C.E. administrative staff to the scholarship committee.

## P.A.C.E. 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 US 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 os 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.

## PASTORAL AND CHURCH MINISTRIES PROGRAM (AAS)

The associate of applied science degree in Christian ministries may be earned through the Pastoral and Church Church Ministries Program. This is a program within the department of religion and philosophy that is offered in the 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 ( 22 hours) are:

| 3 hours of Bible | PBIB 102 or PBIB 103 |
| :--- | :--- |
| 3 hours of math or science |  |
| 3 hours of principles of writing | PENG 101 |
| 4 hours of social science | PSSC 217 and PSSC 218 |
| 6 hours of humanities, with at least 3 of philosophy |  |
| 3 hours of theology | PTHL 230 |
| required religion courses (25 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 |
| 4 hours of internship | PMIN 270 |

General Information: The educational ministries concentration requirements (16 hours) are: PEDM 233, 235, 250, 252, 254, 256, and 258.

Also required is a course in preaching PMIN 222. The integrative studies liberal arts courses, as well as the additional courses required to complete the 62 hours for the AAS degree, 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) 893-1165.

## Course Descriptions

## PBIB 102 Introduction to the Old Testament

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
Historical and theological exploration of the New Testament nature of the church as a faith community. PBIB 217 Gospel Foundations of Evangelism
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
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
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

Provides practical tools for planning church growth and outreach, leadership development, and fiscal planning. Special emphasis is given to "shared ministry" of clergy and lay persons.
PEDM 233 Christian Education In The Church
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
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 250 Working With Urban Youth

Provides skills and tools for working with urban youth. The urban family structure is examined as it relates to youth needs and expectations.
PEDM 252 Theology of the City
An examination of God's presence and activity in ancient and contemporary urban settings. Consid-
eration is given to understanding urban culture and relationships among diverse populations. PEDM 254 How to Teach and Study the Bible
An introduction to the methods of Bible study. Materials explore biblical teaching methods, with emphasis placed on lesson design, planning, and presentation.

## PEDM 256 Selecting and Training Teachers

Specially designed for managers of Christian education programs. Provides guidance, skills and assessment tools needed to select and train teachers of Christian education.
PEDM 258 Techniques of Teaching Youth and Adults
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

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.

## PMIN 222 Foundations of Preaching

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
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
Provides spiritual foundations of urban religious thought, with special emphasis given to the role of prayer in the Black church/community.
PSSC 217 Pastoral Counseling in the Urban Tradition
Provides practical skills in counseling and pastoral care. The course draws upon the unique expressions of spirituality in the urban community to help the student minister effectively.
PSSC 218 Pastoral Care in the Urban Community
Exploration of pastoral care in the urban community context. Emphasis is given to the specific counseling needs in the urban community.
PTHL 230 Introduction to Christian Doctrine
An introduction to the main tenets of the Christian faith. Emphasis is given to the biblical basis for developing a personal and group theology.


## Student Life

Co-curricular activities at Houghton provide students with many opportunities to develop leadership potential, engage in Christian service, and use leisure time in ways that are enjoyable, enriching, and complementary to academic responsibilities. Possible areas of involvement include organizations that focus on ministry and service; communications and media; music ensembles; clubs that emphasize particular vocational or vocational interests; intramural and intercollegiate athletic teams; and residence hall activities.

## Residence Halls

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. Successful residence hall life 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 most 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 planning.

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 Houghton College 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 our townhouse apartments--seven students sharing a 4-bedroom townhouse with full kitchen facilities--or for a Community Living Option (CLO) which permits a student to privately rent a room or apartment within the village of Houghton. 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.

## Health Services

The Student Health Service is a walk-in clinic located in the basement of East Hall and accessed from the parking lot next to the Campus Center. It is staffed by Registered Nurses and is open Monday through Friday, 8 a.m. to 6 p.m. and Saturday, 9 a.m. until noon. The goal is the promotion of wellness and the treatment and prevention of illness in the college community.

Services include nursing assessment and treatment of illness and injury, health screening and risk appraisals, health education, resource materials, allergy injections, immunizations, laboratory services and daily delivery services from the local pharmacy. Referrals are made to local physicians, area specialists or emergency departments when indicated. The college provides three illness visits per student per year to Houghton physicians. Physician visits due to accident or injury are billed through insurance.

Students can assess their own symptoms at the Self-Care Center and select over-the-counter samples for short term treatment.

Health insurance coverage is mandatory. Students without proof of additional health insurance coverage will be enrolled in and billed for the illness/accident college plan. 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.

If a student has a medical condition (for physical or psychological reasons) 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 Policy

New York State's stringent Public Health Law requires all students to provide documented proof of immunity to measles, mumps, and rubella. For individual and community protection, TB testing and up-to-date tetanus/diphtheria immunization is also required. Hepatitis B immunization is recommended; meningococcal vaccine is suggested, but not required.

## Student Government Association

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.

The Campus Activities Board, a division of SGA, is responsible for providing on-campus entertainment.

## Student Class Activity

Classe 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.

## FYI

The FYI program (First Year Introduction) is a follow-up activity to New Student Welcome Weekends. FYI is a mandatory course for all first-year students (see CLLS 101). In the large-group seminar component, various faculty and administrators present information on the Christian liberal arts education experience at Houghton College. The weekly small group follow-up helps first-year students to process the information and to address bridging the gap from high-school learning to the rigors of college academics. The small group setting also provides a support group where peers help one another adjust to college life. FYI meets two times a week for the first nine weeks of school. Thirty-three student peer leaders are selected and trained to facilitate the small group process. These students work with 16 faculty mentors who serve as advisors to the first-year students.

## Religious Services and Organizations

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 includefaculty, 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 the Houghton Wesleyan Church. 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, Jesters for Jesus and Fireseeds. These student-run organizations are designed to provide students with opportunities to apply their faith through service to the church and community.

Music and worship ministry teams (Heirborne, Godspeed and String Quartet) and a camp counseling team (Dayspring) are sponsored through the Office of Christian Life. These student groups provide outreach to area churches and camps through music, testimony, counsel and drama.

## 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 college post office. 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. Copies are also available from the Safety and Security office.

## Artist Series

The Houghton College Artist Series features nationally and internationally known artists, groups and productions which vary from year to year.

## Music Opportunities*

*Most groups rehearse three hours weekly. See the music course description for credit given to members of these groups.

## College Choir

The Houghton College Choir is composed of students chosen for musical competence by audition. Concerts are given each year, including an extended tour during spring break.

## Chapel Choir

The Houghton College Chapel Choir sings for the chapel program. The music performed is representative of several centuries from high Renaissance to the present. The choir travels on an extended tour during spring break. Membership is by permission of the director.

## Chamber Singers

The Chamber (Madrigal) Singers, a group of singers chosen by audition, performs secular and sacred compositions of all periods with an emphasis on early music.

## Opera Workshop

The Houghton College 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 permission of the director.

## Women's Choir

The Houghton College Women's Choir presents programs of both sacred and secular music from all periods of musical history. The choir sings regularly in chapel and accepts off-campus opportunities to sing. A full concert is presented in the spring semester. Membership is by permission.

## Handbell Choir

The Handbell Choir performs sacred and secular literature from various periods, using standard and innovative ringing techniques. Regularly scheduled performances in Founders' Day and Commencement convocations, as well as chapel services, Christmas events, and off-campus opportunities. Open to both elementary and advanced ringers, by permission of the director.

## Philharmonia

The Houghton College Philharmonia is made up of qualified instrumentalists. Representative selections of classical, romantic, and modern literature are performed. Occasionally outside soloists are presented in concerts with the orchestra. Membership is by permission of the conductor.

## 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.

## Symphonic Winds

The Houghton College Symphonic Winds provides students the opportunity to perform significant symphonic band literature. Concerts are performed on and off campus and the ensemble occasionally travels on an extended tour during the spring semester. Membership is open to advancedlevel wind and percussion players, and is by permission of the conductor.

## Heirborne

Six students, selected by audition, comprise this college outreach team. Throughout the school year they travel to churches within a 150 -mile radius to present concerts of sacred music.

## Communication Organizations

## 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.

## WJSL-FM

WJSL is a low-power radio station that reaches Houghton and the surrounding community. It is run by Houghton College students and managed by an elected student management team.

## Clubs and Organizations

Clubs and organizations representing the various interests of the students meet on a monthly or biweekly basis.

## Accounting/Business Club

The purpose of the club shall be to stimulate interest in the fields of business and accounting. The club will also endeavor to make students aware of the vast opportunities by providing a forum for discussing ethical issues in the fields of business and accounting from a Christian perspective. The club will sponsor campus visits by professionals who work in these fields, and assist students in exploring job opportunities.

## Allegany County Outreach

ACO is a ministry to children through students at Houghton College. The purpose is to befriend children of Allegany County and be positive role models to them; pointing them to Christ.

## Campus Activities Board

CABs purpose is to provide quality activities and entertainment for the campus with Christ-like morals and ethics.

## College Republicans

The main purpose of the club is to educate and inform the voters of Houghton College and the surrounding community.

## Cross-Cultural Student Society

CCSS promotes cultural awareness oncampus, and aids in the cultural adjustmentof international students, third culture kids, and American-born minorities.

## Equestrian Society

To create a Christian environment in which equestrian students work together to increase public awareness of their program and its services; to enhance opportunities for students and community members.

## Fellowship of Christian Athletes

Aims "to present to athletes and coaches, and all whom they influence, the challenge and adventure of receiving Jesus Christ as Savior and Lord, serving Him in their relationships and in the fellowship of the church."

## Fireseeds

To spread the Good News through a Bible study on campus by looking into God's word and, through a ministry program, to the surrounding area by sharing through testimony and music.

## Gadfly Society

Aims to provide a forum for voluntary extracurricular endeavors of interest to philosophy majors, minors and other philosophically-minded persons, and to promote awareness of the relevance of philosophical perspectives to issues.

## Habitat for Humanity

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.

## Highland Pipe Corps

To promote the musical and cultural aspects of Houghton College's mascot, the Highlanders.

## Impression (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)

The purpose of Jesters for Jesus is to minister God's word to local churches using the gift of humor and laughter; to teach the life-changing message of Jesus Christ simply, so all can understand and believe.

## Men's Lacrosse Club

To develop lacrosse skills and knowledge of the sport on Houghton's campus and to give men the opportunity to participate in lacrosse.

## Music Educators Club

The Music Educators Club provides opportunities for music education majors.

## Paddle Sports

To provide recreational opportunities for students that will enhance their college experience.

## Physical Education Club

This club reinforces the preparation and enhances the education and future professionalism of its members, and enhances the education of the student body of Houghton College through physical education, recreation, and athletics.

## Salvation Army Fellowship

The Salvation Army Fellowship seeks to encourage spiritual growth and commitment to Christian service.

## Shakespeare Players

To present Shakespear plays in a way that is entertaining and applicable to modern audiences while remaining loyal to the original presentations.

## Sigma Zeta

Threefold purpose: 1) to encourage and foster the attainment of a knowledge of the sciences; 2) to recognize the attainment of high scholarship among those fitted for membership in this society; and 3) to encourage the integration of our faith in God and the sciences.

## 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 cultures and traditions of Spanish-speaking countries.

## Swim Club

To promote spiritual camaraderie and physical fitness through a competitive swim club format.

## TSAO

Transfer Students Activities Organization is to help incoming transfers in adjusting to college life through activities and socialization.

## World Missions Fellowship

WMFs 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.

## Youth for Christ

YFCs purpose is to communicate the life-changing message of Christ to every young person in Allegany County.

## Summer Outreach Groups

## Dayspring

This Houghton College outreach team is made up of six members and serves in various youth camps for eight weeks each summer. Membership is determined through an application and interview process.

## Godspeed

This Houghton College band and vocal group consists of six students who travel to youth oriented events to lead worship. Students are selected by audition. The group travels during the summer and academic year leading worship at youth camps and other activities.

## 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.

## 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 assisted in this process. Moreover, through career counseling, 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.

## 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.

## 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, that sponsors career fairs for their students and alumni.

## Counseling Services

The Counseling Center provides personal counseling to all Houghton students desiring these services. We consider counseling to be 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."
"...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 really 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."
"...I'm depressed an awful lot. Just can't seem to get anything done."
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 than before.

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 visiting psychiatric consultant on staff. On campus one afternoon each month, this individual provides psychiatric evaluation, medication prescription and follow-up, and consultation services.

Finally, the Counseling Center will periodically provide 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 622 or 567-9622. Appointments can be made to meet with any one of the center's counselors, and all counseling information is confidential and will not be used without your consent.


John and CharlesWesley Chapel - This 1200-seat auditorium serves as the worship center and public meeting place for students and faculty. Classrooms, practice rooms, Presser Recital Hall, Marjorie Paine Memorial Prayer Room. Special features: 47-stop Holtkamp organ designed and built for this auditorium, 3,153 pipes in 61 ranks; Ortlip mural "Redemption" in the foyer; and display area in lower level.

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, dean and associate dean of the college, academic records, finance, human resources, student financial services, payroll, and administrative services.

Fancher Hall-A community landmark, 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, college advancement and public relations.

Willard J. Houghton Library - The library's resources include 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, and BioOne, are accessible at any computer connected to the college network. Subscriptions to these online journal services offer more than 2,500 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.

Academic Building Offices and Classrooms - Completed in September 1989, this 49,000 square foot, four-story building houses seven academic departments. It includes ten classrooms, six learning resource facilities, student work/study rooms, three laboratories, interactive TV link with the Buffalo campus, and 57 faculty offices. A beautiful atrium divides the classroom and office wings.

Paine Center for Science - This 65,000 square foot building houses a computer room, faculty offices, classrooms, animal laboratory rooms, instruction and research laboratories. The Margaret Bush Greenhouse, completed in 1999, adjoins the building.

Center for the Arts - A 44,000 square foot facility housing 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 indoor walkway to the John and Charles Wesley Chapel.

Stevens Art Studios - 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 a 24-hour general use PC computer lab, various department specific PC computer labs and multi-purpose wired classrooms dedicated to academic and student use. There are also two Macintosh labs 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 network is available via telephone from non-college owned residences using 56 k modems. The fall of 2001 represents the fifth year in which each first year student receives a laptop computer, and the third year which they receive a printer. This will be used by the student for their four years at Houghton and owned by them upon graduation.

## ATHLETIC FACILITIES

Nielsen Physical Education Center-Occupied in December 1980. Three basketball courts, running track, auxiliary gymnasium, four racquetball courts, faculty offices, classrooms, seminar rooms; the George R. Wells Natatorium offers a full-sized ( 25 meter) swimming pool with three diving boards (one a three-meter board). Parking for 250 vehicles.

Outdoor Recreation - Three soccer fields,a field hockey field, a 1300-seat grandstand, 6 tennis courts, two ski slopes, lodge,cross-country routes, and full ski equipment for rent.

Equestrian Center - Site of the equestrian program, including accommodations for boarding student-owned horses. Five-week summer horse camp conducted each year in July and August. 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. It includes a classroom, restroom, kitchenette, six stalls, and an area for hay storage. A second $36^{\prime} \times 24^{\prime}$ indoor riding arena was completed in 1994, with stalls for 15 horses.

Campus Center - A 75,000 square foot building, occupied in 1972, with three floors. Main floor: campus store, Community Bank, NA branch, offices for student life, career and counseling services, safety and security, college information, plus a large lounge. Second floor: kitchen and dining rooms. Basement: campus mailroom, student government, Big Al's snack shop with computer hookups at each booth, student publications and outreach offices, recreation room for ping-pong and pool tables, television and music listening facilities, television production studio, and radio station WJSL.

## STUDENT HOUSING:

Lambein Residence Hall - A modern, 6-story facility for 154 female students with lounge and study rooms.

South Residence Hall-4-story men's dormitory for 140 students with lounges on each floor, seminar room, individual study rooms.

East, Gillette, and Rothenbuhler Residence Hall - A three-section, 4-story dormitory accommodating 335 students, with lounge, recreation facilities, and a prayer chapel.

Shenawana Residence Hall - A 2-story men's dormitory housing 120 students with several lounges and a recreation room.

Townhouses - The college owns and operates 29 townhouse units, providing housing for approximately 200 juniors and seniors. The Randall and Leonard Houghton Townhouses ( 6 and 7 units, respectively) were constructed in 1994. The 7-unit Hazlett townhouse was completed in 1999. The 9-unit Perkins Townhouses were completed in 2001. All units include kitchen, living room, two baths, and three to four bedrooms. Laundry facilities are available in common areas.

## OTHER FACILITIES

Health Center - The Center is located in the southwest (Gillette) wing of East Hall and contains a modern treatment-laboratory room, exam rooms, reception area, and conference room.

Robert T. Fiegl Maintenance Center $-12,860$ square feet. Shops for maintenance and repair crews; warehouse for materials and supplies.

Spring Lake Preserve - The Spring Lake wildlife preserve, approximately 8 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 - Houghton's Adirondack Park Campus, purchased in 2001, is a 40acre 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, rockclimbing, canoeing, and cross-country skiing. The College plans to develop on-site academic programs in Rural and Environmental Studies to be offered beginning in the summer of 2002 to both Houghton and non-Houghton students. The facilities are also available to outside groups on a limited basis.

## 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 Houghton College 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 six times a year.

The West Seneca campus is the host of adult programs and facilities designed to reach community and professional audiences throughout the Western New York region. The Educational Conference Center at West Seneca provides professional 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. All courses taught by Houghton College faculty are approved and registered by the New York State Education Department.

## Location

Houghton College at WestSeneca is located on New York route 277 one mile south of the New York Thruway Exit 54E, at 910 Union Road, West Seneca, NY 14224. Although only a few minutes drive from urban Buffalo, the campus is located in a secluded area. 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-Completed in 1974 and 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, and a library of over 35,000 volumes with linkage to the OCLC computer network and the DIALOG Information Retrieval System.

Cazenovia Hall-Named for the creek, 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, bearing the original name for West Seneca, 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 town houses were built from prefabricated units in the summer of 1986. 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 four apartments are available for faculty or staff use. Regulations

Regulations regarding student life and activities are published in the Houghton College Student Guide. Information specific to the West Seneca Campus is given to students upon arrival. Please refer to the academic information section of this catalog for information concerning academic requirements.

## Admissions

The main campus and the West Seneca Campus use the same admissions criteria (modified to accommodate adult-degree students). Requests for admission forms may be addressed to the Houghton College at West Seneca, 910 Union Road, West Seneca NY 14224. Phone: (716) 674-6363 or after Nov. 15: 585-674-6363.

## Expenses

For information regarding tuition and other expenses at the West Seneca Campus, see the earlier section on current year financial information. Information regarding housing and food service is available from the college administration office.

## Adult Degree Program (P.A.C.E.)

Houghton College offers at the West Seneca Campus the Program for Accelerating College Education, an adult degree completion program leading to a bachelor of science degree in management. This program is designedto 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 Opportunitiess section of this catalog.



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| arold W |  |
| Teresa McKnight ................................................................................. Resident Director, Townhouse |  |
| David J. McMillan ................................................................................... Academic Advisor P.A.C.E. |  |
| Troy R. Martin ................................................................................ Director Student Financial Services |  |
| David M. Mercer ................................................................................................................. Controller |  |
| Daniel C. Moore $\qquad$ Instructional Support Coordinator Jason Mucher Assistant Director of Public Relations |  |
|  |  |
| Brandon Munger ................................................................................................. Sound Coordinator |  |
| Nancy L. Murphy .......................................................................................................... Counselor |  |
| Ray M. Parlett ............................................................................ Director, Campus Safety \& Security |  |
| Mark A. Pavone ........................................................................................ Women's Basketball Coach |  |
| Beth A. Pocock .............................................................................. Assistant Director of Financial Aid |  |
| Trini G. Rangel ................................................................................................................. Coordinator |  |
| Patricia A. Regan .................................................................................................... Major Gifts Officer |  |
| Douglas E. Roorbach .............................................................................. Director of Public Relations |  |
| Michelle L. Russell ................................................................................... Resident Director, East Hall |  |
| Catherine G. Seebald ......................................................................... Director, Advancement Services |  |
| Robert B. Smalley .................................................................. Cross Country/Track Coach; Instructor |  |
| Gail R. Smith .................................................................................... Director, Student Health Services |  |
| Patricia T. Smith ................................................................. Associate Director of Technology Services |  |
| Valerie C. Smith ................................................................................... Design Publications Manager |  |
| G. Ange Szymanski ............................................................................ Assistant Director of Facilities |  |
| Seth Taylor ................................................................................................... Help Desk Coordinator |  |
| Laurinda Wallace .......................................................................... Manager, Administrative Services |  |
| Amy Wallenbeck ............................................................................................ Admission Counselor |  |
| Scott Wight .................................................................................................... Wilderness Adventure |  |
| John W. Woodard .............................................................................................. Senior P.C. Engineer |  |
| Dale F. Wright .................................................... Director, Human Resources/ Assistant Treasurer |  |

## 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

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, University of New Hampshire, 1980; MLS, EDM, University of Buffalo, 1993, 2001

Denise Bakerink (2000)
Acting Dean of Students; Director of Residence Life
BS, Houghton College, 1983; MS, State University College at Buffalo, 1986
Coenraad Bakker (1997)
Associate Professor of Computer Science
BS, Parsons College, 1965; MS, University of Rochester, 1970

Kenneth J. Bates (Spr, 1989)
Associate Professor of Business; Chair, Department of Business E Economics;
Senior Professional in Human Resources
BS, Houghton College, 1971; MBA, Loyola College, 1980
Gary D. Baxter (1979-1982, part-time; 1982)
Professor of Art
BA, SUNY College at Geneseo, 1983; MFA, Rochester Institute of Technology, 1985
Bradley G. Beach (2000)
Associate Professor of Philosophy
BA, Houghton College, 1975; MA, Trinity Evangelical Divinity School, 1977; PhD, Syracuse University, 1982

Willis Beardsley (1980)
Director of Academic Assessment
BA, Houghton College, 1960; MS, SUNY College at Geneseo, 1965; EdD, SUNY at Buffalo, 1977

Blaine David Benedict (1989)
Professor of Political Science
BA, Houghton College, 1973; MA, PhD, University of Pennsylvania, 1974, 1977
George Bennett (1985)
Director of Learning Resources
BA, Emory and Henry College, 1962; MA, Middlebury College, 1970; MLS, SUNY College at Geneseo, 1973; PhD, SUNY at Buffalo, 1987

Scot E. Bennett (1986)
Professor of Art; Chair, Department of Art
BS, Roberts Wesleyan College, 1981; MFA, Rochester Institute of Technology, 1983
Robert A. Black (1991)
Professor of Economics
BA, West Virginia Wesleyan College, 1972; MA, PhD, West Virginia Univ, 1979, 1984
J. Kenneth Boon (1964-1966, 1974)

Professor of Biology
BA, Houghton College, 1962; MS, PhD, Kansas State University, 1970, 1980
Jonathan E. Bradshaw (1999)
Interim Instructor of Accounting
BS, Houghton College, 1997; MBA, Rochester Institute of Technology, 1999
Bruce N. Brenneman (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)
Professor of Education; Chair, Department of Education, NAIA Faculty Representative BS, Geneva College, 1973; MS, Wilkes College 1974; PhD, University of Rochester, 1994

Bruce C. Brown (1974)
Professor of Voice BM, Wheaton College, 1962; MM, DMA, University of Southern California, 1964, 1974

## Carol A. Brown (1995, part-time)

Assistant Professor of Education
BA, Owosso College; BS, Spring Arbor College, 1965; MLS, SUNY Geneseo, 1981
Betty J. Bunt (1982)
Serials Librarian
BA, Houghton College, 1966; MLS, SUNY College at Geneseo, 1981
Daniel R. Chamberlain (1976)
President
BA, Upland College, 1953; MA, California State College at Los Angeles, 1957; EdD, University of Southern California, 1967

Larry W. Christensen (1969)
Professor of Chemistry
BA, Goshen College, 1965; PhD, Purdue University, 1969
Shirley J. Close (2001)
Visiting Associate Professor of Voice BA, Olivet Nazarene University; MMus, University of California (Los Angeles)

Judy A. Congdon (1991)
Associate Professor of Organ
BMus, Wheaton College, 1975; MMus, University of Colorado, 1977; Diploma, Hochschule fur Musik, Frankfurt/Main, Germany, 1979; MA, DMA, Eastman Schl of Music, 1990

Laurie A. Dashnau (2000)
Assistant Professor of English
BA, Nazareth College, 1982; MA, PHD, Miami University of Ohio, 1989, 1996
William R. Doezema (1979)
Professor of History; Chair, Department of History/Political Science AB, Calvin College, 1969; MA, PhD, Kent State University, 1974, 1978

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## Retirees

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Degree requirements ..... 26, 36
Degrees offered ..... 25, 26, 27
Disabilities, Students with ..... 33
Dismissal ..... 31
Doctrinal statement .....  5
Dropping Classes (see Withdrawal from)
Earth Science ..... 60
Economics ..... 61
Education ..... 62
Education: elementary/childhood ..... 63, 64
Education: secondary/adolescence ..... 63, 67
Educational Ministries ..... 72
Educational Rights \& Privacy Act ..... 8
Elementary certification (see Childhood)
Eligibility for participation ..... 31, 159
Engineering (dual-degree) ..... 73
English ..... 74
Ensembles ..... 102, 103
Entrance examinations ..... 10
Environmental Stewardship ..... 76
Environmental studies ..... 48, 147
Equestrian Studies ..... 77
Expenses ..... 12
Family Studies ..... 78
Fees ..... 13, 15
Final Exams ..... 29
Financial aid ..... 16
Financial delinquency ..... 16
Financial information ..... 12
First-year Introduction (FYI) ..... 39, 155
Foreign Languages ..... 78
Four-College Consortium ..... 8
French (see Foreign Languages)
$\qquad$
General Information ..... 5
General Science ..... 83
German (see Foreign Languages)
Grade grievance procedure ..... 30
Grading system ..... 30
Graduation honors ..... 32
Graduation requirements ..... 26
Grants, loans, scholarships ..... 19, 23
Greek (see Foreign Languages)
Health services ..... 155
Health professions, Pre- ..... 127
Hebrew (see Foreign Languages) History ..... 84
History of Houghton College ..... 6
Honesty ..... 31
Honors projects ..... 32
Horsemanship (see Equestrian)
Houghton at Tanzania ..... 142
Houghton College scholarships ..... 19
Houghton Star ..... 157
Hours, distribution for majors ..... 36
Housing ..... 13, 14, 154, 163
Humanities ..... 86
Immunization policy ..... 155
Independent study ..... 32
Insurance, health \& accident ..... 15
Integrative studies ..... 28, 37
Integrative studies, Bmus ..... 97
Intercultural Studies ..... 87
International Business Institute ..... 147
International Relations ..... 89
Internships ..... 32
Keyboard instruments ..... 107
Lanthorn ..... 157
Late validation (Student Fees) ..... 15
Latin (see Foreign Languages)
145
Latin American Studies (LASP)
128
Liberal arts requirements ..... 26
Library ..... 162
Linguistics ..... 91
Literature ..... 92
Load-limit policy ..... 29
Loans, scholarships, grants ..... 16
London, Houghton in ..... 142
Majors offered ..... 27
Mathematics ..... 92
Mayterm ..... 14, 33
Medical technology ..... 94, 144
Ministerial program ..... 135
Ministry - see the following headings:Christian Ministries
Church Ministries
Educational Ministries
MissionsPastoral and Church Ministries ProgReligionUrban Ministry
Minors, explanation of ..... 28
Mission of Houghton College ..... 5
Missions ..... 94
Music ..... 95
Music Education ..... 100
Music opportunities ..... 156
NAIA ..... 156
New student orientation (FYI) ..... 39, 155
New York State financial aid ..... 18
New York Teacher Certification ..... 63
Number system (courses) ..... 34
Off-campus programs ..... 141
Oregon Extension ..... 142
Organ ..... 108
Outdoor education ..... 133
Outreach Groups ..... 149
PACE (degree completion) ..... 148
Pastoral \& Church Ministries Prog ..... 152
Pastoral Ministry (see Religion, ..... 129
Seminary, Pre-Ministerial Concentration)Payment15
Percussion instruments ..... 112
Petitions ..... 34
Philosophy ..... 113Philosophy statement5 (??)
33
Senior-in-absentia ..... 136
Spanish (see Foreign Languages) String instruments ..... 109
Student Academic Services ..... 33
Physical Education 114 Student life ..... 154155
Physical Fitness ..... 118
Student teaching policy
Physical therapy, Pre- ..... 128
Physics ..... 122
Piano ..... 99, 107
Political Science ..... 112
Post-baccalaureate teacher certification ..... 93
Pre-health professions ..... 127
Pre-law ..... 128
Pre-Physical Therapy ..... 128
Pre-Seminary ..... 129
President's list ..... 32
Pre-Veterinary ..... 127
Privacy Act ..... 8
Probation ..... 31
Psychology ..... 129
Quality point average ..... 30
Recreation ..... 132
Refunds 16, 151 (PACE??)
Religion ..... 135
Religious observances ..... 8,30
Religious services/organizations ..... 155
Repeating a course ..... 31
Research requirement ..... 39
Satisfactory progress ..... 18
Scholarships, grants, loans ..... 19
School of Music ..... 95
Second degree ..... 26
Secondary (adolescence) educ ..... 63, 67
Semester schedule ..... 3,4
Study abroad (see off-campusprograms)
Tanzania, Houghton in ..... 142
Teacher certification (see Education)
Theology ..... 138
Theory ..... 106
Therapeutic recreation ..... 132
TOEFL ..... 10
Transcript fees ..... 13, 15
Transfer students ..... 11
Trustees ..... 166
Tuition rates
Tutorial study ..... 32
Tutoring service ..... 33
Urban Ministry ..... 139
Veterinary, Pre- ..... 127
Voice ..... 109
West Seneca Campus ..... 164
Western New York Consortium ..... 7
Withdrawal from classes ..... 29
Withdrawal from college ..... 33
Woodwind instruments ..... 111
Work-study ..... 17
Writing ..... 140
Yearbook (Boulder) ..... 157
Youth Ministry (see Educational
Ministries, Youth Concentration)

