This community values
respect for learning and
truth, for human dignity,
for freedom from ignorance
and prejudice, and for a
critically inquiring spirit.
MISSION STATEMENT

Valparaiso University, a private institution of higher learning distinguished by its Lutheran heritage of scholarship, freedom, and faith, provides strong programs of liberal and professional studies well-grounded in the arts and sciences by a faculty dedicated to challenging teaching and care for the individual in a residential setting where its students can develop as whole persons, motivated and prepared to serve both church and society.

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ANNOUNCEMENTS FOR 1999-2000 SESSIONS

VALPARAISO UNIVERSITY BULLETIN (USPS 656-460)

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Published four times yearly (July, August, September and November) by The Lutheran University Association, Inc., Valparaiso, IN 46383-6493. Second class postage paid at Valparaiso, Indiana.
The General Catalog of Valparaiso University is designed to describe the programs of the University and to give that information needed to guide students in the successful achievement of their academic goals. Nevertheless, the material is for information only and does not make a contract between the student and the University. Students themselves are ultimately responsible for completion of the requirements for their degrees as well as for the value they receive from University programs.

The relationship between the University and its students is not custodial in nature. There is no special relationship with the University created by a student’s enrollment. The University does not assume any duty toward any student that is not otherwise required by operation of law or by the terms of this catalog.

In years when the General Catalog is not published an Announcement Bulletin gives information on important changes in courses, calendar, staff, program and policies. The University reserves the right to discontinue an academic program if it is deemed no longer central to the University’s mission.

Separate catalogs are issued for the School of Law, the Graduate Division and the Summer Session, which should be consulted for details about the related programs.

Non-Discrimination Policy. It is the policy of Valparaiso University to prohibit unlawful discrimination on the basis of gender, disability, race, color, age, veteran status or national origin in its educational programs, admission policies, employment policies, financial aid or other school-administered programs and policies.

Graduation Rate of Entering Freshmen. The graduation rate for all students entering Valparaiso University as first-time freshmen during the 1992-93 academic year was 67 percent. This graduation rate represents the percentage of students entering Valparaiso University as first-time (i.e., new) full-time degree-seeking freshmen during the 1992 Summer and Fall semesters who subsequently were awarded baccalaureate degrees by Valparaiso University within six calendar years (i.e., through August 1998).
December 10, Friday, 5:00 p.m. Deadline to officially withdraw from the University for Fall Semester. Last day to file petitions to change registration.
December 10, Friday, 10:00 p.m. Instruction ends.
December 11, Saturday, Reading day.
December 12, Sunday. December Commencement Ceremony.
December 13, Monday, 8:00 a.m. Final examinations begin.
December 17, Friday, 5:30 p.m. Final examinations end. Semester ends.
December 20, Monday, 5:00 p.m. Deadline for reporting all grades.

SPRING SEMESTER 2000
January 10, Monday. Orientation for new students; registration confirmation.
January 11, Tuesday, 8:00 a.m. Registration confirmation; registration for all new students, former students and students who did not participate in advance registration.
January 12, Wednesday, 8:00 a.m. Instruction begins.
January 17, Monday. Observation of Martin Luther King’s Birthday.
January 19, Wednesday, 5:00 p.m. Deadline for adding first half short courses.
January 19, Wednesday, 5:00 p.m. Deadline for late registration for spring semester.
January 19, Wednesday, 5:00 p.m. Deadline for adding regular courses. All requests for adding a course during the official drop-add period (first six class days) shall remain at the discretion of the appropriate academic dean or department chair.
January 28, Friday, 5:00 p.m. Deadline to file for S/U grade for first half short courses.
February 11, Friday, 5:00 p.m. Deadline for withdrawing from first half short courses with grade of W.
February 11, Friday, 5:00 p.m. Deadline to file for S/U grade for regular courses.
February 28-March 3. Adjustment period for adding second half short courses.
March 3, Friday, 5:00 p.m. Deadline for arranging course intensification.
March 3, Friday, 6:30 p.m. Spring recess begins.
March 20, Monday, 8:00 a.m. Spring recess ends.
March 23, Thursday, 5:00 p.m. Deadline for adding second half short courses.
March 28, Tuesday, 5:00 p.m. Deadline for withdrawing from regular courses with grade of W.
April 3, Monday, 5:00 p.m. Deadline to file for S/U grade for second half short courses.
April 3, Monday. Last day to file application of candidacy for the associate’s and bachelor’s degrees to be conferred in December, 2000.
April 19, Wednesday, 5:00 p.m. Deadline for withdrawing from second half short courses with grade of W.
April 21, Good Friday. No classes.
May 2, Tuesday. Last day for tests in courses of 3 credits or more. Last day to petition for change in date of final examinations.
May 9, Tuesday, 5:00 p.m. Deadline to officially withdraw from the University for Spring Semester. Last day to file petitions to change registration.
May 9, Tuesday, 10:00 p.m. Instruction ends.
May 10, Wednesday. Reading day.
May 11, Thursday, 8:00 a.m. Final examinations begin.
May 16, Tuesday, 5:30 p.m. Final examinations end. Semester ends.
May 17, Wednesday, noon. Deadline for grades for all candidates for all degrees.
May 19, Friday, 5:00 p.m. Deadline for reporting all other grades.
May 21, Sunday. 126th Annual Commencement
Certain other dates are observed annually by the University: Reformation Day, Ash Wednesday, and Ascension Day.

The Aims of the University
Valparaiso University is dedicated to superior teaching based on excellent scholarship. As a scholarly community it actively engages in the exploration, transmission and enlargement not only of knowledge but also of the cultural and religious heritage of mankind, and it is proud to prepare men and women for professional service. This community values respect for learning and truth, for human dignity, for freedom from ignorance and prejudice, and for a critically inquiring spirit. The University aims to develop in its members these values, together with a sense of vocation and social responsibility. It holds that these values receive their deepest meaning and strength within the context of the Christian faith.
As a church-related university concerned for the needs of its students in all aspects of their development as well as for the problems which face society, it aims to graduate informed and sensitive men and women who will not only leave their marks on society but find lives of personal fulfillment as well. Proud of all its alumni who have carried its values into leadership roles in their communities, the church, social institutions, the nation and the world, it aims to continue graduating such potential leaders.
Under neither the control nor the authority of any church body, the University is an independent institution owned and operated by The Lutheran University Association. For more than half a century the University has been affiliated with congregations and members of The Lutheran Church–Missouri Synod. It enjoys, too, a partner relationship with members of all Lutheran churches, with all its constituents who share its aims and voluntarily support it, and with the communities of Northwest Indiana.
A Distinctive Institution

All American colleges and universities bear a family resemblance to one another as they come from a common set of ancestors in Europe and colonial America. Within that larger family, Valparaiso University belongs to a small and distinctive group. It is neither a large research university nor a small liberal arts college. At the same time that it promotes a basic liberal arts curriculum, it features strong undergraduate colleges of Engineering, Nursing and Business Administration, a professional direction lacking in the conventional liberal arts college. Conversely, the University is not a cluster of professional colleges which merely pays lip service to the liberal arts. Education in the liberal arts is the foundation of every academic program, and the College of Arts and Sciences, the largest unit in the University, carries on many vital programs of its own.

This combination of liberal and professional studies of such variety within an institution of modest size is rare in American higher education. Broad enough in curriculum and in variety of programs to be a university, still Valparaiso University emphasizes undergraduate teaching in the manner of the traditional small college, with many small classes and strong individual guidance. While the University focuses on undergraduate education, it maintains a modest graduate program for part-time students as well as a fine law school of 400 students. The full-time student population is around 3600, with over 4000 served annually.

Faith and Learning

The University's concern for the personal and intellectual development of each student is rooted in its Lutheran heritage. This Christian philosophy of education guides both the design of its curriculum and the approach to learning that it fosters. Beyond the courses in theology which the curriculum provides, the University emphasizes a Christian freedom which liberates the scholar to explore any idea and theory, a vocation freely uniting faith and intellectual honesty. In its residential life the University leads students to accept personal responsibility for their development and encourages a sense of caring for one another. Standing together at the center of the campus, the Chapel of the Resurrection and Moeller Memorial Library express the University's belief in the creative relationship between faith and learning. The University's motto, too, points up this relationship: In luce tua videmus lucem, "In Thy light we see light."

The Chapel is the focal point for worship, the proclamation of the Gospel and many cultural events. Both Sunday and daily services bring together members of the University community who choose to worship together. Students and professional Chapel staff offer a broad and creative ministry to the whole community. As the University welcomes students of varied denominations and religious traditions, so it welcomes the involvement of community churches in those students' lives. A Roman Catholic student center, for example, is located next to the campus, and some churches of other denominations offer transportation to their services in the town.

The Setting of the University

The spacious campus of 310 acres contains more than seventy academic and residential buildings, many of them built within the past two decades. The campus is located in the small city of Valparaiso, attractively situated in a rural setting at the edge of the busy industrial district of Northwest Indiana. Fifteen miles to the north, on the shore of Lake Michigan, are the Indiana Dunes. The city of Chicago with its vast cultural resources, an hour's drive from the campus, can be reached easily by train and bus. The University often charters buses so that students and faculty can take advantage of the theatres, museums and other educational benefits of this great city. Many programs of the University use the region—rich in natural, urban and industrial opportunities for field trips and investigative activities.

An Unusual History

In its 140 year history, the University has passed through three distinct phases. Begun by Methodists in 1859 as an institution pioneering in coeducation, the Valparaiso Male and Female College was forced by the reverses of the Civil War to close its doors in 1871. It was revived in 1873 by an enterprising educator, Henry Baker Brown, as the Northern Indiana Normal School. "Mr. Brown's School," a flourishing private, proprietary institution, was renamed Valparaiso College in 1900 and rechartered as Valparaiso University in 1907. During the next twenty years, it won national recognition as a low-cost, no-frills institution of higher learning which served thousands of students who might not otherwise have been able to afford a good education. Many alumni from this period achieved distinction in their fields as governors, legislators, scientists, business leaders and other professionals. However, after World War I the University went into decline and bankruptcy; then, in 1925, The Lutheran University Association purchased it, beginning the modern phase of the University's history. The Association, an Indiana Corporation composed of men and women affiliated largely with The Lutheran Church-Missouri Synod, is an independent organization actively promoting higher education in the Christian context.

Profile of Students and Faculty

The heart of an academic institution is its students and faculty. Valparaiso University's student body is selected from a large number of applicants from all states in the nation and from many foreign countries. Unlike most American colleges, which draw the majority of their students from their immediate location, Valparaiso enrolls slightly over 40 per cent of its students from Indiana; another 40 per cent come from the other states surrounding the Great Lakes. Major contingents come, too, from both East and West coasts. National and diverse in its student body, the University is still a distinctively Midwestern institution which enjoys the friendliness and hard work characteristic of the region. Almost 56 per cent of the students come from the upper fifth of their high school graduating classes. Approximately fifty National Merit Scholars enroll at the University in any given year, a figure which places Valparaiso University in the upper 4 per cent of the nation's schools in such enrollment.
A rich diversity characterizes the University faculty (about 230 full-time and 80 part-time professors), but they share important skills and attitudes as well. Educated at leading research universities, they are competent in their fields. They care about students, an attitude made visible by the frequent individual consultations they invite. Above all, they enjoy teaching and believe that their work enriches not only their students' but their own lives. At Valparaiso University there are no teaching assistants; senior faculty members and newcomers alike can be found teaching introductory and advanced courses. The University embodies in its faculty an ideal of the teacher-scholar, one who recognizes that teaching is based on continuing scholarship. Many members of the faculty have achieved significant reputations in their particular fields and are pursuing, with marked success, grants from government and private foundations to promote research and improve instruction. In addition to The Cresset, a monthly review of literature, the arts and public affairs, published by the University, faculty edit from the campus two other national learned journals.

University governance, too, reflects campus-wide involvement. Through the University Council, composed of faculty, students, administrators, and staff, students share in the development of University policy, including academic programs. Final responsibility for all academic programs, especially those which require certification, is vested in the faculty.

The modest size of the University, its organization into six small colleges, and especially the strong personal commitment of the faculty enhance its teaching effectiveness. In a school like this, with its concentrated residential focus and the immediate relationships it fosters between faculty and students, educational life is more vital and more intense than would be possible at massive institutions or at commuter colleges. Valparaiso University consciously fosters this tradition in the selection of both its students and its faculty and in the development of its educational programs.

The Goals of Education at Valparaiso

While appreciating the importance of preparing students for useful careers, Valparaiso University holds to the ideal that its students want an education which treats them first as human beings rather than simply as future wage earners. These students want to think clearly, to analyze facts and ideas, to draw sound conclusions from their reasoning and to express themselves clearly and creatively. They want to understand their cultural and religious heritage, developing a sensitivity to the culture and the viewpoints of others while at the same time finding for themselves firm values and standards by which to live and make judgments. They want to become humane and responsible citizens in an ever changing society and to participate effectively in their institutions and communities.

There is no simple formula for acquiring these abilities. Every degree program at Valparaiso aims to assist students to attain these goals by offering a course of studies in general education which provides students with a broad base of knowledge and abilities, as well as in a particular area which leads to the mastery of concepts and tools of a single field of study. Both components, general education and the major field of studies, develop abilities in the student which go far beyond mere career preparation and provide intellectual enrichment for a lifetime.

Degrees

Associate in Science
Bachelor of Arts
Bachelor of Music
Bachelor of Music Education
Bachelor of Science
Bachelor of Science in Education
Bachelor of Science in Fine Arts
Bachelor of Science in Physical Education
Bachelor of Social Work
Bachelor of Science in Accounting
Bachelor of Science in Business Administration
Bachelor of Science in Civil Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Mechanical Engineering
Bachelor of Science in Nursing
Master of Arts
Master of Arts in Liberal Studies
Master of Education
Master of Music
Master of Science in Nursing
Master of Science in Special Education
Juris Doctor
Master of Laws

Moellering Library
Academic Programs

Requirements and Flexibility
Each degree entails a set of requirements which are specified at appropriate places in this bulletin. These requirements are designed to give structure to each student’s education while affording the greatest possible freedom to design an individual academic program. Elsewhere in this bulletin are descriptions of a number of ways by which the University encourages further flexibility and individuality.

An Overview of the General Education Requirements at Valparaiso

These requirements vary somewhat in different degree programs, particularly in the professional colleges. These variations are described in the more detailed presentation of degree requirements elsewhere in this bulletin.

1. Freshman Studies
   (taken during the freshman year)
   The Human Experience, two semesters

2. Academic Area Studies
   Theology, two courses (one in the junior or senior year)
   Literature and Fine Arts, two courses
   Philosophical and Historical Studies, one course
   Studies in Social Analysis, two courses
   Studies in the Natural and Behavioral Sciences/Mathematics, three courses
   Global Cultures and Perspectives, one course
   U.S. Cultural Diversity, one course
   Foreign Languages, variable requirement
   Physical Education, one credit hour

Summary of the Academic Fields of Study at the University

Most of the fields of study listed below are available as majors and minors or as interdisciplinary programs. A few are available only as minors. Some fields offer further specialized concentrations within the major itself. The index of this Bulletin indicates the location for further information regarding these programs.

The College of Arts and Sciences:

American Studies
Art
Biology
Broadcast Meteorology
Chemistry
Chinese and Japanese Studies
Classics
Communication
Computer Science
Criminology
Economics
Elementary Education
English
Environmental Science
French
Geography
Geology
German
Hebrew Minor
History
International Economics and Cultural Affairs
International Service
Japanese Minor
Mathematics
Meteorology
Modern European Studies
Music
Music Education
Music Enterprises
Music-Theatre
Philosophy
Physical Education
Physical Education: Athletic Training
Physical Education: Sports Management
Physical Education: Exercise Science
Physics
Political Science
Pre-Seminary Studies
Psychology
Secondary Education Minor
Social Work
Sociology
Spanish
Theatre and Television Arts
Theology
Writing Minor

Christ College:
Scholar and Associate Honors Program
The Humanities

The College of Business Administration:

Accounting (two degree options)
Decision Science
Finance
International Business
Management
Marketing
International Business and Global Studies Minor

The College of Engineering:

Civil Engineering
Electrical Engineering
Mechanical Engineering

Interdisciplinary Programs:

Applied Statistics Minor
Bioethics Minor
Business Administration Minor
Environmental Studies Minor
Film Studies Minor
Ethnic Studies Minor
Gender Studies Minor
Human Aging Minor
Liberal Arts Business Minor
Manufacturing Management Minor
Political Communication Minor

The College of Nursing:

Nursing
B.S.N. completion program for R.N. students

Programs of the School of Law and the Graduate Division are described in separate bulletins.

The Freshman Year

Even though they may express clear-cut decisions, college freshmen are often uncertain about their long-range career goals. The University fosters this openness by encouraging them to discover new interests while cultivating their current ones. All students, with the help of their academic advisers, design a program that allows them first to explore various areas of interest and, in due time, to develop a plan of study focusing on a major area of interest.

The Valpo Core Course: The Valparaiso Core Course is a two-semester, ten credit course required of all first-year students not enrolled in the Christ College Freshman Program. The primary subject of this interdisciplinary course is the human experience as great thinkers, writers, and artists have represented it. The primary object of the course is to welcome and initiate new students into this university community and academic life generally, by putting them in dialogue with great teachers and great texts, and of course, with each other, to explore together some of the most essential aspects of human existence, past, present, and future.

The course is interdisciplinary because knowledge is interdisciplinary, and in the global community we now live in the world depends increasingly on people able to make connections across disciplines, across cultures, across oceans, across town. To prepare our students to succeed in this world and live meaningful lives of leadership and service, we recognize the need to introduce them to cultures and traditions other than their own. The reading list is multicultural and international because the world is multicultural and international. At the same time, we recognize the need to help students discover where they come from and where they are, which for the majority means exploring the Judeo-Christian intellectual tradition of the West, which produced, among other great things, this University. Hence, at the core of this Core Course, in the best spirit of Lutheran higher education, is the desire to create dialogues of texts and traditions, and to help our students grow in their understanding of how the past speaks to the present, how the sacred informs the secular.

First-year students need special skills to enter fully into this dialogue and become successful students in the fullest sense. The Valpo Core is designed to help students develop those skills necessary for them to thrive in their studies, skills in close reading and critical thinking, in speaking, and especially in writing. Great opportunities also exist in the course for students to become more adept at retrieving, evaluating, and managing information, as they hook up to the rest of the world through our electronic information services.

Intercultural Studies

Intercultural studies at Valparaiso University brings together students of multicultural backgrounds and of different nations to explore together how to build a multiracial and intercultural society—often using the campus itself as a laboratory for learning. It is a program of academic courses, workshops, off-campus encounters and public service. Intercultural studies is not an academic major or minor. It is a program of learning to build an intercultural campus and to develop leadership for service by encountering the challenges of cultural diversity. The program is inspired by the annual all-campus commemoration of the birthday of Martin Luther King, Jr.

An important feature of the program is a balanced involvement of students from
different racial, ethnic and national backgrounds. Some activities in the program limit enrollment. Students are asked to register their interest at the Intercultural Studies Office in Hugel Hall, but there are no formal entrance requirements. A campus-wide orientation to the program is held annually early in the fall semester. Activities include race awareness workshops, an Intercultural Leadership Development Seminar, research and service opportunities, and links with developing academic programs in American ethnic studies and in international service. Many students also participate in such student organizations as the Black Student Organization (BSO), Black American Law Student Association (BALSAA), Native American Student Association (NASA), Latino Student Organization (VIVA), and Association for Students Interested in Asia (ASIA).

Off-Campus Study Programs in the United States

Washington Semester Program. Through an agreement between Valparaiso University and the American University, Washington, DC, students from Valparaiso may spend one semester of their junior year (or some other semester by arrangement) at American University. The program is a set of courses designed to give the students an opportunity to see at first hand the broad range of the governmental and political activity in Washington through field visits, consultation with officials and evaluation sessions led by academic instructors. The program includes semesters on National Politics, Urban Politics, Science and Technology, International Development, Foreign Policy, Economic Policy and Justice.

The Valparaiso University course POLS 120 is a prerequisite to this program. This program is not open to students who have participated in the Semester on the United Nations Program or the Washington Semester Program at American University.

Students register at Valparaiso University for the Washington Consortium Semester and pay to this University the tuition and general fee. Expenses for travel, meals and lodging are paid directly by the students. The Washington Consortium Semester courses are accepted for full credit toward graduation from Valparaiso University.

For information on the Washington Consortium Semester see the Dean of the College of Arts and Sciences.

Semester on the United Nations. Through an agreement between Valparaiso University and Drew University, Madison, NJ, students from Valparaiso may spend one semester of their junior year (or some other semester by special arrangement) at Drew University. The curriculum involves on-the-scene observations and analyses of the United Nations through direct contact with United Nations meetings and headquarters. For two days each week of the semester the student is in the proximity of the United Nations in New York under the supervision of a member of the Drew University faculty.

Valparaiso University course POLS 130 is a prerequisite to this program. This program is not open to students who have participated in the Washington Semester Program.

Students register at Valparaiso University for the Semester on the United Nations and pay to Valparaiso University the normal general fee of this University and the usual tuition and fees of Drew University.

Expenses for travel, meals and lodging are paid directly by the students. Semester on the United Nations courses are accepted for full credit toward graduation from Valparaiso University.

Chicago Arts Program. The Chicago Arts Program is a 15-week guide to the contemporary art world. In addition to attending a wide range of cultural events, students live in Chicago and meet and work with local artists and arts professionals on part-time internships and independent study projects, and in two courses, the Core course, Negotiating the Artworld, and an elective special topics seminar or studio course. Possible internship placements include in an artist's studio; in a museum or gallery; with a theatre or dance company; with an orchestra or presenting venue; with a magazine or newspaper and more. Not limited to arts majors, the program benefits all students who have strong interests in the arts.

Chicago Urban Semester. Through the College of Arts and Sciences and with the cooperation of the Associated Colleges of the Midwest, the University offers to all students a one semester program involving residence in Chicago. This program offers students 16 credit hours of instruction including closely supervised internships and independent study projects. Through the course work, students learn the magnitude and complexity of an urban environment by analyzing and experiencing the political, social, economic and cultural forces shaping a city.

The Cooperative Education program enriches the total education of students by providing the opportunity to increase their sense of responsibility, judgment, and self-confidence through off-campus experiences that are closely integrated with their academic studies.

Students are considered to be continuing full-time students of the University while on co-op assignment.

Other Academic Opportunities

Internships. A number of internship opportunities have been established in several departments in the College of Arts and Sciences and in the College of Business Administration. Some of these are optional, others are required. These internships allow students to learn by direct experience under the supervision of a professional. Further information is given in departmental descriptions.

Service Learning. Service learning is a credit-based educational experience in which students participate in an organized service activity that meets identified community needs. Students reflect on the service activity in such a way as to gain further understanding of course content, a broader
appreciation of the discipline, and an enhanced sense of civic responsibility. Service learning provides an additional means for reaching educational objectives, and academic credit is appropriate for service activities when learning objectives associated with the service are identified and evaluated.

Unlike extracurricular voluntary service, service learning is a course-based service experience that produces the best outcomes when meaningful service activities are related to course material through reflection activities such as writing and small group discussions. Unlike practice and internships, the experiential activity in a service learning course is not necessarily skill-based within the context of professional education.

Guidelines for courses with a service learning component are as follows:
1. Courses should contain the equivalent of one to two hours per week of the service-learning component.
2. A reasonable variety of service agency placements should be provided for each course.
3. Any given course may contain a service-learning component; these courses will be designated as such in the current course schedule.
4. Students may be required to use their personal vehicles for travel to off-campus service sites. If off-campus work is required, students will sign a liability waiver.

Honors Work and Independent Study. The University encourages honors work and independent study. Each college has its own approach to this form of instruction. Information should be sought from deans or department chairs. Especially interesting is an opportunity for a group of students to develop a topic or area of studies to be approached as a group under the sponsorship of a faculty member. This independent group study program is administered through the Dean of the College of Arts and Sciences but is open to all students. More detailed information is given on pages 50-51.

Christ College. This College is itself one of the special educational opportunities available to all students of the University. It is an honors college which offers honors courses, special integrated courses and seminars which probe topics of interest not normally found in a single department. The College has a core community of students who follow a special course of studies in the area of general education but welcomes all students to inquire into its programs and to participate in it. Details are given on pages 162-165.

Summer Sessions. The summer program serves a variety of undergraduate and graduate students. Regularly enrolled Valparaiso University students use the Summer Session to assist in completing additional majors or minors, distribute their academic load, accelerate their studies, or take maximum advantage of educational opportunities. Visiting students from other accredited institutions take courses for transfer to their home institution. Newly admitted students (freshmen, transfers and graduates) may begin their work during the summer. Selected high school students may take courses to facilitate their educational objectives.

The first of two six-week terms begins immediately after the May Commencement. Students may earn up to seven credits in each six-week session and a total of 14 for the summer, the equivalent of a semester's work.

Within each six-week term, a number of shorter courses with special pedagogical requirements are offered. Typically these last two or four weeks and usually involve field trips, field study (including international travel), and immersion experiences which use films, videos, or laboratories. Students normally may not take any other courses while taking a short course.

Details are available in a Summer Session Bulletin published at the beginning of the Spring Semester. See also page 211.

Lectures
Valparaiso University presents numerous lectures by scholars and public figures on topics of scholarly or current interest as an integral part of its academic program. Various endowed and named lectures are also presented each year, bringing distinguished men and women to the campus to address the University community.

The Walter E. Bauer Endowed History Lectureship Fund, established by the family and friends of Dr. Walter E. Bauer, is an annual History Department event to honor Dr. Walter E. Bauer.

Willis Boyd History Lectureship was established by the family and friends in honor of Professor Willis Boyd.

John Martin Gross and Clara Amanda Gross Memorial Lectures, established by Mr. and Mrs. Walter H. Gross, are delivered annually by outstanding religious leaders to the entire University community.

Vera Therese Hahn Memorial Fund for the Performing Arts will use interest from the fund to bring to the campus artists and lecturers who will contribute to the educational experience of students studying theatre and/or public speaking, said artists and lecturers to be selected by the Director of the University Theatre.

A. G. Huegli Lectureship in Church-Related Higher Education is a lectureship series established by Dr. A. G. Huegli to stimulate discussion on key issues concerning Church-related higher education.

Rae M. Huegli Memorial Lectures in Health and Hospital Care provide income for annual lectures in the College of Nursing. This endowed fund was established in memory of the wife of former President Albert G. Huegli because of her long interest in health services.

O. P. Kretzmann Lectureship in Christian Ethics, established in honor of the late President of the University, is delivered annually. Earnings from the O. P. Kretzmann Memorial Fund underwrite the expenses. At the direction of the President of the University, the lectureship may periodically be replaced with a memorial sermon on a topic related to Christian faith and social issues.

A. J. W. and Elfrieda LeBien Endowment Fund for Lectures on Liturgy provides income for lectures on liturgy and for publication of brochures related to the Chapel.

Monsanto Lectures on Tort Law Reform and Jurisprudence were established at Valparaiso University by the Monsanto Fund. This annual series is funded by a generous gift from the Monsanto Fund eleemosynary arm of the Monsanto Company. The gift enables Valparaiso University to invite distinguished scholars and professionals to re-examine the theory of tort as it has evolved in this country and to explore avenues for its reform.

J. W. Miller Memorial Lectures, delivered during Reformation Week by prominent religious leaders, were established in memory of Pastor J. W. Miller, who was an important influence in establishing Valparaiso as a Lutheran University.

Edward A. Seegers Lectures are presented annually by an eminent legal scholar. The lecture series honors Mr. Edward A. Seegers, a benefactor of the University who endowed the Louis and Anna Seegers Chair in Law. The series is under the supervision of the Seegers Professor of Law.

Percy H. Sloan Memorial Lectures in Art, established as a memorial to Percy H. Sloan, who endowed the Sloan Collection of American Paintings, are presented by prominent artists and art critics.

Thomas F. Staley Distinguished Christian Scholar Lectures were established by Thomas F. Staley to further the evangelical witness of the Christian Church, with a particular concern for college students.

Tabor Law Lectureship in Ethics, established by Mr. & Mrs. Glenn J. Tabor to provide funds for a law lectureship with emphasis on ethics.

University Lectures on various topics of current interest are presented from time to time at University convocations as an integral part of the University’s educational program.

Endowed Chairs and Professorships
Richard P. Baeppler Distinguished Professor in the Humanities, endowed by a challenge grant from the National Endowment for the Humanities and generous gifts from alumni and friends of the University, is a rotating two year appointment of a faculty member in a humanities discipline, established to honor the contributions of Richard P. Baeppler and to enhance the interdisciplinary teaching of the humanities in general education.

The Walter E. Bauer Professorship of Art History was established through a grant from the National Endowment for the Humanities and friends of Valparaiso University to honor the late Dr. Walter E. Bauer.
Academic Programs

Bauer in recognition of his leadership in advancing the study of art and its history at Valparaiso University.

The Paul H. Brandt Professorship of Business was established by Paul H. Brandt to promote excellent teaching and leadership in the College of Business Administration.

The Paul and Cleo Brandt Professorship of Engineering was established by Paul H. Brandt to promote excellence in teaching in the College of Engineering.

The John R. Eckrich Chair in Religion and the Healing Arts, a University Professorship established by the Lutheran Charities Foundation of St. Louis in memory of John R. Eckrich, supports the study of the interrelationship of faith, ethics and health.

The Walter G. Friedrich Professorship of American Literature was established with the support of the National Endowment for the Humanities and Friends of Valparaiso University to honor the late Dr. Walter G. Friedrich, Valparaiso University professor of English, and to support and encourage high quality teaching in American literature.

The Frederick F. Jenny Professorship of Emerging Technology was established by Catherine Jenny to honor the life and work of Frederick F. Jenny and to enable the selected College of Engineering faculty member to impart new knowledge to students.

The Emil and Elfriede Jochum Chair, a University Professorship established through a gift from Mr. Emil Jochum, supports the study of Christian values in public and professional life.

Kruse Organist Endowed Professorship was established by Frederick J. Kruse in memory of his parents, Edward A. and Anna L. Kruse, for advancing the integral role of organ music at the center of the University's worship community.

The Richard E. Meier Professorship of Management was established by Richard E. Meier to advance the College of Business Administration.

The Louis S. and Mary L. Morgal Endowed Chair of Christian Business Ethics was established by Louis S. and Mary L. Morgal, with additional support from Proctor and Gamble, Inc., to promote the understanding and practice of Christian business ethics by students, faculty, and the business community.

The Surjit S. Patheja, M.D., Chair in World Religions and Ethics was established by Surjit S. Patheja, M.D., to promote appreciation of world religions, religious tolerance and world peace.

The Fredrick A. and Mazie N. Reddel Professorship of Music, established by the Reddel family to honor Fredrick A. and Mazie N. Reddel, is a professorship in the Department of Music.

Leitha and Willard Richardson Professorship of Engineering was established by Leitha and Willard Richardson to promote excellence in the College of Engineering.

The Herbert H. and Agnes S. Schulz Professorship of Business was established by members of the Schulz family in honor of their parents to support the high goals of the College of Business Administration.

The Louis and Anna Seegers Chair in Law was established by Edward A. Seegers in honor of his parents to promote teaching and scholarship in the School of Law.

The Alfred W. Sieving Chair of Engineering was established by a gift from Esther C. Sieving and Frances H. Sieving to honor their brother, Alfred W. Sieving, and to advanced the College of Engineering.

Special Academic Endowments

The Carl and Isabelle Brauer Business Ethics Fund. This endowment has been established to support activities in the area of business ethics.

The Carl and Isabelle Brauer Humanities Fund. The fund promotes professional activities in the humanities.

The Carl and Isabelle Brauer Music Endowment. This endowment is intended to enhance the music program of the University.

The Endowed Fund for Faculty Research and Faculty Development-1975 Senior Class Gift. This endowment supports both research expenses and faculty development projects.
In an age of global interdependence, the University strongly encourages its students to acquire part of their education abroad. A variety of opportunities exist which enable students to spend a summer, a semester or a whole year in another country as participants in study-abroad programs sponsored by Valparaiso University.

The University sponsors fourteen programs abroad, two of which (Cambridge and Reutlingen) are exclusively Valparaiso University programs; the other twelve (Tübingen, Puebla, two programs in Paris, Hangzhou, two programs in Japan, Oak Hill in London, Anglia Polytechnic University in Cambridge, College Year in Athens, Namibia, and Granada, Spain) are offered in conjunction with host-institution programs. Students considering study abroad should consult the Director of International Studies as well as their academic adviser early in their academic program, to ensure the coherence and continuity of that program.

Any financial aid that students receive while attending Valparaiso University, with the exception of campus employment, may be applied to the fourteen Valparaiso University-sponsored programs. Credits and grades earned through these programs are treated as though they were earned on campus.

In order to facilitate planning, both by students and the administration, students are encouraged to apply two semesters in advance of the semester in which they plan to participate. The deadline for applications is the sixth week of each semester, and selections take place in the seventh week. Although applications may be submitted through the sixth week of the semester immediately preceding the semester abroad, the number of spots available is smaller than when application is made two semesters in advance.

Students are encouraged to participate in study-abroad programs during their junior year. However, sophomore standing during the year or semester abroad is a minimum requirement for admission to all of the programs except the Tübingen and Granada programs, which require junior standing for participation. Beyond this, the programs have varying requirements for admissions. Some programs have a minimum foreign language requirement for admission. While the course offerings available through these programs vary considerably, students may frequently satisfy some Major, Minor, and/or General Education Requirements through courses taken in these programs.

Students should consult with Department chairs and their academic adviser prior to participation in any program to verify that courses will satisfy certain requirements.

General Education Requirements which have in the past been fulfilled or partially fulfilled by courses taken through these programs include the following: Fine Arts/Fine Arts-Literature, Foreign Language, History/Philosophy, Social Analysis, and Theology. Participation in any VU study-abroad program fulfills the Global Diversity Requirement.

For the programs in Cambridge, Reutlingen, Puebla, Hangzhou, and Namibia, students pay regular tuition, the general fee, the double-room fee, and a study-center fee, if applicable (see page 227). For the other programs, students should check with the Director of International Studies concerning payment procedures.

In most cases, the International Studies Office handles the round-trip flight arrangements, but students pay the travel agent directly.

Students who choose to participate in programs sponsored by different institutions, at their own expense, should consult with the Director of International Studies. When students decide on a program, it is necessary to obtain the prior approval of an academic adviser, the Director of International Studies, and the Dean of the College in order to assure in advance that the credit for courses taken abroad will transfer to Valparaiso University. The Registrar’s Office provides a form for this as well as a form which enables students to apply for a leave of absence from the University for the specified time period. Each year the International Affairs Committee will consider, but not necessarily approve, a limited number of proposals to have non-Valparaiso University programs count as University programs. The application deadline for these proposals is February 26 of the academic year preceding the study-abroad year.

### Athens, Greece

Valparaiso University has a study-abroad option in Greece through the College Year in Athens program. College Year in Athens is an independent study-abroad program offering college-level courses in Ancient Greek Civilization. Enjoying an excellent reputation among North American colleges, College Year in Athens enrolls approximately one hundred students per semester.

**Program Requirements.** Students in good academic standing with at least 16 credits of Greek are eligible to apply. The junior year, however, is the best time for most students to leave the home campus for study abroad.

**Program Curriculum.** Students choose from a wide variety of courses dealing with the classical world. These courses, which represent such disciplines as Archaeology and Art, Classical Languages and Literature, History, Philosophy, Politics, and Religion, may count towards a major or minor in Classics with the approval of the Chair of the Department of Foreign Languages and Literatures. Normally four courses constitute full-time study.

Valparaiso University’s arrangements are for fall semester only.

### Cambridge, England

Directed by a resident professor from Valparaiso University, the Cambridge Study Center provides an ideal setting for twenty students each semester to integrate their academic work with the rich heritage of Britain. Students live and study in facilities provided by the University, take four or five courses (12-15 credits) taught by distinguished British professors and the resident director, and participate in two or three group tours to various historical regions of Britain. British professors accompany students on these tours, helping them to integrate their cultural experience with their academic learning. Students may also take a class at nearby Anglia Polytechnic University by special arrangement. One long break provides two full weeks of time for independent travel.

**Program Requirements.** Sophomore standing is required.

**Program Curriculum.** Students may take four or five of the following courses. The first three courses are taught by British faculty, the other two by the resident director.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 311</td>
<td>Art Appreciation</td>
<td>3 Cr</td>
</tr>
<tr>
<td>GEO 318</td>
<td>European Geography</td>
<td>3 Cr</td>
</tr>
<tr>
<td>HIST 351</td>
<td>English History and Culture</td>
<td>3 Cr</td>
</tr>
<tr>
<td>GS 390</td>
<td>Topics in English Life and</td>
<td>3 Cr</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
<td></td>
</tr>
<tr>
<td>SOC 290</td>
<td>Topics: The Cultural Feast</td>
<td>3 Cr</td>
</tr>
</tbody>
</table>

Courses may apply toward fulfillment of
International Study Programs

the following General Education Requirements: Fine Arts/Fine Arts-Literature (ART 311 or GS 390), Social Analysis (GEO 318).

This program is available in either the fall or spring semester.

Anglia Polytechnic University. A
one-on-one exchange agreement makes it possible for Valparaiso University students to study for a semester or a full year at Anglia Polytechnic University in Cambridge.

Students pay tuition and General Fee to Valparaiso University, and pay room and board costs in Cambridge.

Program Requirements. Junior standing with a grade point average of 3.00 and approval from the Director of International Studies are required.

Program Curriculum. Students can select courses from the full range of undergraduate programs in Liberal Arts, Science, and Business. For additional information, contact the Director of International Studies.

London, England - The Oak Hill Semester

As a member of the Concordia Consortium for Study Abroad (CCSA), Valparaiso University is able to send a limited number of students to the Oak Hill College, an Anglican seminary in Southgate, London. A visiting professor from one of the CCSA colleges or universities directs the Oak Hill Program and teaches two courses, one on British cultural heritage and one in his or her field of expertise. Students also take two Oak Hill courses, for a total of 15 semester credits. A variety of field trips round out the program.

Program Requirements. Deaconess, theology, and pre-seminary students only. Sophomore standing with a grade point average of at least 3.00.

Program Curriculum. The program includes the following courses:

- British Cultural Heritage .... 4 Cr.
- Course offered by Visiting Professor (varies) .... 3 Cr.
- Theology courses offered by Oak Hill College .... 4 Cr. each

Courses may apply towards theology requirements with approval from the Chair of the Department of Theology at Valparaiso University and towards General Education Requirements upon evaluation.

This program is available in the fall semester only.

Granada, Spain

In cooperation with Central College in Pella, Iowa, Valparaiso University offers the opportunity to a limited number of students to study at the University of Granada in Spain. The semester begins with a three-week orientation program, two weeks in the city of Ronda. This program is designed to improve students’ oral and written skills, as well as to introduce them to Spanish daily life. At the end of this orientation program, a placement test is given to determine the students’ level of Spanish: Intermediate, Accelerated, Honors, or Superior.

Program Requirements. Spanish 204 and at least one additional 200-level Spanish course, junior standing, a GPA of 3.00 (both overall and in Spanish courses), and approval by the Spanish faculty is required.

Program Curriculum. After successful completion of the three-week orientation program, students may take courses from general categories including the following: Spanish Business, Spanish Civilization and Culture, Contemporary Spanish Economics, History, Regional Geography, Spanish Literature and Language. It is also possible to arrange a service-learning opportunity for two credit hours. All courses are conducted in Spanish and students usually enroll for 12-15 credit hours.

This program is available for the fall semester or for the full-year, but NOT for the spring semester.

Hangzhou, China

Hangzhou is well renowned for its cultural history, its tea and silk production, and according to Chinese tradition, for being a paradise on earth. Hangzhou University, which lies just north of West Lake, is the host institution for students wishing to study Chinese language and culture. Students generally study Chinese intensively (15-18 hours a week) while having the opportunity to experience facets of Chinese culture through tours, lectures in English, and demonstration classes of such arts as calligraphy and tai chi chuan. The Chinese Culture and Civilization course (EAST 395) involves the creation of a project which combines academic reflection with observation and experience. Additional courses may be offered, depending on the resident director. Students may also pursue independent study of China-related topics while in Hangzhou, with the assistance of faculty from Chinese and Japanese Studies and other departments. Students may also pursue an independent research topic (see below under EAST 495). Classes are conducted from early September to mid-December, allowing for periods of travel.

Program Requirements. Sophomore standing is required, but there is no prior Chinese language requirement.

Program Curriculum. Students are placed in language courses according to an exam given at Hangzhou University. The following courses are offered:

- EAST 109 Intensive Elementary Chinese .... 5 Cr.
- EAST 110 Intensive Elementary Chinese: Conversation .... 5 Cr.
- EAST 209 Intensive Intermediate Chinese .... 5 Cr.
- EAST 210 Intensive Intermediate Chinese: Conversation .... 5 Cr.
- EAST 395 Chinese Culture and Civilization .... 3 Cr.
- EAST 495 Supervised Reading and Research .... 3 Cr.

One additional course is offered by the resident director in his or her field of expertise. EAST 109 and 110 are for students with no prior knowledge of Chinese and must be taken concurrently. EAST 209 and 210 are for students with prior knowledge of Chinese and must be taken concurrently. Students taking EAST 495 in China must have their proposal approved before going to China. These courses may apply toward a major in Chinese and Japanese Studies. EAST 109, EAST 10, EAST 209, and EAST 210 may apply toward the General Education Foreign Language Requirement. EAST 395 will satisfy the Fine Arts/Fine Arts Literature and the Global Cultures and Perspectives General Education Requirements.

This program is available in the fall semester only.

Japan

Valparaiso University has two exciting exchange opportunities with sister universities in Japan. The program at Kansai Gaidai, which is located in the culturally rich area between Osaka and Kyoto, offers Japanese language instruction and a number of East Asian studies courses taught in English, including topics in business, art, economics, and history. Students have the option of living with host families or in dormitories located on campus. Students pay all fees, including room, meal plan, and tuition to Valparaiso University. The program is available in either the fall or spring semesters.

The program at Osaka International University also offers language study, but has the added feature of a one-month internship with a Japanese company or organization. Students engage in intensive language study for the first semester, then spend an interim period in an internship setting, before returning to the Osaka International University campus and taking courses taught in English. Tuition and general fees are paid to Valparaiso University; all other fees, including room and board, are paid directly to Osaka International University. Students have the option of homestay with Japanese families or living in a dormitory. This program is offered for the whole Japanese academic year only (from September to July), and is especially suitable for business and engineering students.

Program Requirements. Two semesters of college-level Japanese, a grade point average of 3.00, and sophomore standing are required. References from academic advisers and professors are also needed, as well as permission from the Director of International Studies. Admission is competitive.

Program Curriculum. Students are placed in Japanese language classes according to proficiency tests given during orientation in Japan for both programs. Students are required to study the language, but are free to choose among the courses offered as long as full-time status is maintained. Internship placement in the Osaka International University program depends on availability and language proficiency.

Courses taken in Japan may apply toward certain General Education Requirements, or fulfill major and/or minor requirements in Chinese and Japanese Studies, International Economics and Cultural Affairs, or Japanese. The course offerings vary from semester to semester, so students must consult with their academic advisers and the appropriate bulletins to match their course selections with requirements.
International Study Programs

Namibia

As a result of a partnership with the Center for Global Education at Augsburg College, Valparaiso University offers a challenging study-abroad program in Windhoek, Namibia, in Southern Africa. Valparaiso University students live together with other students from the United States and Namibia, as well as with a family for a two-week stay in Northern Namibia. The program also includes a two- to three-week trip to Southern Namibia and South Africa.

Program Requirements. Sophomores, juniors, and seniors in good academic standing are eligible to apply. Enrollment is limited to twenty-three students each semester, drawn from colleges and universities throughout the United States.

Program Curriculum. The theme for the spring semester is Women, Gender and Development: Southern African Perspectives, and the tentative offerings include courses in four of the following disciplines: political science, history, religion, women's studies, interdisciplinary studies, and sociology. The theme for fall semester is Multicultural Societies in Transition: Southern African Perspectives, with a range of courses similar to the spring offerings.

Much of the coursework involves encounters with the people and culture outside the walls of the study center, thus making the semester an outstanding learning experience. A limited number of Valparaiso University students may study in Namibia either semester.

Paris, France

As a cooperating member of the Central College (Pella, Iowa) program in France, Valparaiso University offers its students a semester or an entire year of study in Paris. The program is intended especially to strengthen students' facility in the French language and their knowledge of French civilization. Students enroll at the Sorbonne, where the medium of instruction in all classes is French. Advanced Program students may also enroll in the Business Program, which allows students to prepare for the certificate or the diploma given by the Chamber of Commerce and Industry of Paris, certifying proficiency in business French.

Program Requirements. French 204 or the equivalent, a grade point average of 3.00, sophomore standing, and approval of the head of the French section are required.

Program Curriculum. All students participate in an exciting two-week intensive French language course at the Alliance Francaise in Nice prior to taking the placement exams and beginning their classes at the Sorbonne in Paris. Based on these exams, Valparaiso University students are placed into one of the following levels: Regular Level—students take eight semester credits in French Speaking and Phonic/Grammar and Structure plus seven or eight credits in Central College seminars and Sorbonne intermediate civilization lectures for a total of 15 or 16 semester credits.

Advanced Level—students take eight semester credits in Advanced, Speaking, Structure and Composition plus four to eight credits in advanced civilization lectures for a total of 15 or 16 credits.

Business Level—designed for advanced students who wish to concentrate on business studies, students take nine semester credits of required courses plus two to four lecture courses from the advanced program for up to 17 semester credits.

Honors Level—designed for exceptional French students who may enroll in either the Business II or Literature tracks. Students take 13 semester credits of required courses plus two lecture courses from the advanced program for up to 17 semester credits.

Central College seminars and Sorbonne courses vary from year to year, but are generally available in the following fields: Art Appreciation, French Literature, History, Geography, Music, Philosophy and Political Science. It is also possible to arrange a service learning opportunity after the placement exams at the Sorbonne. Courses are two credits each.

In the Regular Program, courses may apply toward the French or the International Economics and Cultural Affairs major. In the Advanced Program, certain courses may apply toward the French, International Economics and Cultural Affairs, or International Business majors, or toward certain General Education Requirements, including Fine Arts/Fine Arts Literature, History/Philosophy, Social Analysis.

This program is available for either a full academic year or for spring semester only.

Paris Internship Program

Students of French may also choose to participate in a study-abroad and internship program in Paris, administered by Boston University.

Program Requirements. Minimum requirements for enrolling in this program as a Valparaiso University student are completion of French 204 and an overall grade point average of 3.00. An internship is an enormously valuable experience, but one that places great demands on students' communication and work skills. For that reason, it is recommended that students with strong French language skills enroll in this program after completion of their sophomore year.

Program Curriculum. Students begin the program with eight weeks of intensive language course work to prepare them for the internship. Upon successful completion of the language component, students intern in French businesses in Paris for eight weeks. They are assisted in finding internships in one of the following areas: Advertising and Public Relations; the Arts; Business and Economics; Film and Television; Health and Human Services; Hospitality Administration; Journalism; and Politics. Past internships have included Galerie Maeght, Antenne 2 Télévision, l'Office de Tourisme de Paris, and le Ministère des Affaires Etrangères.

This program is one semester only. Students may enroll for either the fall or spring semester.

Puebla, Mexico

The Puebla Study Center is directed by a resident Valparaiso University professor, who also teaches one course. Students take the remaining courses at the Universidad de las Américas-Puebla. These courses are designed for foreign students and are taught by Mexican professors in Spanish. Valparaiso University students live in on-campus residence halls with Mexican suitemates. Students with advanced Spanish proficiency may take courses in the regular curriculum of the University. Numerous field trips led by the resident director enhance the students' academic and cultural experiences.

Program Requirements. Spanish 102 or the equivalent and sophomore standing are required.

Program Curriculum. Students are placed into language courses by examination. Courses offered include:

SOC 330 Points of Intersection: Mexico and the United States . . . 3 Cr.
Intermediate or Advanced Spanish 4-12 Cr.

Additional course offerings vary each year. Past offerings taught in Spanish include courses in Art, Psychology, and Political Science. Courses taught in English have included the areas of Economics and Political Science.

Sociology 330 may fulfill part of the General Education Social Analysis requirement. Other courses may apply toward the Spanish major or minor, or toward certain General Education Requirements, including Social Analysis, Fine Arts/Fine Arts Literature, Foreign Language, and/or Global Cultures and Perspectives. This program is available in spring semester only.

Reutlingen, Germany

The Reutlingen Study Center, located on the campus of its partner institution, the Fachhochschule für Technik und Wirtschaft, is under the direction of a resident professor from Valparaiso University. Students take four or five courses (13-18 credits), which are taught by the resident director and German professors from neighboring institutions. Except for the German language courses (beginning, intermediate, or advanced), all courses are conducted in English. Several field trips as well as the students' own travel experiences complement the in-class learning and encourage the development of broad new perspectives.

Internship opportunities with German professionals are also a possibility for students with good German language skills.

Program Requirements. Sophomore standing is required; no prior knowledge of German is required.

Program Curriculum. Courses offered include:

ECON 390 Topics in Economics . . . . . 3 Cr.
FLGR 101 First Semester German . . . 4 Cr.
FLGR 102 Second Semester German . . . 4 Cr.
FLGR 103 Intermediate German . . . . 4 Cr.
FLGR 204 German Composition and Conversation . . . . . . . . . . 4 Cr.
ART 311 European Art and Architecture . . . . . . . . . . 3 Cr.
International Study Programs

**PHIL 290** Environmental Ethics ... 3 Cr.
**GS 390** Topics in German Life and Culture ... 3 Cr.

German 101, 102, 103 and German 204 may apply toward the General Education Foreign Language Requirement. German 204 may apply toward a German major or minor or International Economics and Cultural Affairs major. Other courses may be used to fulfill General Education Requirements as follows: **ART 311** will fulfill the Fine Arts/Fine Arts-Literature requirement; **PHIL 290** will fulfill the upper level theology requirement OR a philosophy requirement; and **ECON 390** may be used to fulfill one of the Social Analysis course requirements, one of the 300 level economics requirements for the International Economics and Cultural Affairs major with the approval of the IECA Chair, or a College of Business requirement with the approval of the Dean.

This program is available in either the fall or spring semester.

**Tübingen, Germany**

Through a special one-on-one student exchange agreement with the Eberhard-Karls-Universität Tübingen, Valparaiso University may send a limited number of students there each year.

**Program Requirements.** German 204 or the equivalent, junior standing, a grade point average of 3.0 or better, and approval of the head of the German section are required.

**Program Curriculum.** The Language and Orientation Program, a six-week intensive course before the beginning of the German academic year, is conducted by the University of Tübingen for foreign students. During the academic year, students may choose courses from among the varying offerings of the University of Tübingen.

The six-week Language and Orientation Program allows students to earn five elective credits towards the German major or minor requirements. Other courses may apply toward General Education and/or major or minor requirements; students must consult with relevant department chairs before departure for Tübingen.

This program is available for the full academic year only.

**American School of Classical Studies**

Valparaiso University is a corporate member of The American School of Classical Studies at Athens which provides Valparaiso University students opportunities for summer study in Greece. Two sessions, directed by the School’s Gertrude Smith Professors, are offered annually. These sessions are designed for students who wish to complement their training in the language and literature of ancient Greece with an introduction to the country and its monuments. Housing and meals for participants are provided by the School. Enrollment in each session is limited to twenty students. Students interested in this program should consult with the head of the Classics section.

**Program Requirements.** Six semesters of Greek, History 311, and a grade point average of 3.50 are required. Admission to the summer sessions is highly competitive. Participants include college and university professors, graduate students and highly qualified upper class students.

**Program Curriculum.** The program of the summer sessions focuses on the relationship between the country (its monuments, landscape and climate) and its history, literature and culture. Each session is divided almost equally between the study of sites, monuments and museums in Attica and trips to places chosen by the director in Central Greece, the Peloponnese, Macedonia, Northwest Greece and the Islands. Participants are required to prepare reports on assigned topics.

Credits may be applied toward a Classics major through Greek 495 (Independent Study). Students must consult with the chair of the Department of Foreign Languages and Literatures.

This program is available in the summer only, from late June to early August.

**American Schools of Oriental Research**

Valparaiso University is a corporate member of this organization, which has institutes in Jerusalem, Amman, Baghdad, and Cyprus. Several summer training programs in archaeology are open to undergraduate students of this University through these institutes.

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**FACILITIES FOR LEARNING**

**Buildings**

Much of the University campus has been built within the past few decades. The academic buildings offer students modern, well-equipped laboratories and studios as well as classrooms, seminar rooms, and faculty offices.

**University Library Facilities**

Moeller Library has an important role in student academic achievement. Being information literate means that students know how to identify, locate, and evaluate information in today's complex environment of electronic, print, video, voice, and audio media. Using Moeller Library helps students reach a level of independence in finding information and in understanding the mechanics of information, such as using computers for information retrieval and being able to read, interpret, and write citations. They learn information seeking skills, including how to articulate their information need. Most important, students learn how to evaluate information, find different viewpoints, and recognize the biases of any author. The library gives customized assistance to enable each student to research any question and fulfill any information need. It also provides instruction in information literacy within courses offered by each academic college.

Moeller Library plays an important role in scholarly communication by organizing print and electronic information for easy retrieval. The library maintains an on-line public catalog of its holdings called Galileo that is searchable in a number of ways, including key word. Galileo is accessible on VU's Academic Data Network from the residence halls, computer labs, offices, or in the library itself. Galileo is also a link on the Moeller Library Home Page (http://www.valpo.edu/library). The holdings which Galileo indexes include books, periodicals, government publications, videos, audiodiscs, musical compact disks, and electronic resources. The library owns 424,000 volumes, adding approximately 9,000 new volumes each year. Students may view their circulation records electronically and renew books borrowed electronically via Galileo. Some periodicals and many
Facilities for Learning

Library of microforms databases, many with the full text of articles retrieved through topical searches, to provide ready access to scholarly information across the academic disciplines. Students may send the text of articles retrieved to their e-mail boxes for later printing. When articles retrieved are found in one of the 2,600 periodicals subscribed to by the library, students may make photocopies on one of the four copy machines in the building. They may request an Interlibrary Loan of articles that are not held locally. An electronic interlibrary loan form is accessible on the Home Page to streamline this procedure. The average turnaround time for Interlibrary Loan requests is six working days, but some items are more difficult to locate and the request takes longer to fill. The library is a member of several consortia, including the Private Academic Library Network of Indiana and the Center for Research Libraries, to give scholars access to such materials.

Moellering Library was renovated during 1995-1997 to create an electronic classroom, group study rooms, a newspaper reading lounge, a video viewing room, and enlarge the Audio Library. Individual carrels and study tables are located throughout the building and a vending room is available for study breaks. The library has a variety of seating types to meet the study preferences of a diverse body of students. It has two computer clusters plus several individual workstations enabling access to the Home Page, MIMe, Galileo, and other information resources. The electronic classroom is available for booking by students, faculty, and staff whose proposed use is academic in nature, such as a scholarly presentation, group study tables, or a committee meeting.

The Law Library at Wesemann Hall hold a collection of 146,000 bound volumes and 749,500 microforms, with 3,258 current periodical subscriptions. LEXIS and WESTLAW subscriptions add to the rich information resources available for use by Valparaiso University students and scholars.

Moellering Library and the Law Library provide the resources and services that connect the University community to the information that each member needs. New services and resources are selected, acquired, and organized to support the mission of the University.

Electronic Information Services

Electronic Information Services provides a wide range of services for students, faculty, and staff, and plans and manages the computing and networking environment. This dynamic information environment provides support for excellent teaching and learning, quality research, effective decision-making, efficient administration, and communication among the members of the University community.

Electronic information services include hardware and software to support courses and applications across the curriculum; access to local, national and international networks; access to PhoneMail and e-mail; training on available resources; and consulting services.

Networks of Windows and Macintosh computers are available in student computer clusters located in Schnabel Hall, the Center for the Arts, Gellersen Center, Moellering Library, Urschel Hall, the Union, Dickmeyer Hall, the Law School and all residence halls. All computers in these clusters have access to the campus network and the Internet. General applications supported include word processing, spreadsheets, databases, desktop publishing, statistics, and presentation graphics. Many departments have specific applications available on the networks. In addition, many departments have computer clusters to support special needs.

Sun Enterprise systems serve as e-mail server, web server, administrative information server, and news server and handle other network tasks. A VAX 4500 supports statistical processing and other academic applications.

There are several satellite dishes on campus which support instructional needs. Each residence hall has a computer cluster to meet the basic computer needs of students. Network access is provided from all residence hall rooms. With the exception of a few specialized services, there are no separate charges for these services.

HONORS AND AWARDS

Graduation with Honors

Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a standing of at least 3.80 in their work at this institution are graduated Summa Cum Laude.

Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a standing of at least 3.60 in their work at this institution are graduated Magna Cum Laude.

Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a standing of at least 3.40 in their work at this institution are graduated Cum Laude.

Semester Honors

Undergraduate students who achieve a standing of 3.50 in any semester except the last before graduation are awarded honors under the following restrictions:

1. The student received no grades of I or U at the official end of the semester concerned;

2. The student was registered for at least fourteen credit hours of work for that semester on campus or at least twelve credit hours in an International Studies Semester, Special Off-Campus Semester or any other approved cooperating program.

Graduating senior honors are announced at Commencement and are based on the work of the last two semesters. The standing of 3.50 must have been maintained cumulatively for both semesters; restriction 1 above applies, and the total credit hours for both semesters must be at least the cumulative total from restriction 2 above (for example, in the College of Arts and Sciences, a total of twenty-eight credit hours for two semesters on campus or a total of twenty-six hours for one semester on campus and one semester special off-campus program, e.g., the Washington Semester).

Christ College. Graduates who complete the requirements of the honors college, Christ College, are designated Christ College Scholars or Christ College Associates.

Departmental Honors. Students in many departments of the College of Arts and Sciences may be awarded honors in their field of study provided they meet the specific requirements described on page 50.
Honor Societies

NATIONAL FRESHMAN HONOR SOCIETY

Alpha Lambda Delta. This national honor society recognizes women and men who achieve high scholastic standing during their freshman year.

NATIONAL SENIOR HONOR SOCIETY

Mortar Board. This national honor society recognizes outstanding men and women for leadership, scholarship and character.

NATIONAL COLLEGE HONOR SOCIETIES

Alpha Epsilon Delta. This national honor society recognizes students who have achieved academic distinction while pursuing a pre-medical or pre-dental program.

Alpha Sigma Lambda. This national honor society is devoted to the advancement of scholarship and to the recognition of students in continuing higher education programs.

Beta Gamma Sigma. This national honor society is restricted to students in business schools which have achieved accreditation from the American Assembly of Collegiate Schools of Business. Students in the upper ten percent of the senior class and the upper seven percent of the junior class of the College of Business Administration are eligible for membership.

Sigma Theta Tau. This national honor society for nursing elects outstanding upper class students to membership on the basis of scholarship, leadership and character.

Tau Beta Pi. Engineering students who have demonstrated high academic achievement, exemplary character and a breadth of interest in the field of engineering are eligible for membership in this national engineering society.

VALPARAISO HONOR SOCIETIES

Lumina Award. This honor is presented in the spring of the junior year to students enrolled in the College of Arts and Sciences whose cumulative grade point average for the five preceding semesters is 3.60 (level of Magna Cum Laude) or above. It is awarded by the Arts and Sciences Scholarship Committee and the Dean of the College.

DEPARTMENTAL HONOR SOCIETIES

Accounting - Accounting Society
Chemistry - Phi Lambda Upsilon
Classics - Eta Sigma Phi
Decision Science - Alpha Iota Delta
Drama - Alpha Psi Omega
Economics - Omicron Delta Epsilon
Education - Kappa Delta Pi
English - Sigma Tau Delta
Finance - Financial Management Association Honorary Society
French - Pi Delta Phi
Geography - Gamma Theta Upsilon
German - Delta Phi Alpha
History - Phi Alpha Theta
Home Economics - Kappa Omicron Nu
Journalism - Society of Collegiate Journalists
Marketing - Alpha Mu Alpha
Music - Pi Kappa Lambda
Philosophy - Phi Sigma Tau
Physical Education - Phi Epsilon Kappa
Physics - Sigma Pi Sigma
Political Science - Pi Sigma Alpha
Psychology - Psi Chi
Social Science - Pi Gamma Mu
Sociology - Alpha Kappa Delta
Spanish - Sigma Delta Pi
Theatre - Alpha Psi Omega

Awards and Prizes

Bauer Award. This prize is presented annually by the History Department to the history major who has written the best historical paper during the year. The award is made in memory of Dr. Walter E. Bauer, Distinguished Service Professor Emeritus of History.

Delta Sigma Pi Award. Awarded to a College of Business Administration senior with the highest cumulative grade point average after seven semesters of study.

Bruce and Linda Eastmond Award. These are annual awards presented to outstanding senior students in the College of Engineering and an outstanding senior student in the College of Arts and Sciences.

Roger and Hazel Guillaumant Award. This award is presented annually by the Department of Foreign Languages and Literatures to the French major who has demonstrated outstanding achievement and promise in French studies. It is given in honor of Professor Emeritus Hazel Guillaumant and her husband, Roger.

The Victor Hoffmann Award. Each year the Beta Nu Chapter of Pi Sigma Alpha, national honorary political science organization, presents an award to the outstanding political science major voted by the faculty of the Political Science Department.

Howard K. Hughes Mathematics Prize. An annual award is presented to the Valparaiso University student who shows the greatest proficiency in the first four calculus courses. This proficiency is demonstrated through participation in the Hughes Mathematics Competition which takes place in the spring semester of each academic year.

Indiana CPA Society Award. Awarded to the outstanding senior accounting student in the College of Business Administration.

Kingswood Hospital Award for Psychiatric Nursing. The Kingswood Hospital awards this prize to a senior nursing student selected by the nursing faculty for scholarship and dedication to working with the mentally ill.

Walther M. Miller Memorial Prize. This prize is awarded to a student who has majored in German and demonstrated excellence in German studies at Valparaiso University. It is awarded in memory of Walther M. Miller, Distinguished Service Professor Emeritus of German Language and Literature.

The Ronald G. Reidenbach Prize in Music. An annual award honors a graduating student of church music who has made a significant contribution to campus life. The award is made in memory of Ronald G. Reidenbach, alumnus of the University and musician to Lutheran churches in Ohio, Illinois, and Maryland.

Anna Zink Springsteen Prize. This prize is awarded to a senior, preferably an English major who has made a substantial contribution to campus life with special gifts in poetry composition.

Margot Ann Uehling Endowed Scholarship Prize. Awarded annually to an undergraduate student who writes the best non-fiction prose essay.

The Wall Street Journal Award. Awarded to the outstanding senior business administration student in the College of Business Administration.

Medals

Lumen Christi Medal. This medal is awarded to a lay person for distinguished service to Lutheranism. It is the highest honor Valparaiso University can bestow.

Medal of Merit. This medal is an award to recognize the outstanding service to society by the recipients through their chosen calling and by their exceptional activity in the advancement of the mission of Valparaiso University.
The University accepts and practices the view that a liberal education concerns the lives of students, encouraging them to develop their full potential. It complements and enriches their academic curricula.

The Office of the Assistant Provost for Student Affairs coordinates the services offered to students and promotes a wide range of campus activities which enhance residential life at Valparaiso.

Student Residences

The majority of undergraduate students live in one of the eight university residence halls or in one of the eight fraternity houses located on or near the campus. Alumni, Brandt, Lankenau, and Wehrenberg Halls are residence halls with rooms for two students. All are co-ed halls with men and women living on alternate floors. Guild and Memorial are slightly older with men and women living in separate buildings. Guild Hall houses upperclass women. Each hall has its own student council and peer judicial board. Two dining halls and the Valparaiso Union provide food services.

Student Conduct and the Honor System

Valparaiso University holds the ideal of a community of Christian scholars living together in freedom and civility, in an environment conducive to Christian faith and supportive of the Christian ethic. A minimum number of rules and regulations is necessary for this community; these are found principally in the Student Guide to University Life.

Each student enrolling at Valparaiso University thereby accepts the rules, regulations and procedures as found in this catalog and the Student Guide. Conformity to the traditions and regulations of the University is expected. The University reserves the right to suspend or dismiss any student at any time when, in the judgment of its authorities, that action is deemed to be in the best interests of the institution. Such a decision is normally made by the Assistant Provost for Student Affairs on the recommendation of the Campus Judiciary Board.

The student-initiated Honor System has a long history at Valparaiso University and is a strong distinguishing characteristic of the institution. It is in every way consistent with the highest principles of Christian ethics and morality. In sanctioning the Honor System, the University presumes that students are able and willing to accept the duties and responsibilities of honorable conduct for the sake of the Valparaiso University community. Before they can enroll at the University, all entering students must sign and submit a statement that they understand the Honor System and are aware that all of their academic work must be submitted under their signature and that they have done this work in agreement with the Honor Code. The statement "I have neither given or received nor have I tolerated others' use of unauthorized aid" must be written out and signed on all written work.

Under the Honor System, all written examinations of any length are taken in an atmosphere free from the surveillance of a proctor, unless requested by a student member of the class. Every student has the responsibility to keep academic work free of dishonesty; that is, neither to give nor to receive unauthorized aid. All students must report to the Honor Council any violation of the System of which they become aware. Students are required to sign a pledge on all work submitted for academic credit as indicated above.

The Honor Council is an educational, preventive, remedial and judicial body with the duty of maintaining the Honor System in the academic community. The Council hears Honor Code cases and then makes decisions about whether or not a student has violated the code and assesses any penalties. The Council is composed of students and faculty who are chosen by the incumbent members subject to the approval of the President of the University.

The Arts

The mission of the program in the visual and performing arts at Valparaiso University is to educate the minds of students by opening their eyes and ears to the best of their artistic heritage and the joy of artistic expression. The University offers its students a range of arts education opportunities through its general education curriculum; co-curricular activities in art, music, theatre, dance, and creative writing; and academic majors in the departments of visual and performing arts which permit students to make the arts the focus of a liberal education for personal and professional development and for creative leadership and service. At Valparaiso University, the arts serve primarily the students, while also serving the faculty and staff and the larger community of the region.

The Department of Music offers students the opportunity to study and perform as singers and instrumentalists in an array of curricular and co-curricular ensembles. Students wishing to participate in selective ensembles may audition for the Valparaiso University Chorale, the Kantorei, the Chamber Orchestra, the Symphonic Orchestra, the Gospel Choir, the Jazz Band, and the Concert Band, as well as a variety of small groups including Woodwind Quintet, String Quartet, Brass Ensemble, Jazz Combo, and others. Some ensembles are open to all students with no auditions required. These include the Choral Society and the University-Community Band. A number of additional student-organized performing groups are also sheltered by the Department. For an additional charge, students may sign up for private music lessons at any level, including beginning level, in voice, piano, guitar, harpsichord, organ, and most orchestral and band instruments.

Theatre: The University Theatre brings the best of classic drama, new plays, musicals, and operas to the Valparaiso University Center for the Arts. Soul Purpose, a tour of liturgical drama troupe, travels to churches throughout the nation, and Theatre Outreach Performances (TOP) performs plays on social issues for local and regional schools. Theatre opportunities are available for any student interested in dramatic arts. Theatre work is focused in performance, production, and administration. Advanced students regularly supervise in all areas.

Art: The Art Department offers basic studio courses in painting, drawing, digital art, design, graphic design, sculpture, photography, ceramics, fibers, art education, and art history. Galleries exhibit student work.
work as well as distinguished work by visiting artists. The Sloan Collection of American Paintings is the core of the Brauer Museum of Art, a collection of nearly 1,600 works of increasing national reputation. Summer programs of study overseas provide students with immediate experience of Western cultural heritages.

Dance. While not yet a formal part of the University’s curriculum, dance groups organized and maintained by students attract many participants. Co-curricular workshops as well as performances by visiting dance ensembles are important parts of campus activities.

Creative and Professional Writing. The English Department offers a minor with an emphasis in either creative or professional writing. The department sponsors the Margot Ann Uehling Scholarship, awarded annually for the best essay written by a Valparaiso University student. WORDFEST annually brings established writers to campus and awards prizes for fiction, poetry, and non-fiction prose. The Cresset internship provides experience in editing and publishing. The Lighter, a campus literary magazine, presents student work in award-winning form.

Athletics

Valparaiso University provides a varied athletic program which assumes that sports can play a major role in college life by encouraging wide participation by the student body. The Athletics-Recreation Center is a major indoor facility. Outdoor facilities include tennis courts, eight all-purpose intramural fields, a hard surface track and fields for varsity football, baseball, and soccer. Although the University provides an experienced staff and takes every precaution to avoid injury to all participants in the intercollegiate and intramural programs, it assumes no responsibility for accidents; students participating in these activities do so at their own risk.

Intramural Sports/Campus Recreation. Valparaiso University is committed to a comprehensive program of recreational sports. A wide variety of team and individual sports are scheduled throughout the academic year. Students are also encouraged to participate in the many informal recreational activities, special events, and clinics offered by the Athletics-Recreation Center staff.

Intercollegiate Competition. Women’s sports offered are: basketball, cross country, soccer, softball, swimming, tennis, track and field, and volleyball. Membership is maintained in the National Collegiate Athletic Association. The women’s teams participate in the Mid-Continent Conference.

Men’s sports offered are: football, basketball, baseball, soccer, cross country, swimming, tennis and track. Membership is maintained in the National Collegiate Athletic Association. The men’s teams participate in the Mid-Continent Conference and the Pioneer Football League.

Publications and Broadcasting

Students are encouraged to work in any aspect of campus publications and broadcasting, including writing, editing, advertising, sales, photography and layout. A student/faculty Committee on Media is responsible for the policies and regulations governing these activities.

The Beacon. The Beacon, the University yearbook, is designed and edited by students. It offers experience in art work, editorial work and advertising.

The Lighter. The Lighter, a student literary magazine, is published twice a year and welcomes contributions from all members of the University community. Art work, especially photography, is also a feature of this publication.

The Torch. The Torch is the student newspaper. A weekly publication, it covers a wide range of campus activities and involves students interested in all aspects of journalism.

WWUR. The campus radio station WWUR (95.1 FM) offers students a wide variety of experiences in radio broadcasting and management.

Organizations

Student Senate. The Student Senate is empowered by the Instrument for Internal Governance of the University with executive, legislative and judicial powers over the student body. The Student Senate affords students the opportunity to assume the privileges and responsibilities of self-government. It also coordinates the major committees of the University, including student involvement, and monitors all student Senate activities.

Fraternities and Sororities

Active chapters of national Greek social fraternities on campus include Phi Delta Theta, Phi Delta Kappa, Sigma Chi, Sigma Phi Epsilon, Sigma Pi, Sigma Tau Gamma and Theta Chi.

National Greek social sororities include Alpha Delta Pi, Alpha Sigma Tau, Chi Omega, Delta Delta Delta, Gamma Phi Beta, Kappa Delta, Kappa Kappa Gamma, and Pi Beta Phi.

The governing body of the sororities is the Panhellenic Council. The governing body of the fraternities is the Interfraternity Council.

Fraternities are housed in their own individual residences. Sororities are housed in a suite of rooms on the main floor of the building.

Alpha Phi Omega. Alpha Phi Omega is the nation’s largest service fraternity founded to develop leadership, promote friendship and give service to the campus, community and nation. Alpha Phi Omega is a co-ed organization whose goals are the development of the individual through both service and social events. Active membership in this service fraternity is open to all students of the University, and in no way interferes with membership in a social fraternity or sorority.

Clubs and Interest Groups

Clubs and interest groups abound on the campus. They focus on a variety of activities including academic and professional interests, hobbies, recreational activities, cultural interests, activities connected with the Chapel, religious interests, politics and service projects.

Black Student Organization (BSO). The Black Student Organization promotes cultural awareness of African-American culture through various programs and activities and provides avenues for networking and socializing. BSO event highlights include presenting at MLK Day, tutoring for the Running Rebels Program, coordinating field trips, attending an African-American Leadership Conference, sponsoring BET Comedy Night, planning Black History Month celebrations, and participating in forums and campus committees.

Latinos in Valparaiso for Excellence (LIVE). LVE’s main focus is to promote academic excellence among Hispanic students and to support and cultivate the interest of Hispanic students through forums, socials, and other planned activities. LVE also promotes programs and activities that encourage an appreciation for and an awareness of the many different Hispanic cultures represented on Valparaiso University’s campus. LVE event highlights include Hispanic Heritage Month, Hispanic Leadership Conference, Northwest Indiana Hispanic Scholarship Dinner, Cinco de Mayo, Hispanic FilmFest, and participating in forums and campus committees.

Valparaiso International Student Association (VISA). VISA sponsors a number of social and cultural events throughout the year aimed at bridging cultural differences. Most notable is the annual international dinner, which features cuisine from around the world and an international talent show. Although VISA serves as the main support group for international students, it welcomes American members. The International Student House serves as the headquarters for VISA and has rooms for studying, cooking, meeting friends, and many other purposes. The International Student
House is a tangible symbol of Valparaiso University’s commitment to serve international students and to demonstrate the importance of international relationships between all members of the University community.

Involvement Center

The Involvement Center provides a clearinghouse for students to volunteer their time in service to the community. Local agencies in need of volunteers provide structured opportunities. Students learn the rewards of volunteering, build self-esteem, develop social responsibility, and provide help to those in need. Students placed by the Involvement Center serve in a variety of positions including tutoring adults, teenagers and children; visiting with the elderly; working with handicapped and mentally challenged persons; and helping with Christmas in April.

The Valparaiso Union

The Valparaiso Union, a community center for all the members of the campus, strives to provide quality facilities, services and conveniences needed by members and guests of the University. The Union also develops programs that are responsive to student developmental needs and to the cultural, social, recreational, and educational needs of the campus community.

The Valparaiso Union provides students with a place to meet, relax and study; a headquarters on campus for commuters; a place where students, faculty and administration can develop acquaintances outside the classroom; a place to entertain and be entertained at programs, dinners and receptions; a place for recreation; and an information and service center.

As one of Valparaiso University’s largest student organizations, the Union Board provides films, lectures, concerts, dances, outdoor recreation trips, mini-courses, coffeehouses, special events activities, diversity programs, trips to Chicago, and much, much more.

The Union staff help plan and present such programs as the Union Jazz Festival, the One Planet, One People International Food and Music Festival, the Madrigal dinners, the Activities Fair, College Bowl (an academic question and answer tournament), merchandise sales in the lounge, and performing arts events. Many events planned by student organizations, faculty and staff departments also take place in the Union. The Beacon, Student Senate, Union Board and other student organizations have offices, work and meeting spaces in the Union where they plan programs and perform their duties.

The Valparaiso Union also offers students the opportunity to explore and develop their leadership potential through participation in student activities. These experiences allow students to explore the dynamics of effective leadership, making the Union an important place where education takes place as students and others come together on common ground to meet and exchange ideas. Assistance is available in the Union to support student groups with their activities and to promote the development of leadership skills.

The Union Director’s Office processes reservations for meetings and events that take place in the Valparaiso Union and in academic buildings and handles the arrangements for numerous summer conferences, camps and workshops. The Union Director’s Office also compiles, prints and distributes the following: a monthly Students Activities Calendar, a weekly listing of events called VU This Week, and Cultural Arts Calendars to help inform the campus of activities.

The Union Games Area offers billiards, electronic games, table soccer and table tennis. Outdoor recreation equipment availability allows students the opportunity to pursue a variety of outdoor recreational activities. Equipment such as mountain bikes, tents, backpacks, cross country skis and sleeping bags are available for rental. Union Board offers trips such as skiing, canoeing, camping, whitewater rafting, and backpacking.

The Union also provides a 24-hour lounge, computer lab, commuter student facilities, student organization offices, meeting rooms, and a dining and social activities space called The Round Table. The Valparaiso Union is fully accessible to persons who are physically challenged.

Union AdWorks is available to any campus group to publicize programs. Campus events may be advertised through posters, flyers, buttons, brochures, announcements and mail box stuffers. The Union Information Desk provides answers to questions and sells popcorn, candy, gum, sundries, phone cards, newspapers, tickets for trips and special programs, and discount movie tickets. Also offered are magazines to read during visits to the Union, a fax machine service, a copy machine, change, lost and found, a dictionary, and phone directories.

Other Union services include a ride board, a cash machine, bulletin boards, art exhibits, televisions, audio/visual services, and event planning assistance. Union Board offers a telephone activities hot line #5655 - a prerecorded message listing the latest in campus activities.

Dining Services operates Jesters, which provides daily breakfast, lunch and dinner items and a snack shop in The Round Table. Dining Services also provides catering services for banquets, luncheons, and receptions.

Campus Ministry

The VUministry of Word and Sacraments centers in the Chapel of the Resurrection. A ministry is also carried on in the residence halls and fraternity houses.

Students and faculty participate with the University Pastor and University Associate Pastor in preparing a wide range of services. In addition to holding services on Sunday and throughout the week at various times, the University has appointed 11:15 for Morning Worship Monday through Friday when members of the community may come together for prayer and praise. Pastoral counseling is available at any time.

Students participate in the Kantorei and University Singers, as well as other choirs which sing for chapel worship services; serve as organsists for daily services; and serve as cantors and instrumentalists for Sunday and weekday services. Students plan chapel decorations and decorate the chapel for the seasons of Advent, Lent, Holy Week and Easter, as well as assist in the contribution of the arts for other chapel services.

Students chair chapel ministry groups of worship, social concerns, and visitation, as well as chapel service groups such as Altar Guild, acolytes and ushers. All students are invited to participate in these and other areas of ministry.

St. Teresa’s, the Roman Catholic Student Center at Valparaiso University, is located across the street from the university campus at 1511 LaPorte Avenue. The center is staffed by a full-time chaplain. Sunday and weekday Masses, as well as a full program of pastoral ministry, are conducted at the center.

Every courtesy is shown to pastors of other Christian churches in Valparaiso who wish to conduct a ministry for students of their denomination. A listing of area churches and the time of worship is available in the chapel office.

Services For Students

Leadership Programs. The office of the Dean of Students provides students the opportunity to explore and develop their leadership potential through programs such as the Student Leaders Workshop and the Leadership Lunch Series. These experiences allow students to explore the dynamics of effective leadership.

The Office of Multicultural Programs. In collaboration with the campus community, the Office of Multicultural Programs provides a variety of support programs and services designed to address the specific academic, cultural, and social needs of underrepresented groups (African-American, Asian/Pacific Islander, Hispanic/Latino, and Native American students). OMP also develops and implements programs and activities throughout the year which promote multicultural education, cross-cultural awareness, and racial reconciliation.

The Martin Luther King, Jr. Cultural Center (MLKCC), located next to the School of Law, provides students from different cultures a place to relax, hold meetings or study. At the MLKCC, students may utilize the computer room, the Neal Multicultural Resource Library, a fully equipped kitchen, and a reception area.

The Director of the Office of Multicultural Programs serves as a liaison and provides support to many Valparaiso University organizations and their programs, and encourages campus-wide collaboration and interaction among students, faculty and staff. The Director works with the Black Student Life
members for personal conferences and advising. Many of these sessions develop informally. A formal system of advising is in place in each of the colleges.

Entering students are assigned to an academic adviser to assist them in selecting a curriculum, meeting University requirements and making the most of their studies.

In the College of Arts and Sciences, students who have not declared a major are assigned a general adviser. As soon as students declare a major, they are assigned to a departmental adviser by the chair of their major department. Students in a special program are assigned a program adviser. The major field or interdisciplinary program of study should be chosen by the beginning of the sophomore year. Some majors and programs, for example teacher certification and pre-med, require students to declare their intentions and begin the programs at the beginning of the freshman year to make it possible to complete the degree or certification requirements in four years.

All students must have their proposed schedule for the next semester signed by their academic adviser before it is filed with the registrar. If the student has more than one adviser (e.g. departmental, special program, Christ College), the student should have the signature of the special program adviser, after consulting with the other adviser(s). Advisers' signatures indicate only that they have counseled the student, not that they approve the schedule. Nor does the adviser's signature guarantee that the schedule will meet the requirements of the student's program.

**Students With Disabilities.**

Valparaiso University, through its Mission Statement, strives to maintain a supportive environment which will promote the learning and well-being of all students. The following information is provided to assist those students with disabilities who are seeking academic adjustments or other special services.

Inquiries about assistance to meet special needs should be directed to the Office of the Dean of the College of Arts and Sciences, which oversees the BRIDGES Program, an academic support service for students with disabilities.

The provision of auxiliary assistance is primarily the responsibility of the Department of Rehabilitation Services of the state in which the student maintains legal residence. If the request for assistance is denied by the local agency, Valparaiso University's provision of academic adjustments, or other special services will be based upon a case by case analysis of an individual student's need. In order to be considered for ancillary aids, academic adjustments, or other special services, the student:

1. Should apply to his/her local Department of Rehabilitation Services Office at least 6 months before attending Valparaiso University, or as soon as possible upon diagnosis of a disability, in order to allow time for funding to be allocated.
2. Should be admitted to one of the colleges of the University.
3. Must submit a written diagnosis of the disability and its impact on learning from appropriate professional personnel.
4. Should notify the Director of the BRIDGES Program in writing at least 5 months before the first day of classes, or as soon as possible upon diagnosis of a disability. Such notice is required to give the various academic and service areas a reasonable period of time to plan to meet the individual's special needs.

**The Writing Center.** At the Writing Center in Schnabel Hall students will find all the tools for writing close at hand. Undergraduate or graduate students may discuss writing projects with professional or student tutors who will help with planning, revising, editing, and proofreading. Handbooks, various dictionaries and stylebooks, ampie table space, and many computer resources make the Writing Center an excellent place of work.

**Tutoring.** The ASK Office, located in Huegl Hall (phone 52761), supports various levels of tutoring. A semester-by-semester schedule of departmental help/ study sessions is one of the services provided by the Office.

In addition to publishing the departmental help sessions schedule, the ASK Office supports the following types of tutoring:

1. Work with the professor — It is strongly suggested that the first option for help in a course is for the student to work directly with the professor. Frequently simple problems can be made more understandable with this communication.
2. Study Groups — It is often suggested that students gather in small groups and work with each other in mastering class problems. This reinforces points from daily lectures and supports good study habits. On occasion the ASK Office will select a leader who has been successful in the course to help the group. This student is selected at the professor's recommendation. The ASK Office also hires a tutor who has satisfactorily completed the course or is a major in that discipline, who can lead the study group.
3. One-on-One — In many instances a student will want direct and private tutoring. The ASK Office maintains a list of tutors for various subjects and will arrange for a student to have a tutor. These tutors are students who have completed the course with a satisfactory grade, and/or are majors from that discipline.

A student experiencing difficulty in a course should not hesitate to go directly to the professor for assistance. Departmental help sessions are posted in the departmental offices and at various locations around campus. The ASK Office maintains a posting also. Students may start a study group and the ASK Office staff can assist in organizing the group. If a tutor is needed, students should not hesitate to call the ASK Office to get assistance.

All tutoring sessions supported by the ASK Office uphold the standards set by the University's Honor Code. It is the student's responsibility to know what is authorized and unauthorized aid.

**The Valparaiso University Federal Credit Union.** This is an independently operated federal credit union whose membership is open to all students, alumni, members of the faculty and employees of the University, as well as their respective families and others. Its purpose is to provide the University community with a full service, convenient financial facility. It is not governed nor operated by the University. The Credit Union is governed by a board of directors elected by the membership and is supervised by the National Credit Union Admission, an agency of the United States Government. All accounts up to $100,000 are insured by the National Credit Union Administration. Special student checking accounts and student Visa cards are available through the Credit Union.
COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences, the largest college of the University, consists of twenty-one departments and provides the University with its program of general education for all students as well as advanced work in the liberal arts, the sciences and in several professional areas. Each department in the College consists essentially of two parts: 1. The general education component; 2. The major field or interdisciplinary program. To these two parts, the student adds elective courses chosen from all the offerings of the University, often including a minor or minors.

The Major Field
Each student must complete a major field of study or an interdisciplinary program. Ways of meeting this requirement are presented in detail in connection with the degree requirements listed below. These options are intended to offer maximum flexibility so that students may find the courses of study best fitted for their interests and needs.

Degrees and Degree Requirements

ASSOCIATE IN SCIENCE DEGREE (60 CR.)

A. General Education Requirements
1. First Year Core ....... 10 Cr.
   CORE 110 .......... 5 Cr.
   CORE 115 .......... 5 Cr.
2. Social Analysis ....... 3 Cr.
3. PE 101-105 .......... 1 Cr.

B. Major Field Requirements
At least 30 credit hours in Natural Science and Mathematics. Students preparing for admission to one of the allied health fields should develop an appropriate program of study with the Associate Degree Adviser.

C. Other Requirements
1. The following work must be completed in residence at Valparaiso University:
   a. 30 of the last 34 credit hours for the degree.
   b. At least 15 credit hours in Natural Science and Mathematics.
   c. A foundational level Theology course.
2. The student must earn a cumulative grade point average of 2.00 on all work in residence and on courses in Natural Science and Mathematics taken in residence.

An Associate in Science degree with concurrent cytotechnology certification may also be obtained. See page 47.

BACHELOR OF ARTS DEGREE (124 CR.)

A. General Education Requirements
1. First Year Core ....... 10 Cr.
   CORE 110 .......... 5 Cr.
   CORE 115 .......... 5 Cr.
2. Academic Area Studies 49 Cr.
   a. Theology ........... 6 Cr.
      1) One foundational level Theology course .... 3 Cr.
      2) One upper level Theology course taken in the junior or senior year .. 3 Cr.
   b. Literature and Fine Arts ....... 6 Cr.
      1) ENGL 200 ....... 3 Cr.
      2) One course in Fine Arts or Fine Arts-Literature 3 Cr.
         Courses which fulfill this requirement are ART 101, 102, 311, 317, 318, 319, 320, 321; CLC 200, 220, 251; ENGL 231; FLGR 260, 260; FIJ 251; PHI 260; POLS 130, 335; SOC 150, 230; FLS 250; THEO 250, 260, 357, 362, 363, 364, 365, 366; NUR 318.
         In appropriate cases, a course from this area may be used to fulfill another area requirement.
   c. Foreign Language ....... 8 Cr.
      Course number 102 in a foreign language in which the student has no more than one year of high school credit, or course number 103 in any foreign language. A student who has completed a second year language course in high school will not be granted credit toward degree requirements for course 101 in that language at Valparaiso University.

   International students whose native language is not English and who are studying on a nonimmigrant visa are exempt from the foreign language requirement provided that they have fulfilled the General Education Requirements in English (ENGL 101 and 200).

B. Diversity: Global Cultures and Perspectives ....... 3 Cr.
   Courses which fulfill this requirement are ECON 336; GEO 102; GLST 150; HIST 232, 240, 242, 250, 331, 341, 342, 350, 393; FLJ 251; PHIL 260; POLS 130, 335, 360; SOC 150, 230; FLS 250; THEO 250, 260, 357, 362, 363, 364; 365, 366; NUR 318.
   In appropriate cases, a course from this area may be used to fulfill another area requirement.

C. Diversity: United States Cultural Diversity ....... 3 Cr.
   Courses which fulfill this requirement are ECON 136, 233; GEO 200, 274; HIST 225, 226; POLS 110, 111, 120, 121, 123, 210; SOC 150, 200, 230; GRAM 200, 111; FLS 250; THEO 307, 337, 366; NUR 318.
   In appropriate cases, a course from this area may be used to fulfill another area requirement.

D. Diversity: Philosophical and Historical Studies ....... 3 Cr.
   One course in either philosophy or history. (CLC 311 will also fulfill this requirement.)

E. Studies in Social Analysis ....... 6 Cr.
   Two courses from the following selection: ECON 136, 210, 221, 222, 223, 233; GEO 101, 102, 201, GNST 201; POLS 110, 120, 130, 220; SOC 110, 150, 160.
   The two courses must be from two different departments.
h. Studies in Natural and Behavioral Sciences/Mathematics........ 12 Cr.
Twelve credit hours, including at least eight credits with two laboratories, are to be selected from one of these options:
1) one course (four credits) from each of three different departments (biology, chemistry, and the departments of geography/meteorology, mathematics/computer science, physics/astronomy and psychology); or
2) two courses (eight credits) from one department (BIO 151 and 152, BIO 171 and 172, CHEM 121 and 122, CHEM 131 and 132, PHYS 111/111L and 112/112L, or PHYS 141/141L and 142/142L) plus four credits from a different department (see point 1 for list of departments).

NOTE: Only one course from the departments of geography and meteorology, mathematics and computer science, and psychology may be used to meet the twelve-credit hour requirement. MATH 110 and 114 will not fulfill this requirement.

i. PE 101-105............. 1 Cr.

B. Major Field Requirements
Students may fulfill the major field requirements of the Bachelor of Arts degree by completing either a Department Major or an Individualized Major and by meeting one of the completion requirements listed below; or by completing an Interdisciplinary Program (see page 43).

Departmental Major. In order to fulfill requirements under the Departmental Major, students must complete a minimum academic major. Departments in the College of Arts and Sciences offer the following major fields for the Bachelor of Arts degree: Art, Biology, Chemistry, Classics, Communication, Computer Science, Economics, Economics and Computer Analysis, English, French, Geography, German, History, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Spanish, Theatre and Television Arts, and Theology.

Individualized Major. An approved individualized major of thirty credit hours may be presented instead of the departmental majors listed above. This major is intended for students with clearly defined academic or career objectives who feel that their specific needs are not met by the departmental major option nor by the interdisciplinary program option described below. A student in the College of Arts and Sciences may propose a plan for an individualized major, using the form available in the Dean's office. The major must satisfy the following conditions:
1. The proposed major must include at least 30 credit hours but not more than 48 credit hours chosen from two or more departments.
2. None of the courses chosen may be courses used to meet the General Education Requirements.
3. The proposed major must be supported and supervised by a faculty adviser.
4. A comprehensive statement by the student justifying the major must accompany the Individualized Major form. This form must list the specific courses to be taken, and will be signed by the student and the faculty supervisor before it is presented to the Dean's office for approval. Any revisions must also be approved by the Dean of the College.
5. The proposed major must be submitted to the Dean of the College of Arts and Sciences for approval, preferably by the beginning of the junior year, but no later than the deadline for filing for degree candidacy.

The selection of courses for the individualized major should reflect serious deliberation on the part of the student and adviser. Normally, the individualized major will not include lower division courses or courses of an introductory nature.

The individualized major may be freely substituted for a departmental major in any of the various combinations available to students in meeting major requirements for the Bachelor of Arts degree. Courses taken for this major may not be counted for credit toward a minor or a second major.

Completion of Major Field Requirement
In addition to completing either a departmental or an individualized major, students must complete one of the following:
1. An academic minor. The faculty recommends that minors be selected that are correlated to the major. No course may be used to fulfill two majors or both a major and a minor requirement except with the permission of the Dean of the College.
2. An approved individualized minor of 15 credit hours may be presented in lieu of the departmental minor. At least 9 credit hours must be taken beyond the introductory level. None of the courses chosen may be courses used to meet the General Education Requirements. Forms for individualized minors are available in the Dean's Office. A student may not graduate with both a minimum individualized major and an individualized minor as the method of fulfilling major area graduation requirements.
3. A second academic major. In addition to the first major areas listed above, Physical Education may also be selected. An approved individualized major may also be presented in fulfillment of requirements of a second major.
4. A complementary major. A major which enhances and expands a first major. This major may not be a first major.
5. A first major with at least forty credit hours. However, no more than forty-eight credit hours from one department may be applied toward the 124 required for graduation. This limitation does not apply to students pursuing an English major and an English Writing minor, students pursuing a double major in Geography and Meteorology or pursuing a Meteorology major and a Geography minor in the Department of Geography and Meteorology, students pursuing double majors in the Department of Foreign Languages and Literatures, students pursuing double majors in Mathematics and Computer Science in the Department of Mathematics and Computer Science, the Bachelor of Music or Bachelor of Music Education degrees, or students pursuing a Bachelor of Fine Arts degree.
6. An interdisciplinary minor, see listing below.

Interdisciplinary Programs
The College of Arts and Sciences offers nine Interdisciplinary Programs of study which students may pursue instead of the major options outlined above. These programs are coordinated by special administrative committees composed of faculty members drawn together by their interest in a particular subject not defined by boundaries of the traditional academic disciplines. Interdisciplinary Programs are currently offered in American Studies, Broadcast Meteorology, Chinese and Japanese Studies, Environmental Science, International Economics and Cultural Affairs, International Service, and complementary majors in Modern European Studies and Pre-Seminary Studies.

A departmental second major, a complementary major, or departmental minor may be added to the Interdisciplinary Programs with approval of the Dean's office. In addition, minors in Interdisciplinary Programs in American Studies, Applied Statistics, Bioethics, Business Administration, Chinese and Japanese Studies, Environmental Studies, Ethnic Studies, Film Studies, Gender Studies, Human Aging, Liberal Arts Business, and Political Communication may be added to departmental majors.

BACHELOR OF MUSIC DEGREE (128-136 CR.)
To be eligible for the Bachelor of Music degree, students must complete the required curriculum for the program area. In addition, they must pass all performance tests set for them by the Department of Music. They must earn 136 credit hours for the Church Music program or 128 credit hours for the Composition or Performance program. They must maintain a grade point average of 2.00. Two options are offered the student in the church music program: organ and voice. Each student is expected, however, to acquire sufficient skill in organ performance and choral directing to assume a position as a qualified parish musician.
A. General Education Requirements
For details see the Bachelor of Arts degree.
1. First Year Core ................. 10 Cr.
2. Academic Area Studies
   a. Theology: one foundational and one upper level course 6 Cr.
   b. ENGL 200 .................. 3 Cr.
   c. Global Cultures and Perspectives .......... 3 Cr.
   d. Historical Studies .................. 3 Cr.
   e. Studies in Social Analysis ............... 3 Cr.
   f. Studies in Natural and Behavioral Sciences/Mathematics 8 Cr.
   g. PE 101-105 .................. 1 Cr.

B. Music Requirements
The requirements for the major fields are given on page 123.

BACHELOR OF MUSIC EDUCATION DEGREE (138-142 CR.)
To be eligible for this degree, students must complete the curriculum described below. In addition, they must pass all performance tests set for them by the Department of Music. Three specializations are offered: vocal, instrumental, and combination. The combination specialization is designed for students who wish to prepare themselves for teaching in both the vocal and instrumental fields. Any one of the specializations also meets state requirements for the teaching of general music. Students must earn a total of 138 credit hours in the vocal specialization, 140 credit hours in the instrumental specialization, and 142 credit hours in the combination specialization. They must have a grade point average of 2.50. In addition to meeting the music requirements for the Bachelor of Music Education degree, each student must be formally admitted into the Teacher Education Program and the Professional Semester. See requirements listed in the Department of Education under Secondary Education, page 78.

A. General Education Requirements
For details see the Bachelor of Arts degree.
1. First Year Core ................. 10 Cr.
2. Academic Area Studies
   a. Theology: one foundational and one upper level course 6 Cr.
   b. ENGL 200 .................. 3 Cr.
   c. Global Cultures and Perspectives .......... 3 Cr.
   d. Historical Studies .................. 3 Cr.
   e. Studies in Social Analysis ............... 3 Cr.
   f. Studies in Natural and Behavioral Sciences/Mathematics 8 Cr.
   g. PE 101-105 .................. 1 Cr.

B. Professional Education Requirements
1. ED 203 .................. 2 Cr.
2. ED 204 .................. 3 Cr.
3. ED 305 or 306 or 307 ............... 1 Cr.
4. ED 457 .................. 3 Cr.
5. ED 459 .................. 10 Cr.
6. ED 460 .................. 3 Cr.
7. ED 474 .................. 3 Cr.
8. ED 475 .................. 3 Cr.
9. ED 485 .................. 2 Cr.
10. ED 489 .................. 3 Cr.
11. SPED 340 .................. 3 Cr.
3. Academic Area Studies Option
   Select two of the following:
   a. Fine Arts or Fine Arts-Literature ............... 3 Cr.
   b. Foreign Language, one course above 101 ........... 3-4 Cr.
   c. One course in Philosophy or History ............... 3 Cr.

C. Music Requirements
The requirements of the major field are given on page 123.

BACHELOR OF SCIENCE DEGREE (124 CR.)
A. General Education Requirements
For details see Bachelor of Arts degree.
1. First Year Core ................. 10 Cr.
2. Academic Area Studies
   a. Theology: one foundational and one upper level course 6 Cr.
   b. ENGL 200 .................. 3 Cr.
   c. Global Cultures and Perspectives .......... 3 Cr.
   d. Historical Studies .................. 3 Cr.
   e. Studies in Social Analysis ............... 3 Cr.
   f. Studies in Natural and Behavioral Sciences/Mathematics 8 Cr.
   g. PE 101-105 .................. 1 Cr.

B. Major Field Requirements
A student must complete one science major of at least 32 credit hours (biology, chemistry, computer science, geology, mathematics, meteorology, physics, psychology) and:
- 1. A science minor, or
- 2. A non-science major, or
- 3. The Liberal Arts Business Minor (see page 207 for details), or
- 4. The Business Administration Minor (see page 203), or
- 5. An Education Minor, or
- 6. An Applied Statistics Minor;
OR two minimum science majors (biology, chemistry, computer science, geology, mathematics, meteorology, physics, psychology);
OR complete at least 40 credit hours in the first major.
No more than 48 credit hours from a major department may be applied toward the 124 credit hours required for graduation.

The geography major is offered as a special program in the Department of Geography. The departmental major or the individualized major may be chosen provided that the major is at least 32 credit hours but not more than 48 credit hours; that courses for an individualized major are chosen from the sciences listed on page 44, and that other restrictions on majors are followed.

BACHELOR OF SCIENCE IN EDUCATION DEGREE (124 CR.)
Completion of a special curriculum with a major in elementary education leads to the degree of Bachelor of Science in Education. This degree is intended for students who plan to become teachers in elementary schools. The requirements for this degree are given in the announcement of the Department of Education on pages 76-77.

BACHELOR OF SCIENCE IN FINE ARTS DEGREE (124 CR.)
A. General Education Requirements
For details see the Bachelor of Arts degree.
1. First Year Core ................. 10 Cr.
2. Academic Area Studies
   a. Theology: one foundational and one upper level course 6 Cr.
   b. ENGL 200 .................. 3 Cr.
   c. Global Cultures and Perspectives .......... 3 Cr.
   d. U.S. Cultural Diversity ............... 3 Cr.
   e. Studies in Social Analysis ............... 6 Cr.
   f. Studies in Natural and Behavioral Sciences/Mathematics 12 Cr.
   g. PE 101-105 .................. 1 Cr.

B. Major Field Requirements
1. The student must complete a major in art consisting of at least 54 credit hours, including ART 101, 102, 121, 122, 132, 162, 221, 231, 251, one from (311, 317, 318, 319, 320, or 321) and 493. A concentration must be chosen in painting, sculpture, ceramics, photography, graphic design or art history.
2. The student must receive approval by the Department of Art of a portfolio presentation by the beginning of the junior year to be eligible for this degree.
Special Academic Regulations for the College of Arts and Sciences

REGULATIONS CONCERNING GENERAL EDUCATION REQUIREMENTS

1. A course may not be used to meet more than one General Education Requirement, with the exception of the required courses in diversity (Global Cultures and Perspectives or U.S. Cultural Diversity). Appropriately designated diversity courses may be applied simultaneously toward fulfillment of certain area requirements.

2. Only courses of at least three credits may be used in meeting General Education Requirements, excluding the requirement in Physical Education.

3. Courses taken to fulfill major requirements may be presented in fulfillment of General Education Requirements where applicable.

RESTRICTIONS ON THE USE OF CREDIT HOURS FOR DEGREES IN THE COLLEGE OF ARTS AND SCIENCES

1. A student may apply no more than four credit hours in Physical Education 101-149 toward a degree in the College of Arts and Sciences.

2. At most, four credit hours from the Computer Science courses numbered 128, 225, 226, and 290 may be applied toward a degree.

3. Non-music majors are limited to 16 credit hours of applied music, of which no more than 4 credit hours may be in ensemble music. For further clarification, see page 127.

4. No more than 48 credit hours in any one department may be applied toward the total of 124 credit hours required for graduation. This limitation does not apply to students pursuing: 1) double majors in Mathematics and Computer Science, 2) majors in Geography and Meteorology, and 3) a professional preparatory programs a student may complete while pursuing a liberal arts major.

5. A student may apply no more than 15 credit hours for the following courses: Applications of Computers, Programming Languages, Computer Science, and Management Information Systems.

Note: A student who transfers from one of the professional colleges into the College of Arts and Sciences may apply credits within the restrictions listed above. For further clarification, consult the Dean of the College.

Professional and Pre-Professional Areas

The College of Arts and Sciences offers degrees especially designed for teaching in elementary schools, teaching of music, performance of music, creation of art works, work in physical education and social work. The appropriate degrees are described earlier, pages 41-46. In addition, students can prepare for teaching in secondary schools under a variety of majors for Bachelor of Arts and Bachelor of Science degrees. The Deaconess Program, the prelegal program and the premedical arts programs are professional preparatory programs a student may complete while pursuing a liberal arts major.

Students interested in any of these programs should declare the program before entering the sophomore year.

Those pursuing an Associate in Science degree may elect the cytotechnology certification option. This program requires the student to complete a one year program in an accredited school of cytotechnology and a one year prescribed course of study at Valparaiso University. The credits from the cytotechnology program (usually 30) will transfer to Valparaiso University to meet about half of the requirements for the A.S. degree. See pages 40-41 for the degree requirements for the Associate in Science degree. Students should contact a premedical arts advisor for specific science courses that must be completed.

TEACHER EDUCATION PROGRAMS

The Teacher Education Program is under the direction of the Department of Education. Eligibility for admission to the program is determined by the department.

Note: Major and minor areas for teacher certification as in the list below are not the same as academic majors or minors. Consult the Department of Education for those courses required for major and minor areas for teacher certification.

The University currently prepares applicants for certification in the following types of teaching:

Elementary

General Elementary (Grades 1-6) Endorsements in:

- Reading
- Special Education (learning disabilities/neurologically impaired)
- Coaching
- Health Education
- Music
- Physical Education
- Recreation
- Visual Arts

Junior High/Middle School endorsement (Grades 5-9)

- Social Studies
- Language Arts
- Mathematics
- Science
- Foreign Language
- Visual Arts

Senior-Junior High/Middle School endorsement (Grades 8-12)

- Coaching endorsement
- English major or minor
- Foreign Language major or minor
- French
- German
- Latin
- Spanish
- Health and Safety minor
College of Arts and Sciences

Mathematics major or minor
Music minor
Physical Education minor
Reading minor
Science
Biology primary, supporting or minor
Chemistry primary, supporting or minor
Physics primary, supporting or minor
Earth, Space, Science supporting area
General Science supporting area
Mathematics supporting area
Physical Science supporting area
Social Studies
Economics primary or supporting
Geography primary or supporting
Government primary or supporting
Psychology primary or supporting
Sociology primary or supporting
U.S. History primary or supporting
World Civilization primary or supporting
Special Education (learning disabilities)
Speech minor
Visual Arts major or minor

All Grade Education (Grades 1-12)
Coaching endorsement
Music area major
Music major or minor
Physical Education major or minor
Visual Arts major or minor
Special Education (learning disabilities)

School Services Personnel
Nurse

PREPARATION FOR THE MEDICAL ARTS

Students can prepare for entrance into medical, dental, veterinary, medical technology, physical therapy, or paramedical schools by entering one of the premedical arts programs of the College. Students in these programs must have their schedules approved at the beginning of each semester by a major adviser and an assigned premedical arts academic adviser. Advising in the premedical arts is handled by premedical advisers, who are members of the Committee on Pre-Medical Arts. All recommendations to the professional schools are sent out by this Committee: Professors Cook (Chemistry), Associate Professors Hicks (Biology), Bradley (Chemistry) and Goyne (Chemistry).

Premedical and pre-dental students are invited to join the Pre-Medical Society, a student organization which promotes interest in medicine and dentistry through a program of guest lectures and social events. Those with outstanding academic records may be invited to join Alpha Epsilon Delta, a national medical honorary society.

In some fields such as medicine, dentistry and veterinary medicine, completion of a Bachelor of Arts or Bachelor of Science degree is often required before admission to a professional school. However, if three years or less of college work are needed for entrance into a professional program, a student may earn a bachelor's degree through the University's Combined Liberal Arts-Medical Arts program. This involves three years of work at Valparaiso University and one year of work at an approved professional school. Details are in the next section of this catalog. This program is often used by students in medical technology.

Students who want to enter allied health fields which require two years or less of college preparation may want to earn the Associate in Science Degree described on pages 40-41. Further information about allied health fields may be obtained from the office of the Allied Health Adviser, Professor F. Meyer.

Under the course, GS 395 (see page 53), two topics are offered in the Summer I Session (see page 211) that are of interest to students in premedical arts: Medical Apprenticeship and Dental Apprenticeship. Details are given in a Summer Session announcement each year.

COMBINED LIBERAL ARTS-MEDICAL ARTS PROGRAM

Students may complete the degree Bachelor of Arts or Bachelor of Science from Valparaiso University by completing three years of study at this University and completing an additional year's work at an approved school of medicine, dentistry, veterinary medicine, medical technology or other allied health disciplines. Prior approval of the program must be secured from the Committee on Pre-Medical Arts.

Specifically, students who elect one of these programs must meet the following requirements:
1. They must spend the junior year in residence at Valparaiso University.
2. They must meet all General Education Requirements for the Bachelor of Arts or Bachelor of Science degree with the exception that one course in theology is waived.
3. They must complete an academic major. For the Bachelor of Science degree this major must be in one of the science fields.
4. They must offer at least 93 semester credit hours of college work.
5. They must apply for graduation by the deadline date as noted at the front of this catalog and present to the Office of the Registrar an official transcript of an additional year's satisfactory work at an approved professional school.

PREPARATION FOR THE STUDY OF LAW

According to the consensus of legal educators, a specified major is not a prerequisite to the study of law. Significant qualities of undergraduate preparation derive from the intellectual discipline required by exacting teachers rather than the subject matter of what is taught. Prelaw students should select an academic major and consult with their academic adviser and a prelaw adviser to select courses in the student's areas of interest which will place demands on analytic skills and both verbal and written expression.

Students in this program may express common interests through the Pre-Law Society.

PREPARATION FOR SEMINARY

Students may prepare themselves for seminary entrance by enrolling in the pre-seminary program of Valparaiso University. This program meets all the standards of the Association of Theological Schools for undergraduate education. Students preparing for seminary should, with their first major, take the complementary major in Pre-Seminary Studies, see page 143. Upon graduation from this program, students are usually accepted into the seminaries not only of the Lutheran Church Missouri Synod and the Evangelical Lutheran Church in America, but also of other Protestant bodies, and in graduate divinity schools throughout the United States.

A student who is interested in preparing for seminary entrance is helped by an adviser to select appropriate undergraduate courses. These include studies in the arts and humanities, in theology, in the biblical languages and in areas of the student's own special interest.

Further information on this program is available from the Chair of the Department of Theology.

ARTS AND SCIENCES PRE-ENGINEERING PROGRAM

Applicants for admission to the College of Engineering may require additional work, usually in mathematics or sciences, before admission is granted. Such students may be admitted to the College of Arts and Sciences for this preparation. Students should consult the Dean of the College of Engineering for details.

ARTS AND SCIENCES PRE-NURSING PROGRAM

In some cases students applying for admission to the College of Nursing may require additional preprofessional work, usually in the biological and social sciences, before admission is granted. A limited number of such students, as well as late applicants, are admitted to the College of Arts and Sciences. These students are helped by the College of Nursing to develop a course of study which will prepare them for admission to the College of Nursing. Students who successfully complete this course of study, including all the liberal arts pre-nursing requirements given on page 198, with a standing of 2.00 or better may then apply to the Dean of the College of Nursing for admission to that College.

PROGRAM OF STUDIES IN DEACONESS MINISTRY

The University and the Lutheran Deaconess Association cooperate in the education of women for service in Deaconess Ministry.

A deaconess student may choose one of the following education plans:

PLAN 1. Students complete the requirements for the Bachelor of Arts degree with a major in Theology, minor in a related field. Attendance at Valparaiso University during the junior and senior years is required. Practical courses are Fieldwork (two semesters) and Clinical Deaconess Education. A year of internship is required between the junior and senior years. This is a year of supervised learning through work in a church-related setting, enabling the student to develop knowledge and skills for Deaconess Ministry.
College of Arts and Sciences

PLAN 2. Students complete the requirements for a major at Valparaiso University in nursing, social work, education, or music. In addition they take at least a minor in Theology. Practical requirements are met in connection with the practicum for the major. A year of internship is an option.

A plan for two semesters plus a summer session. The student takes a full complement of theo logical courses, including Fieldwork (one semester) and Clinical Deaconess Education. The student does one year of internship following completion of the academic work at Valparaiso University. Pi Delta Chi is a professional society of deaconess students. This organization helps students in the understanding of the diaconate and the varieties of ministries in which they can serve God and people. Deaconess students participate in various formation, worship, and social activities. The residence requirement for PLAN 1 students is two years. Students under PLAN 2 or PLAN 3 should discuss the residency requirement with the staff of the Lutheran Deaconess Association.

The education program is under the counsel and guidance of the staff of the Lutheran Deaconess Association. Inquiries should be directed to the Director of Student Services, Center for Diocesan Ministry, 1304 Laporte Avenue, Valparaiso, Indiana 46383-9978.

COMBINED LIBERAL ARTS-ENGINEERING PROGRAM

Students may earn in five years (ten semesters) both the Bachelor of Arts degree and one of the Bachelor of Science in Engineering degrees. They may earn the two degrees by completing one of the engineering curricula and the General Education Requirements of the Bachelor of Arts degree as well as the major requirements of the College of Arts and Sciences. This requires them to earn 162 credit hours and to have a standing of at least 2.00 in all of their work. Students who elect such a program must have their schedules approved by both the Dean of the College of Arts and Sciences and the Dean of the College of Engineering at the beginning of each semester. Sample or representative curricula for such programs may be obtained upon application to the Dean of the College of Engineering.

Departmental Honors Work

Honors work is designated for students of exceptional ability who may benefit by earning a limited number of the credits required for graduation through supervised independent study rather than through regular course work. Students who apply for Honors Work should understand that their work will be evaluated according to the highest standards of scholarly achievement. Honors Work may be pursued by any student who is a degree candidate in the College of Arts and Sciences and whose major or program is administered by a department or an administrative committee within the College.

A student who has completed at least 80 credit hours, but has not yet entered upon the work of the last two semesters, and who has a cumulative grade point average of at least 3.00 and a grade point average in the major of at least 3.50 may apply through the major department or program committee for admission to Honors Work. To apply, the student must submit a plan for a major independent project which will be undertaken under the supervision of a member of the major department or program. The application form, which requires the student to articulate the independent project briefly, clearly, and with a timetable and modest bibliography, is available in the dean’s office. (For more information, please attend the Lumina Futures program held annually during the spring semester.) This plan must be presented to the chair of the student’s department or program for approval and forwarded to the dean’s office no later than 12:00 P.M. on the third Monday of April of the student’s second semester, junior year. The dean will then forward the application to the Scholarship and Advising Committee for final approval. If the proposed independent study project is approved, the student shall be enrolled by the Dean’s Office in the first semester of the senior year in course numbered 497 “Honors Work in (the major department or program).” A student who has been admitted to Honors Work must present four copies of a completed draft of the project to the chair of the major department (or program) at least ten class days (November 29, 1999) before the beginning of the final examination period of the student’s first semester of the senior year. With prior approval, the student may substitute for the completed draft a status report demonstrating substantial progress (in certain areas, such as in the experimental sciences). In the case of a status report, the student should describe the work accomplished during the semester and the plans for continued work during the following semester. The project is then judged at midyear by a project committee consisting of the chair of the major department or program, the project advisor, one additional department reader, and one outside reader who is a member of the Scholarship and Advising Committee. If, based on the status report or draft, the project committee affirms the likelihood that the student will be able to conclude an exceptional piece of scholarship appropriate to the student’s discipline by the end of the following semester, that student will be admitted to Candidacy for Honors. If the project has not progressed as had been expected (the student must earn an A or A- for the first semester), the student will be denied admission to Candidacy for Honors. The student should consult with the project advisor for departmental/program evaluation policy. If admitted to Candidacy for Honors, the student shall be registered by the Dean’s Office during the second semester of the senior year in course numbered 498, “Honors Candidacy in (major department or program)” A student must complete the independent study project begun in the previous semester, incorporating additions or revisions suggested by the project committee to its satisfaction. Four copies of the completed project report must be delivered to the chair of the major department or program at least fifteen class days (April 19, 2000) before the beginning of the final examination period of the student’s final semester. The original project committee shall then schedule an oral examination for the Honors candidate to assess the student’s knowledge of matters covered in the independent study project and any other closely related matters deemed appropriate by the project committee. The Honors Candidate shall be notified beforehand of the related matters to be included in the examination. If, in the opinion of the project committee, the candidate is worthy of Honors, it shall recommend to the dean that the student be awarded three credit hours with a grade of A or A- for course numbered 498 and be graduated “With Honors (in the major field).” If the candidate is not deemed worthy of Honors, the office of the dean, upon consultation with the project committee, may recommend that the student be granted three credit hours for Independent Study in the major department or program, with a grade determined by the project committee. Two copies of the final project report will be given to the Dean’s Office for archival purposes.

During the semester or semesters of engagement in Honors Work, a student is not allowed to carry more than 12 credit hours in addition to Honors Work. A student enrolled in Honors Candidacy is excused from all regular final examinations of the last semester of the senior year.

A student whose major requires completion of a senior project may register for Honors Work in lieu of the departmental senior project course, after securing permission from the department chair. The same procedures as outlined above must be followed.

Cooperative Education

Cooperative Education in the College of Arts and Sciences is a program in which students combine professional, paid work experience with academic programs. Students may be employed in full-time (called alternating) or part-time (called parallel) placements. Normally, a semester of full-time employment will earn a maximum of 3 credit hours; a full-time summer employment, a maximum of 2 credit hours; and a part-time (parallel) placement requiring a minimum of fifteen hours per week, 1 credit hour. Parallel placements of fewer than fifteen hours per week may be given 0.5 credit hours. Students will normally complete a minimum of two alternating or
four parallel work assignments. The program is available through various departments as well as through the general offerings of the College. The College's general program is intended both for undeclared majors who are able to use cooperative education on an exploratory basis and for declared majors who may wish to participate outside their major department on an elective basis.

The following policies govern Cooperative Education within the College:
1. The student works under the advisement of a faculty member who monitors the work experience, evaluates the required written reports by students, and assigns the course grade.
2. A student is eligible upon completion of two semesters of enrollment in residence with a minimum cumulative grade point average of 2.50. Co-op is open to students upon completion of the freshman year.
3. Placements require prior approval of the Coordinator of Cooperative Education—retroactive credit will not be granted.
4. Course credits count as electives toward graduation or, in certain academic departments where specified, count toward the department's major or minor.
5. No more than a combined total of 12 credit hours earned through cooperative education, internship, field experience, or other work experiences may be applied toward the meeting of minimum graduation requirements. Exceptions may occur in certain departments due to professional certification requirements. Additional restrictions may apply in departments where the cooperative education credits count toward major or minor requirements.

College of Arts and Sciences

General Courses Offered by the College of Arts and Sciences

First Year Core (Cr. 10, CORE 110 and CORE 115). A writing-intensive interdisciplinary course that initiates first year students into the VU academic community by exploring significant themes in human experience, engaging students with resources from the areas of history, theology, philosophy, literature and the arts. It is a core experience extending for two semesters, 5 credits each semester, in seminar sections of about 20 students. It is taught by a trained core faculty from areas across the University, the faculty meeting regularly to promote extensive collaborative activity for both faculty and students.

Note: Course 390 is available in Overseas Study Centers only.

GS 100. VU Strategies.
Cr. 0. A course to assist first-year students in developing skills necessary for college success, including study skills, learning styles, time management and test-taking strategies. Assistant to the Dean Luci Hicks' signature required.

GS 390. Topics in English Life and Culture.
Cr. 3. A study of selected aspects of English life and culture. Topics might include, but are not restricted to politics, education, religion, business, environment, and multi-cultural issues. Cambridge Center only.

GS 390. Topics in German Life and Culture.
Cr. 3. A study of selected aspects of German life and culture. Topics might include, but are not restricted to politics, education, religion, business, environment, and multi-cultural issues. Reutlingen Center only.

CPED 381. Cooperative Education I.
Cr. 0.5-3. This course is a prearranged, approved professional work experience with a cooperating employer. A written report is required of each student. The prerequisites are one year in residence, a minimum cumulative grade point average of 2.50, and the approval of the Coordinator of Cooperative Education.

CPED 382-383. Cooperative Education II-III.
Cr. 0.5-3. The prerequisites for additional cooperative education experiences are the same as for Cooperative Education 381, plus positive work performance evaluations by the previous cooperative employer(s). This course may be repeated beyond 383 for additional credit, subject to the guidelines of the College, as stated on page 51.

GS 395. Independent Study Project.
Cr. 1-3. An independent project is conducted on a topic selected by a group or individual. Grading is limited to the use of S or U. Prerequisites: Approval of a faculty sponsor and the Dean of the College of Arts and Sciences. This course is administered by the Dean of the College for students who desire to work on a specialized academic project. A proposal for an independent study project must be submitted at least three weeks before the beginning of the registration period for the semester in which the project is to occur. Further details and an application form may be obtained at the Office of the Dean of the College of Arts and Sciences.

Urban Semester. The following courses are offered in a residential program in Chicago in cooperation with the Associated Colleges of the Midwest:

GS 338. The Core Course: Public Policy in an Urban Center.
Cr. 4. A survey of three or four important urban policy areas giving special attention to issues being publicly discussed during the current semester. The course relies on presentations by individuals actively involved with the topic at hand, selected to provide different and sometimes contradictory perspectives. The policy areas are selected from among the following: health care, urban politics, neighborhood development, mass transportation, public education and municipal finance. SU grade.

GS 348. The Seminar.
Cr. 4. Each student chooses one urban issue to examine in depth in a seminar involving readings, class discussions and field visits. Topics represent a range of academic disciplines, usually making it possible to select a seminar relating to a major. Recent seminar titles included City Politics, Urban Planning, Arts in the Black Community, Sexism and Racism, The Helping Professions, Dynamics of Urban Housing. Graded A-F.

GS 386. The Internship.
Cr. 4. Each student devotes 15 hours per week to an agency which can provide direct involvement in city life and exposure to a particular career environment. The placement is determined jointly by the student and staff during the first week of the semester. A wide range of placements is available. Graded either A-F or SU at the student's choice upon entry into the program.

GS 395. Independent Study Project.
Cr. 4. Each student pursues one topic from the Chicago experience under the supervision of a faculty member. Some projects grow out of the Internship whereas others are based on another component of the program. The student may elect to write a research paper or a creative piece, or to use photographic or other visual media. Graded A-F.

All sophomores, juniors and seniors at the University are eligible to participate in this program. Students shall be admitted to this program on the recommendation of the Urban Studies Advisory Committee.

Valparaiso University students register at Valparaiso for the Chicago Urban Semester and pay to Valparaiso University the general fee charged of all full-time students. Expenses for travel, meals and lodging are paid directly by the students. Full credit toward graduation is given for all courses taken in the Urban Studies program. The program is offered in both the fall and the spring semesters.
American Studies

Administrative Committee:
Professor Feaster (English, Chair);
Professors Albers (Theology), Janke
(Geography and Meteorology), Berg
(History), Piehl (Christ College),
Sponberg (English), Trost (Political
Science).

Students completing the Program in
American Studies will have fulfilled major field
requirements for the Bachelor of Arts degree
under the Interdisciplinary Program Option.

Objectives. The Program in American Studies
offers the undergraduate student an
opportunity to study the whole civilization of
the United States—its fundamental ideas,
institutions and symbolic expressions as
these have developed over time. This
common subject matter is examined through a
variety of methods and materials that
reach across traditional disciplines. The
student must, therefore, become familiar
with the approaches of the social sciences,
the fine arts, and the humanities as these
bear on the subject of American civilization.
By drawing together these different
perspectives, American Studies enables
students to attain a broad vision of the
civilization, while deepening their
understanding of what is both unique and
universal about the United States.

Resources. Valparaiso University has
special resources for the student in
American Studies. Among these are the
Library of American Civilization, containing
more than 15,000 volumes of American
materials on microfiche; the Sloan Art
Gallery, and the Washington Semester
Program (page 12), which allows students to
spend a semester in Washington, D.C., and
intern at such institutions as the National
Archives and the Smithsonian.

Program Requirements. A minimum of
48 credit hours in courses approved by the
Administrative Committee. Courses must
include the 24 credit hours designated in the
Program Core and an additional 24 credit
hours selected from the list of approved
elective courses. The student and the Chair
of the Committee, who is adviser for all
students in the Program, may select courses
that fulfill individual academic or career
objectives. Courses not included in the list of
approved electives may be substituted in
some instances if they are approved by the
Chair of the Committee. Students are
encouraged to undertake independent study
projects.

Honors Work may be undertaken in
American Studies with appropriate approval.
Students should register for AMST 497:
Honors Work in American Studies, and 498:
Honors Candidacy in American Studies (see
page 50).

Area Minor in American Studies. A
student fulfilling major field requirements
under a Major Option may present an area
minor in American Studies for the required
minor. Requirements for the minor are a
minimum of 24 credit hours approved by the
Committee on American Studies. Courses
must include at least 12 credit hours
selected from the Program Core. The
remaining credit hours are selected from the
list of approved elective courses.

Program Core

**ART 320** American Painting or
**ART 321** American Architecture . . . . 3 Cr.
**ENGL 401** American Literature I . . . . . 3 Cr.
**ENGL 402** American Literature II . . . . 3 Cr.
**HIST 220** The American Experience to 1877 . . . . 3 Cr.
**HIST 221** The American Experience in the
Modern World . . . . 3 Cr.
**POL S 120** Government of the U.S . . . . . 3 Cr.
**THEO 349** Independent Study . . . . . 3 Cr.

Elective Courses

**ART 311** Modern Art since 1945 . . . . . 3 Cr.
**CC 300** Seminar—Modern American
Social Thought . . . . . 3 Cr.
**CC 300** Seminar—Dorothy Day and James Agee
. . 3 Cr.
**ECON 233** The Economics of Race and Gender . . . . . 3 Cr.
**ECON 300** Economic History of the U.S . . . . . 3 Cr.
**ENGL 365** Studies in American Literature . . . . 3 Cr.
**ENGL 390** Topics in Literature . . . . . 3 Cr.

Note: the Department of English offers courses
noting the Department of History frequently offers
such offerings include: The Novel of Social Criticism in
American Literature, American Literary Realism, and Fiction
by American Women.

**GEO 274** North American Indian on Film . . . . . 3 Cr.
**GEO 301** Regional Geography
of the United States and Canada . . . . . 3 Cr.
**GEO 474** Historical Geography of the U.S . . . . . 3 Cr.

**HIST 225** Racial Minorities and Mainstream
America . . . . . 3 Cr.
**HIST 321** The American Revolution, 1763-1783 . . . . 3 Cr.
**HIST 322** Slavery, Abolitionism
and Sectionalism, 1815-1860 . . . . . 3 Cr.
**HIST 323** Civil War and Reconstruction . . . . . 3 Cr.
**HIST 324** Depression and War: The
United States, 1929-1945 . . . . . 3 Cr.
**HIST 326** The Age of Anxiety: United States Since 1945 . . . . . 3 Cr.
**HIST 390** Topics in History . . . . . 3 Cr.
**HIST 394** Beats and Hippies . . . . . 3 Cr.
**HIST 492** Reading and Discussion Seminar . . . . . 2-3 Cr.
**HIST 493** Research Seminar— . . . . . 3 Cr.

Note: The Department of History frequently offers
seminars under 390, 492 (see above) and 493 that
are applicable to the American Studies Program.
Recent offerings include: Slavery in the Americas,
History of the American South, American
Environmentalism, Pearl Harbor, American
Immigration History.

**PHIL 290** Philosophical Topics:
American Philosophy . . . . . 3 Cr.
**POLS 220** State and Local Politics in the U.S . . . . . 3 Cr.
**POLS 320** Problems in State and Local Politics . . . . . 3 Cr.
**POLS 326** The Presidency . . . . . 3 Cr.
**POLS 327** Congress . . . . . 3 Cr.
**POLS 340** Constitutional Law I . . . . . 3 Cr.
**POLS 341** Constitutional Law II . . . . . 3 Cr.
**POLS 355** Problems in Political Philosophy:
American Democracy . . . . . 3 Cr.
**SOC 330** American Minority Lifestyles
and Human Rights . . . . . 3 Cr.
**SOC 328** Urban Sociology . . . . . 3 Cr.
**SOC 347** Race and Ethnic Relations . . . . . 3 Cr.
**SOC 390** Issues in Sociology: American
Institutions . . . . . 3 Cr.
**TTVA 337** American Theatre . . . . . 3 Cr.
**THEO 320** Topics in Christian History: History
of Lutherans in America . . . . . 3 Cr.
**THEO 366** Native American Religions . . . . . 3 Cr.
Art

Associate Professors Corazzo, Frey, Morgan (Chair); Assistant Professors Sirko, Tomasek.

The Art Department offers instruction in basic design, graphic design, drawing, digital art, painting, photography, sculpture, ceramics, art of fiber, art education and art history. Interdisciplinary majors are possible which combine these areas with such fields as journalism, drama, marketing, communications and others. Upperclass majors typically work independently with individual members of the faculty. Gallery and cultural resources on campus and in nearby Chicago are an integral part of the curriculum. Frequent use is made of the outstanding collection of American art in Valparaiso University's Brauer museum of Art, which offers an active exhibition program.

A major in art may lead to careers in the fine arts and related fine arts services such as museum technology and gallery sales; in areas of visual communication such as graphic design, photography and illustration; and in the field of art education. A graduating art major is also prepared for graduate study in art history and the fine arts.

Major. A minimum of 30 credit hours in art which must include ART 101, 102, 121, 132, 162, 221, 231, and 251. The Bachelor of Science in Fine Arts degree requires 54 credit hours of art; see page 45.

After completion of the core courses for each degree, a concentration must be chosen in painting, sculpture, ceramics, photography, graphic design or art history. Recommendation for admission to the B.S. in F.A. program requires a portfolio presentation to the faculty of the Art Department at the beginning of the junior year. Descriptions of specialized programs as well as suggested curricula are available from the Department Chairman. Field trips, art exhibitions, visiting artists and similar events are integral parts of the program of the Art Department.

Minor. A minimum of 15 credit hours in art constitutes a minor. The student may concentrate in studio art or art history. For studio art: ART 101 or 102, 121, 132, and 162 or 231 must be included. For art history: ART 101 and 102 must be included in addition to three other art history courses in the department.

Degrees. Completion of the degree requirements of the College of Arts and Sciences with a major in art leads to the Bachelor of Arts degree intended to provide a general art background, or the Bachelor of Science in Fine Arts degree primarily intended for students desiring to continue their training at the professional or graduate school level. See page 45 for the requirements for the B.S. in F.A. degree. Specialization in art education is possible in either the B.A. or the B.S. in F.A. program; consult the Education Department concerning state and University requirements.

Approval of Schedules. Students who take a major or a minor in art must have their schedules approved by the Chair of the Department at the beginning of each semester. Students who expect to teach art should consult, as early as possible, the appropriate advisor in the Education Department concerning state and University requirements.

ART HISTORY

ART 101. Ancient to Medieval Art History. Cr. 3. A survey of art history from prehistoric times through the Gothic period. Field trip. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

ART 102. Renaissance to Modern Art History. Cr. 3. A survey of art history from the Renaissance to the 19th century. Field trip. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

ART 311/511. Topics in the Theory and History of Art. Cr. 1-4. An investigation of major periods or developments in the visual arts. Included may be historical topics such as Western art history, the history of art theory or such topics as aesthetics or color theory. Field trip. May be repeated for credit provided topics are different. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

ART 317/517. Seventeenth and Eighteenth Century European Art. Cr. 3. A seminar course tracing major themes in Italian, French, Spanish, Netherlands, and British art in the 17th and 18th centuries. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Prerequisite: junior standing or approval of the Chair of the Department.

ART 318/518. Nineteenth Century European Art. Cr. 3. A seminar course tracing major themes in 19th century European art. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Prerequisite: junior standing or approval of the Chair of the Department.

ART 319/519. Early Twentieth Century European Art. Cr. 3. Seminar course tracing major movements in European art from the turn of the century until World War I. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Prerequisite: junior standing or approval of the Chair of the Department.

ART 320/520. American Painting. Cr. 3. A survey of American painting history from colonial times through the present. Field trip. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

ART 321/521. American Architecture. Cr. 3. A survey of American architectural history from colonial times through the present. Field trip. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

STUDIO

ART 121. Drawing. Cr. 3. A basic course in the fundamentals of drawing and using various media. Field trip.

ART 122. Drawing: Advanced Studies. Cr. 3. A study of more advanced techniques and problems involving the drawing media, to include the human figure. Field trip. Prerequisite: ART 121.

ART 132. Introduction to Design. Cr. 3. A course introducing the basic elements and principles of two-dimensional and three-dimensional design. Field trip.

ART 151. Ceramics. Cr. 3. Basic ceramic processes including wheel throwing, hand building, tapestry and coilng. Field trip.

ART 152. Ceramics: Advanced Studies. Cr. 3. Advanced problems in clay construction and glaze formation with opportunities for specialization. Field trip. Prerequisite: ART 151.

ART 162. Photography I. Cr. 3. Introduction to the techniques, history, and aesthetics of black-and-white photography. Field trip.

ART 221. Painting. Cr. 3. Problems in painting in oil and other media. Emphasis on color theory and composition. Field trip. Prerequisite: ART 121.

ART 222. Painting: Advanced Studies. Cr. 3. Continuation of ART 121 with increased concentration on students' individual interests. Field trip. Prerequisite: ART 221.

ART 230. Desktop Publishing. Cr. 3. (Also offered as COMM 230.) Introduction to computer information display techniques ranging from computer generated illustration, charts and graphs, to newsletter and related page layout procedures. No prior computer experience is required.

ART 231. Graphic Design I: Typography. Cr. 3. Introduction to the principles of graphic design. Emphasis is placed on typography. Explores both printed and animated problems. Work is created on the Macintosh. No previous experience is required.

ART 232. Graphic Design II: Advanced Problems. Cr. 3. Advanced problems in visual communications with emphasis on design in the commercial environment. Focus is on the printed word. Special emphasis on text and image, design theory, computer-aided designs and techniques for presentation. Field trip.

ART 251. Sculpture. Cr. 3. Problems in forming sculptural statements in various materials and techniques such as concrete casting, metal welding, wood construction, etc. Field trip. Prerequisites: ART 121 and 133 or consent of the instructor.


ART 262. Photography II: Color. Cr. 3. Introduction to the techniques, history, aesthetics, and criticism of color photography. Students work with color negatives, prints, and transparencies. Field trip. Prerequisite: ART 162 or consent of the instructor.

ART 274. Art of Fiber.  
0+6, Cr. 3. A basic course in fiber manipulation, including loom weaving, tapestry, coiling. Field trip.

0+6, Cr. 3. Advanced techniques and problems in the art of fiber. Field trip. Prerequisite: ART 274.

ART 290. Topics in Art.  
Cr. 3. Specific topics based on interests of students and faculty. Topics may vary from one semester to another. May be repeated for credit if topics are different. Prerequisite: sophomore standing.

ART EDUCATION

ART 341. Elementary School Art-Methods and Materials Workshop.  
0+6, Cr. 3. A basic course providing the prospective teacher with studio experiences in the selection, organization and use of two- and three-dimensional art and craft materials for the elementary school. This course may not be counted toward a minimum major or a minor in art. Field trip.

ART 342. Secondary and Middle School Art-Methods and Materials Workshop.  
0+6, Cr. 3. A basic course providing the prospective teacher with studio experiences in the selection, organization and use of two- and three-dimensional art materials for the middle, junior and senior high schools. This course may not be counted toward a minimum major or minor in art. Field trip.

ART 489. The Teaching of Visual Arts.  
Cr. 3. (See ED 489.) A study of the methods of teaching art in the secondary schools. This course may not be counted toward a major or minor in art. Field trip. Prerequisite: admission to the Professional Semester.

SPECIAL STUDIES

ART 386. Internship.  
Cr. 1-3. Internships in which students work with professional art-related organizations in such areas as photography, graphic design, or with an art museum. Prerequisite: consent of department chair. Grade is S/U only.

ART 390/590. Special Studies.  
Cr. 1-4. (Graduate Cr. 1-3). Specialized work in the practice of art, the teaching of art and the history of art, arranged by a professor and one or more advanced students. Work in crafts, liturgical design, etc. may be included. A S/U grade option may be stipulated at the beginning of the course. May be repeated for credit. Field trip. Prerequisites: upperclass major and consent of the instructor. A formal written proposal is required before registration. The proposal becomes a permanent part of the student's file. Prerequisite for graduate students: undergraduate art major or consent of instructor.

ART 493. Senior Seminar.  
Cr. 3. Independent work in a studio major's specialized program, combined with participation in group discussion and other special events. This work will result in a senior exhibition and portfolio. Field trip. Prerequisite: senior standing in the Bachelor of Science in Fine Arts program.

ART 495. Independent Study in Art.  
Cr. 3. Independent work for junior or senior level students under the supervision of an instructor. Prerequisite: consent of the instructor.

ART 497. Honors Work in Art.  
Cr. 3. See Honors Work, page 50.

ART 498. Honors Candidacy in Art.  
Cr. 3. See Honors Work, page 50.

Biology

Professors G. Davis, F. Meyer; Associate Professors G. Evans, Hicks, Scupham (Chair); Assistant Professor Eberhardt.

Biology is the disciplined study of living organisms. It is also a vital part of liberal education, enabling students to develop an appreciation of their own biological nature as well as of the great variety of organisms and communities of organisms with which they come into contact and upon which they are dependent.

The study of biology may be at many levels: molecular, cellular, organismic, population, community, ecosystem. The department offers instruction at each of these levels designed to meet the requirements for graduate study, for professional schools, and for a teaching career in biology or for working in industrial or governmental positions.

The Biology Department is housed in the Neil science Center, a modern teaching/research facility with state-of-the-art equipment such as advanced research light microscopes and electron microscopes. Nearly all biology courses have a laboratory component and these field or laboratory classes are taught by professors or other experienced faculty. The department makes extensive field trips for its organismal biology laboratory courses to the Indiana Dunes National Lakeshore, which ranks third of all National Parks in species diversity, and at other distinguished natural history institutions in the Chicago area. Biology majors are encouraged to conduct research under the supervision of a faculty member as a part of the graduation requirements. Majors also have opportunities to study abroad at the University's overseas centers or at affiliated institutions as well as at many highly recognized programs sponsored by national laboratories and other distinguished institutions.

Premedical Arts Programs. A major in biology is an appropriate preparation for admission into professional schools and programs such as medicine, dentistry, hospital administration, medical technology, optometry, osteopathy, physical therapy, podiatry, public health, veterinary medicine and other allied health fields. Further information may be obtained from the Chair of the Department or members of the Committee on Premedical Arts.

Major. A minimum of 28 credit hours in biology is required for the Bachelor of Arts degree. Courses must include BIO 171, 172, 270, two of courses 290 to 370, two of courses 420 to 460 and 2 credit hours in 493 and/or 495.

A minimum of 25 credit hours in biology fulfills the minimum requirement for a Bachelor of Science degree, provided that a second major is taken in another science (chemistry, computer science, geology, mathematics, meteorology, physics or psychology). Courses must include BIO 171, 172, 270, one of courses 290 to 370, two of courses 420 to 460 and 2 credit hours in 493 and/or 495.

A minimum of 32 credit hours in biology fulfills the requirements of the Bachelor of Science degree with a single major plus one of the following: a non-science major, a Liberal Arts Business Minor, a science minor, an education minor, or an Applied Statistics Minor. Courses must include BIO 171, 172, 270, two of courses 290 to 370, two of courses 420 to 460, and two credit hours in 493 and/or 495, plus four additional credit hours chosen from BIO 290 to 498.

A minimum of 40, but not more than 48 credit hours in biology fulfills the requirements of the Bachelor of Science degree without a minor. Courses must include BIO 171, 172, 270, two of courses 290 to 370, two of courses 420 to 460, two credit hours in 493, two credit hours in 495, plus at least six additional credit hours chosen from BIO 290 to 499.

Majors who are candidates for the Bachelor of Science degree must take two semesters of general chemistry and one semester of organic chemistry in addition to the requirement in mathematics or its equivalent (see page 44). Majors who are candidates for the Bachelor of Arts degree must take two semesters of general chemistry. Depending on career goals and special requirements for graduate schools and professional programs, majors are
Biology

Advised to include in their plans of study courses in advanced chemistry, advanced mathematics including calculus, computer science, physics, and statistics.

Minor. A minimum of 16 credit hours in biology constitutes a minor. Two options are offered.

General Biology Minor. Courses must include BIO 171, 172, 270 and four additional credit hours from BIO 290 to 493.

Human Biology Minor. Courses must include BIO 151, 152 and eight additional credit hours from BIO 210 to 493.

Biology Club. Students with an interest in biology are invited to join the Biology Club.

Approval of Schedules. All students taking a major or minor in biology and all students planning to teach biological subjects must have their schedules approved by the Chair of the Department at the beginning of each semester.

Note: Entering students who satisfy requirements for Biology 171 or equivalent by passing a departmental placement examination at the beginning of the freshman year, the College Level Examination Program (CLEP) examination in Biology, or the Advanced Placement Examination (AP) in Biology are granted 4 credit hours toward graduation.

BIO 125. Biotechnology.
3+2, Cr. 4. An introductory study of modern biology in which those aspects of biotechnology that affect the welfare of humanity are emphasized. This course is recommended for non-science majors who wish to take only one biology course for partial fulfillment of the General Education Requirements in Natural Science. Not open to students who have received credit for BIO 151 or 171. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement examination.

BIO 151. Human Biology I.
3+3, Cr. 4. An introductory study of the physicochemical nature of cells and tissues, cell division and human genetics, the musculoskeletal system, the nervous system and special senses and the endocrine system and chemical control. May be used in partial fulfillment of the General Education Requirements in Natural Science. Credit is given for either BIO 151 or 171 but not both. This course is required for nursing, physical education, and some allied health students. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement examination. Students may register concurrently for MATH 110 and BIO 151.

BIO 152. Human Biology II.
3+3, Cr. 4. A continuation of Human Biology I. A study of hematology and the anatomy and physiology of the following organ systems: cardiovascular, respiratory, digestive, excretory and reproductive. May be used for partial fulfillment of the General Education Requirements in Natural Science. Prerequisite: BIO 151, MATH 110 or placement higher than MATH 110 in the math placement examination.

BIO 171. Unity of Life.
3+3, Cr. 4. A study of organic molecules, cells, tissues and organs for biology majors and minors. Emphasis is placed on the principles which unify all living forms: structure, energetics, physiology, inheritance and development. May be used in partial fulfillment of the General Education Requirements in Natural Science. Credit is given for either BIO 151 or 171 but not both. This course is required for biology majors and general biology minors including premedical and other preprofessional students. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement examination.

BIO 172. Diversity of Life.
3+3, Cr. 4. A survey of the kingdoms of organisms, their relationships and origins, and their roles in the economy of nature. Emphasis is on the structures and their functions, life cycles, development, distribution and ecology, evolution and the social and economic importance of representative members. Field trips are required. May be used in partial fulfillment of the General Education Requirements in Natural Science. Prerequisite: BIO 151 or 171 or equivalent, or consent of the Chair of the Department. MATH 110 or placement higher than MATH 110 in the math placement examination.

BIO 205. Fundamental Nutrition.
Cr. 3. A study of the basic principles of human nutrition. Emphasis is on practical application and includes a focus on sports nutrition.

BIO 210. Microbiology.
3+3, Cr. 4. A study of bacteria, viruses and selected fungi. Major emphasis is given to understanding infectious disease and immunology. Prerequisites: BIO 151 or 171 and CHEM 111 or 121.

Cr. 3. Basic principles of human nutrition including the functions, requirements and food sources of nutrients. Prerequisite: CHEM 111 and BIO 151 or 152 or consent of the Chair of the Department.

BIO 270. Genetics.
3+3, Cr. 4. An introductory study of the basic laws of genetics, the physical and chemical basis of inheritance, genes as functional and structural units of heredity and development, and qualitative and quantitative aspects of genetic variation, Human genetics and social implications are discussed. May be used in partial fulfillment of the General Education Requirements in Natural Science. Prerequisite: BIO 171 or 151 or equivalent.

BIO 290/490. Biological Topics.
Cr. 2-4. A consideration of various topics in biology through lectures, laboratory work, field work and conferences. The topics are related to staff and student interests. My be taken more than once if topics are different. Prerequisite: certain topics may have specific course requirements. A sample of current and probable offerings are: Advanced Light Microscopy, Biostatistics, Ecology of South Florida, Electron Microscopy, Experimental Botany, Human Genetics, The Art of Scientific Investigation.

BIO 320. Comparative Vertebrate Anatomy.
2+3, Cr. 2. A comparative study of representative vertebrate animals, with emphasis on structures, functions and laboratory dissections. Prerequisite: BIO 152 or 172.

BIO 330. Mammalian Cell Culture.
2+3, Cr. 3. A study of the theory and practice of culturing mammalian cells. Emphasis is on the application of mammalian cell systems in studying experimental cytology, mutagenesis and cell genetics. Prerequisite: BIO 270.

BIO 340. Field Biology: Fall.
2+4, Cr. 3. This course is designed to acquaint students with organisms they are likely to encounter in the field in the late summer and fall months. The lectures emphasize the flowering plants and insects, the most abundant organisms at this time, but in the field attention is paid to other common or conspicuous organisms. Prerequisite: BIO 172.

BIO 350. Field Biology: Spring.
2+4, Cr. 3. This course is designed to acquaint students with organisms they are likely to encounter in the field in the late winter and spring months. The lectures emphasize the flowering plants and/or birds, the most abundant organisms at this time, but in the field attention is paid to other common or conspicuous organisms. Field trips are required. Prerequisite: BIO 172.

BIO 370. Human Environmental Biology.
Cr. 3. A study of the relationships between humans, technology, and the environment. Emphasis is placed on ecological principles, human population growth, resources, and pollution. Field trips are required. Prerequisite: junior standing.

BIO 420. Developmental Biology.
3+3, Cr. 4. An introduction to the descriptive and analytic study of plant and animal development and growth, with emphasis on higher plants and vertebrate animals. Prerequisite: BIO 270.

3+3, Cr. 4. A study of organisms in relationship to their physical and biotic environment. There is considerable field work in local terrestrial and aquatic habitats. Field trips are required. Prerequisite: BIO 172 and preferably a prior field course.

BIO 450. Molecular Genetics.
3+3, Cr. 4. A study of the molecular basis of genetic interactions and physiological processes in prokaryotic and eukaryotic organisms. Topics include biochemistry, immunology, and genetic engineering with medical and pharmaceutical applications. Laboratories emphasize standard microbiological techniques as well as recent advances in gene cloning and molecular genetics. Prerequisites: BIO 270 and CHEM 221.

BIO 460. Cell Physiology.
3+3, Cr. 4. A study of the fundamental physiological activities of animal and plant cells and tissues. The course includes lectures, assigned readings and laboratory work in cell structure and cell organelles, energy transduction and synthesis, membrane transport, excitability and contraction. Prerequisite. BIO 270 and CHEM 221.

BIO 489. The Teaching of Natural Sciences.
Cr. 3. (See Education 489.) A study of the methods of teaching natural sciences in the secondary schools. Includes lectures, discussions, demonstrations and projects. This course may not be counted toward a major or minor in this department. Prerequisite: admission to the Professional Semester.

BIO 493. Seminar in Biology.
Cr. 1. Student and staff presentation and discussion of selected topics in biology. Current topics are Animal Behavior, Biology of Algae, Economic Botany, Endocrinology, Genetic Toxicology, How to Build an Embryo, Human Evolution, Immunology, Protozoology, Somatic Cell Genetics, Temperature Regulation, Viruses. Prerequisites: 12 credit hours in Biology or consent of the Chair of the Department; certain topics may have specific course prerequisites. Normally three topics are offered each semester so that during a two-year period the broad spectrum of topics is available. A maximum of four seminars (on different topics) may be credited toward graduation. SUJ grade optional.

BIO 494. Premedical Arts Colloquium.
Cr. 0-1. (Also offered as CHEM 494.) All Premedical Arts students are expected to register for this course every semester. May not be counted for a major or minor. Students who register for the colloquium for 1 credit must have the consent of the instructor. A maximum of 2 credit hours in this course may be counted toward graduation. SUJ grade.
Biology

BIO 495. Research in Biology. Cr. 1-2. Special research problems. Prerequisites: 12 credit hours of biology, prior approval of a supervising instructor and the Chair of the Department is required. A maximum of 4 credit hours in this course may be applied toward graduation. S/U grade optional.


BIO 499. Biology Colloquium. Cr. 0-1. Biology majors and minors are encouraged to register for this course. Colloquium presents insights into the living world beyond the material found in regular course offerings. S/U grade.

Broadcast Meteorology

Administrative Committee: Associate Professor Kocher (Communication, Chair); Instructor Powell (Communication); Professor Janke (Geography and Meteorology); Assistant Professors J. Knox, Wolf (Geography and Meteorology).

There is a considerable demand nationwide for trained professionals able to effectively and accurately communicate meteorological information, either through the broadcast media or in association with various consulting firms. This major prepares students interested in careers involving broadcasting (cable, television, and radio) and weather forecasting. It is designed to offer sufficient breadth to address necessary preparation in the fields of communication and meteorology. Students selecting this major will have access to the excellent broadcasting and meteorological forecasting facilities in the associated programs.

The Department of Communication operates an industry-quality three-camera production studio, equipped with insert and A/B roll editing bays and chroma key. Special effects and advanced animation editing are readily available through Pentium nonlinear editor workstations.

The Department of Geography and Meteorology maintains the University Weather Center, where students routinely provide weather data and forecasts for Northwest Indiana. Meteorological equipment includes a 50-foot instrumented tower, a UNIDATA Mcidas-X data retrieval and display system, DIFAX map satellite downlink, DTN and Alden Doppler radar feeds, and other computers, providing students with considerable hands-on experience.

Internship opportunities have been established with a number of broadcast stations, including WGN-TV in Chicago. Many students are active members of a regional chapter of the National Weather Association, which sponsors professional and social events, field trips, and public service. In addition, the department is home to VUSIT, one of the largest university storm intercept teams in the country.

Students interested in careers with the federal government, or who are planning to attend graduate school in meteorology, should enroll in the Bachelor of Science program in meteorology.

Program Requirements. A total of 37 credit hours is required. Students completing the program in Broadcast Meteorology will have fulfilled the major field requirements for the Bachelor of Arts degree.

Chapel of the Resurrection

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Media Presentation</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 201</td>
<td>Historical Development of Communication</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 250</td>
<td>Radio Production</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 251</td>
<td>Television Production</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 354</td>
<td>Broadcast News Production</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 358</td>
<td>Advanced Television Production</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 103</td>
<td>Meteorology</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>MET 215</td>
<td>Climatology</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 216</td>
<td>Introduction to Meteorological Observation and Analysis</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 279</td>
<td>Severe Storm Prediction and Nowcasting</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 486</td>
<td>Internship in Meteorology or TVA 357 Performance for the Camera</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 490</td>
<td>Selected Topics in Meteorology: Weather Systems Analysis</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>
Chemistry

Professors Cook, Kosman (Chair); Associate Professors Bradley, Engerer, Goyne; Visiting Assistant Professor DeLassus.

Chemistry is the discipline that studies the fundamental nature of matter and the changes in energy and properties accompanying compositional changes in matter. As a scientific discipline, chemistry is firmly rooted in the liberal arts tradition, placing emphasis on the development of intellectual capability and judgment. Yet it is also a very practical discipline dealing with the fundamental technology of matter that affects our environment and our society. Because of the nature of the discipline, a wide diversity of careers is possible with a chemistry major. These range from industrial product development to academic research, from medical and paramedical careers to forensic (law enforcement) chemistry. Government, industry, schools and universities and many private institutions, such as museums, have a variety of openings for chemists. About two-thirds of the chemistry graduates continue their education in graduate, medical, or professional school. In almost every instance, those who go to graduate school receive complete financial support in the form of a fellowship or an assistantship.

The programs of the Department provide balance between theoretical and practical aspects of chemistry. Opportunities for carrying out directed or honors work research are available. A wide selection of instruments is maintained for student use in instructional laboratory work and research. The Department is approved by the American Chemical Society for the training of professional chemists, including the biochemistry option, and the Beta Sigma Chapter of the Phi Lambda Upsilon Chemistry Honorary Society is located here. A student may choose to work toward a Bachelor of Arts degree which requires at least 24 credit hours in chemistry, a Bachelor of Science degree which requires at least 32 credit hours in chemistry, or a Bachelor of Science degree in professional chemistry which requires at least 40 credit hours in chemistry.

Pre-Medical Arts Programs. A major in chemistry is an appropriate preparation for admission into professional schools and programs such as medicine, dentistry, hospital administration, medical technology, optometry, osteopathy, physical therapy, podiatry, public health, veterinary medicine and other allied health fields. Further information may be obtained from the Chair of the Department or members of the College on Pre-Medical Arts.

Major. There are three different chemistry majors which a student may choose to pursue:

1. Bachelor of Arts degree. A minimum of 24 credit hours in chemistry is required. Courses must include CHEM (122 or 132), 222 and 230. A combination of this major with a minimum major in another science can lead to a Bachelor of Science degree (see page 44).

2. Bachelor of Science degree. A minimum of 32 credit hours in chemistry is required. Courses must include CHEM (122 or 132), 190 or 495, 222, 230, and (311 or 321).

3. Bachelor of Science degree in Professional Chemistry. The program leading to this degree is approved by the American Chemical Society for the training of professional chemists. A minimum of 40 credit hours in chemistry is required. This major must include CHEM (122 or 132), 190, 222, 230, 322, 421, 422, 2 credit hours of 495, and 3 credit hours of advanced courses selected from 315, 316, 317, 332, 350, 390, 440, 450, and 460. PHYS 142 (or equivalent) and MATH 234 (or equivalent) are required. German is the recommended foreign language. With the approval of the Chair of the Department, the chemistry elective may be the Honors Work sequences. CHEM 497 and 498.

Biochemistry Concentration. Within either of the two Bachelor of Science degree options listed above, a student may choose to add a biochemistry concentration by meeting one of the following requirements:

1. Bachelor of Science degree with Biochemistry Concentration requires CHEM 316 and 317, BIO 171 and 270 along with the courses listed above in option 2.

2. American Chemical Society Certified Bachelor of Science degree in Professional Chemistry: Biochemistry Option requires the same mandatory courses listed above in option 3 plus CHEM 316 and 317 along with one of the following advanced courses: BIO 450, 460, CHEM 332, 450, 485 (at least three credit hours). Minor. A minimum of 16 credit hours in chemistry constitutes a minor.

Chemistry Club. The Chemistry Club, an affiliate of the American Chemical Society, provides extracurricular opportunities for students interested in chemistry.

Cooperative Education. Qualified students may combine semesters in chemical research at a professional work site with other semesters of traditional academic studies on campus. Although this program will probably extend the participating student's college education beyond the normal four years, the students will be financially reimbursed by the cooperating employer and also receive credit toward the chemistry major. No more than six credits earned in Cooperative Education may be applied toward minimum requirements of the major in Chemistry. Enrollment in this program is limited by the availability of positions offered by suitable cooperating companies. Eligible students are junior or senior chemistry majors who have completed CHEM 222 with a cumulative grade point average of 2.50 in their mathematics and science courses. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

Credit by Examination. Credit for CHEM 111, 121, 122 may be earned through the College Level Examination Program subject examination in General Chemistry or through the Advanced Placement Examination in Chemistry.

Approval of Schedules. All students taking a major or a minor in chemistry must have their schedules approved by the Chair of the Department at the beginning of each semester.

Chem 111. Introduction to Chemistry. 3+2, Cr. 4. A one semester overview of general, organic, and biochemistry. Intended for non-science majors who elect chemistry to meet one of the natural science requirement. Students with a major or minor in elementary education, nursing, or physical education ordinarily take this course to meet their chemistry requirement. Students may not receive credit for both CHEM 111 and CHEM 121. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

CHEM 115. Essentials of Chemistry. 3+2, Cr. 4. A one semester introductory course in the principles of chemistry for engineering students. Prerequisite: enrollment in the College of Engineering or consent of the Chair of the Chemistry Department.

CHEM 116. Applications of Chemistry in Engineering. 3+2, Cr. 4. A continuation of CHEM 115; offering additional principals of chemistry for engineering students, especially civil engineering students, with emphasis on analytical chemistry. Prerequisite: CHEM 115 and enrollment in the College of Engineering, or consent of Chair of the Chemistry Department.

CHEM 121. General Chemistry I. 3+2, Cr. 4. An introductory course in the principles of chemistry for science majors. The first of a two semester sequence. Required of majors and minors in chemistry and students in premedical, pre-dental, or medical technology programs, except for students who take CHEM 131. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

CHEM 122. General Chemistry II. 3+3, Cr. 4. A continuation of CHEM 121 with an emphasis on descriptive inorganic chemistry. Prerequisite: CHEM 115, 121, or 131.

CHEM 131. General Chemistry I. 3+3, Cr. 4. Same lecture as CHEM 121, but with more challenging, in-depth laboratory program. Intended for students who are willing to intensify their learning. Recommended for chemistry majors. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

CHEM 132. General Chemistry II. 3+3, Cr. 4. A continuation of CHEM 131. Same lecture as CHEM 122, with a more challenging, in-depth laboratory program. Intended for students who are willing to intensify their learning. Recommended for chemistry majors. Prerequisite: CHEM 115, 121, or 131.
CHEM 190. Introduction to Chemical Research. 7 weeks, Cr. 1. An introduction to chemical research methods and literature. A laboratory project is required. S/U grade.

CHEM 221. Organic Chemistry I. 3+3, Cr. 4. An introductory survey of the nomenclature, reactions, structures and properties of carbon compounds. Prerequisite: CHEM 222 or 132.

CHEM 222. Organic Chemistry II. 3+3, Cr. 4. A continuation of CHEM 221. A further study of the reactions, structures and properties of carbon compounds, including reaction mechanisms and complex organic reactions. Prerequisite: CHEM 221.

CHEM 230. Quantitative Analysis. 3+4, Cr. 4. A study of the theory of chemical equilibria, electrochemistry and elementary chemical analysis. The laboratory work consists of an introduction to gravimetric, volumetric and instrumental methods of analysis. Prerequisite: CHEM 122 or 132 or consent of Chair of the Department.

CHEM 311. Elementary Physical Chemistry. Cr. 3. A one-semester course in physical chemistry covering elementary thermodynamics and kinetics, together with their applications to various chemical systems. Prerequisites: CHEM 221 and 230 or equivalent. Not open to students who have taken CHEM 321.

CHEM 312. Thermodynamics and Structure Laboratory. 1+3, Cr. 2. Physical chemistry experiments involving thermodynamic and structural properties of atoms and molecules. (This is also the laboratory portion of CHEM 321.) Prerequisite or concurrent registration: CHEM 311.

CHEM 315. Biochemistry I. Cr. 4. Structure and function of proteins, carbohydrates and lipids with particular stress on physical biochemistry and enzyme kinetics. Overview of metabolism with an emphasis on integration and control. Prerequisite: CHEM 222.

CHEM 316. Biochemistry II. Cr. 3. A continuation of CHEM 315 that is focused on the biosynthesis of nucleic acids and proteins and the regulation of these processes. Special topics in biochemistry. Prerequisite: CHEM 315.

CHEM 317. Biochemistry Laboratory. 0+3, Cr. 1. An introduction to the experimental methods used to characterize biomolecules and biochemical reaction. Prerequisite: CHEM 315 (may be taken concurrently).

CHEM 321. Physical Chemistry I. 4+3, Cr. 5. A theoretical study of chemistry involving thermodynamics, kinetics and modern structural concepts. Prerequisites: CHEM 221 and 230; 230 may be taken concurrently; MATH 152 or equivalent, PHYS 142.

CHEM 322. Physical Chemistry II. 4+3, Cr. 5. A continuation of CHEM 321. Prerequisite: CHEM 321.

CHEM 332. Advanced Instrumental Analysis. 2+4, Cr. 3. In depth study of theory and practice of nuclear magnetic resonance, spectroscopy, chromatography, and electrochemistry. Other topics include electronics (operational amplifiers) and computer interfacing. Prerequisite: CHEM 311 or 321.

CHEM 350. Lasers and Optics in Chemistry. 2+4, Cr. 3. Overview of basic optics, including ray tracing and optical systems. Theory and operation of lasers, including picosecond and femtosecond systems. Applications of ultrashort pulses to transient chemical events. Prerequisite: CHEM 311 or 321 or consent of instructor.

CHEM 360. Chemical Literature and Chemical Writing. Cr. 1. Discussion and library work on the important sources of chemical information. Experience in the use of Chemical Abstracts, Beilstein, chemical journals and government publications in chemistry. Includes discussion and practice with computerized data bases. Library work leads to the writing of a paper as well as an abstract of a single article. For the student who plans to do graduate work in chemistry. S/U grade.

CHEM 381. Cooperative Education in Chemistry I. Cr. 0.5-2. Experience in chemical research with a cooperating employer. Written report required. Prerequisites: CHEM 222 and approval of the Chair of the Department. S/U grade.

CHEM 390. Topics in Chemistry. Cr. 3-4. A study of various topics in chemistry. Prerequisite: dependent upon the topic.

CHEM 421. Advanced Inorganic Chemistry. Cr. 3. A study of advanced topics in inorganic chemistry with emphasis on structure and bonding, transition metal chemistry, and organometallic chemistry. Prerequisite: CHEM 222 and 311 or 321 (may be taken concurrently).

CHEM 422. Inorganic Chemistry Laboratory. 0+3, Cr. 1. Experiments involving structures and reactions of inorganic compounds. Prerequisite: CHEM 421 (may be taken concurrently).

CHEM 440. Polymer Chemistry. Cr. 3. An introduction to the study of macromolecules: their preparation, properties, reaction and uses. Emphasis is on synthetic macromolecules. Prerequisite: CHEM 222.

CHEM 450. Advanced Organic Chemistry. Cr. 3. A study of physical organic chemistry and strategy in modern organic synthesis. Topics include linear free energy relationships, the Woodward-Hoffman rules and semiempirical quantum mechanical calculation techniques for organic molecules. Prerequisites: CHEM 222 and 311 or 321.

CHEM 460. Quantum Mechanics. Cr. 3. The fundamental concepts of quantum mechanics are examined. Topics include state functions and their interpretations, the Schroedinger equation, approximation methods, multielectron atoms and molecules. Prerequisite: CHEM 322 or consent of the instructor.

CHEM 482-483. Cooperative Education in Chemistry II-III. Cr. 0.5-2. Continuation of CHEM 381. Prerequisites: CHEM 381, satisfactory employer evaluation, and approval of the Chair of the Department. S/U grade. May be repeated beyond 483 for additional credit.

CHEM 489. The Teaching of Natural Sciences. Cr. 3. (See ED 489.) A study of the methods of teaching natural sciences in the secondary schools. Lectures, demonstrations and projects. This course may not be counted toward a major or minor in chemistry. Prerequisite: admission to the Professional Semester.

CHEM 493. Seminar in Chemistry. Cr. 0. All Chemistry majors are expected to register for this course. Report required in this forum for all those registered for CHEM 493. S/U grade.

CHEM 494. Premedical Arts Colloquium. Cr. 0-1. (Also offered as BIO 484.) All Premedical Arts students are expected to register for this course every semester. May not be counted for a major or minor. Students who register for the colloquium for 1 credit must have the consent of the instructor. A maximum of 2 credit hours in this course may be counted toward graduation. S/U grade.

CHEM 495. Special Problems in Chemistry Cr. 0.5-2. A course in which each student attacks a chemical problem by study of the literature and by work in the laboratory. A written report is required. Must be registered for CHEM 493 concurrently to report orally on research results. May be repeated for additional credit. Prerequisite: consent of Chair of the Department.


Chinese and Japanese Studies

Administrative Committee:
Professor Ludwig (Theology),
Associate Professors Bernard (Economics), Lin (Political Science, Chair), Nelson (Psychology); Assistant Professors Craft (History), Kavanagh (Foreign Languages and Literatures), Kerr (Christ College), McGuigan (College of Arts and Sciences).

Students completing the program in Chinese and Japanese Studies will have fulfilled major field requirements for the Bachelor of Arts degree under the interdisciplinary program option. Students majoring in another major or a minor in Chinese and Japanese Studies.

Objectives. Programs in Chinese and Japanese Studies provide an opportunity for students to focus their study on this important area of the world, by examining the history, culture, and religions of China and Japan, in addition to developing some proficiency in the Japanese language. It provides essential background for students considering a career in education, business, government, or the arts related to the East Asian cultural sphere. Students are strongly encouraged to participate in overseas programs in East Asia, particularly at the University's exchange program at Zhejiang University and at Kansai Gaidai and Osaka International University in Japan. Courses taken in exchange programs may be used to fulfill major and minor requirements.

Program Requirements. A minimum of 53 credit hours, selected from the following list of courses approved by the Administrative Committee. A number of these courses may also be counted toward fulfillment of the General Education Requirements for the Bachelor of Arts degree. FLJ 101 and 102 may fulfill the Foreign Language Requirement; any of the theology courses may fulfill the Theology Level III Requirement; any of the history courses or PHIL 260 or 290 may fulfill the Philosophical and Historical Studies Requirement; ART 311 may fulfill the Fine Arts/Fine Arts-Literature Requirement; and any appropriate course may fulfill the Non-Western or Third World Studies requirement. Other appropriate courses, including credits in supervised reading and research, may be substituted with the permission of the Chair of the Committee. Courses must include EAST 493, HIST 240, 341, 342, GLST 150, FLJ 101 and 102 or FLJ 101 and 102 or EAST 109 and 110, FLJ 250 or 251, POLS 335 or 490 (East Asia), THEO 363, plus 21 credits in elective courses.

Complementary Major. A student fulfilling major field requirements under a Major Option in another field may present as a second major an area major in Chinese and Japanese Studies. The requirement for the second major is a minimum of 35 credit hours selected from the following list of courses. Other appropriate courses, including credits in supervised reading and research, may be substituted with the permission of the Chair of the Committee. Courses must include EAST 493, HIST 240, 341 or 342, FLJ 101 and 102 or FLJ 101 and 102 or EAST 109 and 110, THEO 363, plus 9 credits in elective courses.

Minor. A student fulfilling major field requirements under a Major Option in another field may present an area minor in Chinese and Japanese Studies for the required minor. The requirement for the minor is a minimum of 18 credit hours selected from the following list of courses. Courses must include GLST 150, HIST 240, either HIST 341 or HIST 342, and THEO 363. It is strongly recommended that the student also complete FLJ 101 and 102 or FLJ 101 and 102 or EAST 109 and 110. Only one course in Japanese or Chinese may be counted toward the Chinese and Japanese Studies minor.

East Asian Studies Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 311</td>
<td>Topics in the Theory and History of Art</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FLC 101</td>
<td>Beginning Chinese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLC 102</td>
<td>Beginning Chinese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLC 203</td>
<td>Intermediate Chinese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLC 204</td>
<td>Intermediate Chinese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>COMM 390</td>
<td>Topics and Projects</td>
<td>1-3 Cr.</td>
</tr>
<tr>
<td>ECON 390</td>
<td>Topics in Economics: East Asian Topics</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 301</td>
<td>Regional Geography of Asia</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 240</td>
<td>Introduction to East Asian Culture</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 242</td>
<td>East Asia on Film</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 341</td>
<td>Revolution and Its Roots: The Making of Modern China</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 342</td>
<td>Tragedy and Triumph: The Making of Modern Japan</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 390</td>
<td>Topics in History: East Asian Topics</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>HIST 492</td>
<td>Reading and Discussion Seminars: East Asian Topics</td>
<td>2-3 Cr.</td>
</tr>
<tr>
<td>FLJ 101</td>
<td>Beginning Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 102</td>
<td>Beginning Japanese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 203</td>
<td>Intermediate Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 204</td>
<td>Intermediate Japanese II</td>
<td>4 Cr.</td>
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<tr>
<td>FLJ 250</td>
<td>Topics in Japanese Literature and Fine Arts</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FLJ 251</td>
<td>Introduction to Japanese Literature</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FLJ 305</td>
<td>Advanced Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 306</td>
<td>Advanced Japanese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 495</td>
<td>Supervised Reading and Research in Japanese</td>
<td>1-4 Cr.</td>
</tr>
</tbody>
</table>

MUS 421 | Pro-Seminar in Music: East Asian Topics | 2-3 Cr. |
| PHIL 220 | Non-Western Philosophy | 3 Cr. |
| PHIL 290 | Philosphic Topics: East Asian Topics | 3 Cr. |
| POLS 335 | Politics of Developing States | 3 Cr. |
| POLS 400 | Seminar in Political Science: East Asian Topics | 2-3 Cr. |
| THEO 360 | Topics in the History of Religions: East Asian Topics | 3 Cr. |
| THEO 363 | Religions of China and Japan | 3 Cr. |
| THEO 364 | The Buddhist Tradition | 3 Cr. |
| THEO 366 | Religion in Japanese Culture | 3 Cr. |
| EAST 109 | Intensive Elementary Chinese | 5 Cr. |
| EAST 110 | Intensive Elementary Chinese | 5 Cr. |
| EAST 115 | Cultures of China and Japan | 3 Cr. |
| EAST 209 | Intensive Intermediate Chinese | 5 Cr. |
| EAST 210 | Intensive Intermediate Chinese | 5 Cr. |
| EAST 390 | Topics in East Asian Culture | 3 Cr. |
| EAST 395 | Chinese Culture and Civilization | 3 Cr. |
| EAST 493 | East Asian Senior Seminar | 3 Cr. |
| EAST 495 | Supervised Reading and Research | 1-3 Cr. |
| EAST 497 | Honors Work in Chinese and Japanese Studies | 3 Cr. |
| EAST 498 | Honors Candidacy in Chinese and Japanese Studies | 3 Cr. |

Approval of Schedules. All students taking a major in Chinese and Japanese Studies must have their schedules approved by the Chair of the Administrative Committee at the beginning of each semester. EAST 109, 110, 209, and 210 are offered only in China, where students attend language classes 15-18 hours per week. These credits may apply toward the general education foreign language requirement.

East Asian Topics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HIST 240</td>
<td>Introduction to East Asian Culture</td>
<td>3 Cr.</td>
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<tr>
<td>HIST 242</td>
<td>East Asia on Film</td>
<td>3 Cr.</td>
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<tr>
<td>HIST 341</td>
<td>Revolution and Its Roots: The Making of Modern China</td>
<td>3 Cr.</td>
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<tr>
<td>HIST 342</td>
<td>Tragedy and Triumph: The Making of Modern Japan</td>
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<td>HIST 390</td>
<td>Topics in History: East Asian Topics</td>
<td>3 Cr.</td>
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<tr>
<td>HIST 492</td>
<td>Reading and Discussion Seminars: East Asian Topics</td>
<td>2-3 Cr.</td>
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<tr>
<td>FLJ 101</td>
<td>Beginning Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 102</td>
<td>Beginning Japanese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 203</td>
<td>Intermediate Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 204</td>
<td>Intermediate Japanese II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 250</td>
<td>Topics in Japanese Literature and Fine Arts</td>
<td>3 Cr.</td>
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<tr>
<td>FLJ 251</td>
<td>Introduction to Japanese Literature</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FLJ 305</td>
<td>Advanced Japanese I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>FLJ 306</td>
<td>Advanced Japanese II</td>
<td>4 Cr.</td>
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<tr>
<td>FLJ 495</td>
<td>Supervised Reading and Research in Japanese</td>
<td>1-4 Cr.</td>
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<tr>
<td>MUS 421</td>
<td>Pro-Seminar in Music: East Asian Topics</td>
<td>2-3 Cr.</td>
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<tr>
<td>PHIL 220</td>
<td>Non-Western Philosophy</td>
<td>3 Cr.</td>
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Communication

**Associate Professor Kocher (Chair); Assistant Professor Neff; Instructors Douglas, Powell.**

The Department of Communication focuses on teaching the process of communication as it applies to the several fields it represents: journalism, public relations, and speech. In all of these fields the department encourages students to become ethical, critical, and effective sources and receivers of communication; it endeavors to motivate them to serve their community. The department stresses solid preparation in the liberal arts. It seeks a balance between liberal arts and skills courses within the department, believing that this balance is essential to developing good communicators, not just technicians trained for particular jobs. The department's programs also strive to demonstrate the linkages between communication studies and the larger issues of the global community.

The communication major allows specialization in several areas at the junior and senior levels, including print and broadcast journalism and public relations. Core course and sequencing requirements permit flexibility in arranging a program which focuses on individual student interests in communication.

**Major.** The communication major consists of 36 credit hours. Required courses are COMM 101, 201, 269, 386 and 460; at least 6 hours and no more than 10 from the following, normally taken during the sophomore year: COMM 243, 250, 251, 261, and 265; 6 to 9 credit hours (junior and senior years) selected from COMM 230, 290, 342, GEO 215, and POLS 326, 327, or 361; and 6 credit hours selected from COMM 247, 262, 263, 266, 344, 353, 354, 356, 367, 368, 374, and 390.

**Minor.** A communication minor is 18 credit hours consisting of COMM 101, 201, 261, and nine hours of Communication electives approved by the Chair of the department.

**Public Speaking and Debate Minor.** This minor prepares students interested in developing public speaking skills and provides experience in local and regional debate events.

Students electing a minor in Public Speaking and Debate must complete a total of 15 credit hours selected as follows: COMM 145, 243, 247, 342, and 344. For students choosing this minor, COMM 145 and 243 are prerequisites for the other listed courses.

**Teaching Programs.** Students who plan to teach journalism or speech communication and theatre in secondary schools with a major or minor in communication should consult the Chair of the Department and the Education Department for specific requirements.

**Cooperative Education.** Qualifying students may participate in prearranged, approved professional work experiences. During their employment, students are financially reimbursed by the cooperating employer. Credits earned in this program apply toward the major and may substitute for internship requirements. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

**Degree.** Students completing the communication major together with the degree requirements of the College of Arts and Sciences fulfill requirements for the Bachelor of Arts degree.

**Approval of Schedules.** All students pursuing a major or minor in communication must have their schedules approved by their departmental adviser at the beginning of each semester.

**SPECIAL OPPORTUNITIES**

**Television/Radio Studio.** The Department teaches all television and radio classes in its production studio. The studio is fully equipped for all levels of television and radio production and provides a quality laboratory experience. Students are also placed as interns in area television, radio and cable stations. Digital nonlinear editing facilities interface with the studio and are available for student video work.

**Student Organizations.** The department sponsors the Communication Club and has an active student chapter of the Association for Women in Communications.

**COMM 101. Media Presentation.** Cr. 3. An introduction to a variety of media writing contexts, including news, public relations, and writing for public speaking. Students will also be expected to make oral presentations. Primarily intended for communication majors as preparation for more advanced coursework in the department.

**COMM 110. Introduction to Internet Communication.** Cr. 3. An introductory course on using the global Internet communication network. Students will study the various Internet services and tools, develop competency in their use, and acquire expertise in using the subject searching capabilities of the Internet. Prior competency in the Internet and in computers is not expected. This course is intended for freshmen and nontraditional students.

**COMM 140. Public Speaking.** Cr. 2. Fundamental principles of organization, generation of argument, use of language and components of delivery for effective construction and performance of messages in a variety of speechmaking experiences.

**COMM 145. Interpersonal Communication.** Cr. 3. A study of human communication dealing with intrapersonal, dyadic, small group and nonverbal areas. Students participate in a variety of semi-structured and pre-structured communication events including presentation skill development.

**COMM 201. Historical Development of Communication.** Cr. 3. This course surveys the contexts and development of print, public relations, electronic media, and rhetorical history. Developments in each area will focus on the larger governmental, economic, and social contexts within which each operates. Prerequisites: COMM 101 and sophomore standing.

**COMM 230. Desktop Publishing.** 0+6, Cr. 3. (Also offered as ART 230.) Introduction to computer information display techniques ranging from computer generated illustration, charts and graphs to newsletter and related page layout procedures. No prior computer experience is required.

**COMM 243. Public Communication.** Cr. 3. A study of public communication in a variety of structured settings. Students participate in public interviews as well as deliver informative speeches, persuasive speeches, special occasion speeches and rhetorical criticism.

**COMM 247. Persuasion.** Cr. 3. A study of motivational communication. This course includes theories of persuasion and offers structured experiences for the producer and consumer in the persuasive process.

**COMM 250. Radio Production.** Cr. 3. A practical course in radio production. Production planning, scripting, using sound effects, recording, mixing, editing and performing. Prerequisite: COMM 101.

**COMM 251. Television Production.** Cr. 3. (Also offered as TTV 251.) A practical course in television production. Students produce programs and acquire experience in all facets of production, including scripting, shooting, editing and performing. Prerequisite: COMM 101.

**COMM 261. News Writing.** 2+4, Cr. 4. A course in the fundamentals of news writing and news gathering. Practice in writing various types of news stories; problems of in-depth writing and reporting; introduction to newspaper organization and methods. Laboratory and field work. Prerequisite: CORE 110 and 115.

**COMM 262. Copy Editing.** Cr. 2. A course in copy editing, headline writing and newspaper makeup. Basic principles of news evaluation, photo editing and introduction to newspaper layout. Laboratory practice. Prerequisite: COMM 261 or consent of the instructor.

**COMM 263. Advanced News Practice.** Cr. 3. A course for the advanced journalism student, comprising in-depth reporting, opinion and editorial writing, specialized writing. Prerequisite: COMM 261 or consent of the Chair of the Department.

**COMM 265. Principles of Public Relations.** Cr. 3. Survey of the history, development, principles and practices of public relations; investigation of public relations ethics, relationships and role in mass media and society; case studies and experiments in public relations practices. Prerequisite: COMM 101.

**COMM 266. Feature Writing.** Cr. 3. A course in human interest writing. Creative news writing emphasizing originality of style and imaginative treatment in composition of news features and the personality sketch. Laboratory practice. Prerequisite: COMM 261 or consent of the Chair of the Department.

**COMM 290. Topics in Communication.** Cr. 3. Specific topics based on interests of students and faculty. Topics may vary from one semester to another. May not be repeated for credit. Prerequisite: sophomore standing.
COMM 342. Rhetorical Thought.  
Cr. 3. A study of the theories of rhetoric as a force in the political and intellectual development of Western cultures. This course includes selected theorists from Plato and Aristotle to Kenneth Burke.

COMM 344. Argumentation.  
Cr. 3. This course includes structured experiences in the research and development of argument, case construction, refutation and evidence. Includes preparation for participation in competitive debate team events. Prerequisite: consent of the Chair of the Department.

COMM 353. Broadcast Programming.  
Cr. 3. Theories of programming, current program forms, examination of the structure and function of television and radio programming practices, including relationships to entertainment, information and the audience. Prerequisite: COMM 101.

Cr. 3. A course in the fundamentals and special requirements of radio and television news reporting, writing and editing. Laboratory and field work. Prerequisite: COMM 251 or consent of the Chair of the Department.

COMM 358. Advanced Television Production.  
Cr. 3. (Also offered as TIVA 358.) Workshop format emphasizing advanced production and program practices. Projects include preparation of television materials for possible off-campus usage. Prerequisite: COMM 251 or consent of the Chair of the Department.

COMM 379. Mass Media Law and Ethics.  
Cr. 3. Discussion of major legal and ethical issues which affect the mass media. Prerequisite: junior or senior standing or consent of the Chair of the Department.

COMM 387. Editorial and Opinion Writing.  
Cr. 3. A course in structure, style and principles of editorial, column, commentary and critical review writing. Laboratory practice. Prerequisite: COMM 261 or consent of the Chair of the Department.

COMM 388. Public Relations Copywriting.  
Cr. 3. Persuasive and effective copywriting. Prerequisites: COMM 261 and 265.

COMM 389. Cooperative Education in Communication.  
Cr. 0.5-3. Professional work experience with a cooperating employer. Written report required. Prerequisite: approval of the Chair of the Department.

COMM 382-383. Cooperative Education in Communication II-III.  
Cr. 0.5-3. Continuation of COMM 381. Approval of the Chair of the Department. May be repeated beyond 383 for additional credit.

COMM 386. Internship.  
Cr. 3. Internships in which students may intensively study a particular area of communication. Prerequisite: consent of the department Internship Coordinator. Open to declared communication majors only.

COMM 390. Topics and Projects.  
Cr. 1-3. Individual or group. Specific topics or projects based on special interests of students and faculty. Topics and projects vary from one semester to another. Prerequisites: consent of the Chair of the Department.

COMM 460. Communication Research Seminar.  
Cr. 3. Application of communication research techniques to selected topics, such as censorship in the arts, libel law, and media sensationalism. Research techniques may include content analysis, surveys, experiments, and historical methods. Prerequisite: senior standing or consent of the Chair of the Department.

COMM 475/575. Mass Media in Modern Society.  
Cr. 3. Study of interaction between mass media and society. Freedom of the press theories, communication theory and relationships in the role of mass media with government, business, the courts and other segments of society. Open to juniors and seniors.

COMM 492. Supervision of Student Publications.  
Cr. 3. Problems and practices of supervision of secondary school student newspapers, magazines, yearbooks and other school publications. Includes examination of state-adopted texts, the role of the high school press, budgeting and financial responsibilities, organizing staffs, working with school administration, establishing curriculum, reviewing other school publications and basic journalistic styles. May not be counted toward a major or minor in this Department. Field Trip. Prerequisite: admission to Supervised Teaching and COMM 282, or consent of the designated adviser.

COMM 497. Honors Work in Communication.  
Cr. 3. See Honors Work, page 50.

COMM 498. Honors Candidacy in Communication.  
Cr. 3. See Honors Work, page 50.

Economics

Economics

Professor Henderson; Associate Professors Bornard, Singleton (Chair); Assistant Professor Raman.

Economics provides a logical, orderly way of looking at problems, issues and policies regarding the production, distribution and consumption of goods and services. It draws upon other social sciences and mathematics to confront a wide range of topics from environmental abuse to economic growth to business regulations and other governmental interactions with the commercial world. As economics in general deals with choice and decision making, it is of great value on both a personal and a professional level.

Economics majors have a wide range of career choices, including government or business economist, banking economist, investment analyst, trade association economist and others.

Students who distinguish themselves by high scholarship may be elected to Omicron Delta Epsilon, a national economics honorary organization.

Major. Requirements for the major in economics may be fulfilled by completion of one of the following programs. Two of the four economics electives must be at the 300 level or higher.

General Economics Major. A minimum of 27 credit hours in economics constitutes this major. Courses must include ECON 221, 222, 321, 322, and 325. In addition, either DS 205 or MATH 240 is required.

Economics and Computer Analysis Major. A minimum of 27 credit hours in economics is required. Courses must include ECON 221, 222, 321, 322, and 325. Computer science courses which must be completed are CS 157, 225, and 325. Also required is a minor in mathematics including MATH (124, 131, or 151), (122, 132, or 152), 240 and 320 (or an approved alternative).

General Economics Minor. A minimum of 18 credit hours in economics constitutes a minor. Courses must include ECON 221, (222 or 223), one of (321, 322, or 325) and one additional course selected from 300 or above.

Degree. Completion of the degree requirements of the College of Arts and Sciences with a major in Economics leads to the Bachelor of Arts degree.

Credit by Examination. Credit for ECON 221 and 222 may be earned through the College Level Examination Program subject examination in Introductory Economics.

Approval of Schedules. All students taking a major or minor in economics must have their schedules approved at the beginning of each semester.

Cr. 3. This course is an introduction to the economics of public and private provision of health, education and social services in urban and developing economies. May be used in partial fulfillment of the Social Analysis component and for the U.S. Diversity component of the General Education Requirements.

Cr. 3. An introductory study of the relationship between environmental quality and economic behavior, with an emphasis on the principles of demand, costs, and economic efficiency. Current developments in the United States and world environmental policies will be analyzed. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

Cr. 3. An introductory study of the central functions and problems of an economic system with emphasis on the determinants of consumer demand, producer supply and their interactions in the marketplace. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

Cr. 3. An introduction to macroeconomic analysis with emphasis on national income, consumer spending, investment, government and monetary aspects. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.
Cr. 3. An introduction to international aspects of economics with emphasis on international trade, international finance, comparative economic systems, and problems facing developing nations. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

ECON 233. The Economics of Race and Gender.
Cr. 3. Investigates the employment gaps and earnings gaps that exist between women and men, and between various racial and ethnic groups in America. Economic analysis of discrimination and its consequences for individuals and families. May be used in partial fulfillment of the Social Analysis component and for the U.S. Diversity component of the General Education Requirements.

Cr. 3. A comparative analysis of political theories and the economic systems that derive from those theories. The course focuses on those ideological assumptions that result in capitalism, socialism, anarchism, etc. as the solution to economic problems. Prerequisite: consent of the instructor.

Cr. 3. A study of the theoretical concepts and analytical techniques which economists employ to interpret the process of resource allocation under various systems of economic organization. Prerequisite: ECON 221.

ECON 322. Intermediate Macro-Economic Theory.
Cr. 3. A critical examination of theories of national income determination and of techniques for measuring and analyzing aggregate economic activity. Prerequisite: ECON 222.

ECON 324. Managerial Economics.
Cr. 3. A course in applied economics which emphasizes the use of microeconomics, statistics and mathematics in the process of making managerial decisions. Using problems and short case studies, topics such as estimating demand, cost, productivity and pricing policies are discussed. Prerequisite: ECON 221.

ECON 325. Econometrics.
Cr. 3. The application of mathematical and statistical techniques to the analysis of economic issues. Development of simple and multiple regression as tools of analysis. Use of computer facilities and statistical programs to apply the tools to current economic data. Prerequisites: ECON 221 and 222, MATH 240 or DS 205 or equivalent.

ECON 326. International Economics.
Cr. 3. A study of the basis for the gains from international trade including the effects of growth and development on a nation's welfare. Attention is also given to the effects of tariffs and other restrictions to trade. Balance of payments accounting, foreign exchange markets and international monetary institutions are covered during the last part of the course. Prerequisites: ECON 221 and 222.

ECON 330. Industrial Organization.
Cr. 3. The analysis of the economic factors underlying the structure, conduct and performance of American industry. Prerequisite: ECON 221.

ECON 331. Government Regulation of Business.
Cr. 3. A survey of government regulations of private business, monopoly and unfair competition with emphasis on health and safety regulations, consumer and environmental protection. Utilizing basic economic analysis, attention will be given to how regulation affects individuals and firms, the costs and benefits to society of regulation and the alternatives to the present approaches to regulation. Prerequisites: ECON 221 and 222.

ECON 332. Economics of Labor.
Cr. 3. The approach of workers and employers to the problems of labor; the development of trade unions and collective government regulation of labor relationships, and an economic analysis of wage-employment problems. Prerequisite: ECON 221.

Cr. 3. An examination of the regional and spatial characteristics of cities with emphasis on policies to correct urban problems. Transportation, housing, poverty and discrimination plus other substantive urban problems are analyzed and discussed. Prerequisites: ECON 221 and 222.

Cr. 3. An analysis of economic variables, both theoretical and institutional, which characterize developing nations. Emphasis is placed on cyclical poverty, allocation of resources and policy planning. Prerequisite: ECON 221 or 222 or consent of the instructor. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

ECON 337. Public Finance.
Cr. 3. An analysis of the role of the government sector in a market economy. Causes of market failure, the efficient provision of public goods and the effects of taxation are considered as they relate to economic activity. Prerequisite: ECON 221 or 222.

ECON 339. Money and Banking.
Cr. 3. A study of the institutions, principles and problems of money and banking in the United States. Special attention is given to the basic elements of monetary theory and policies. Prerequisite: ECON 222.

ECON 360. Economic History of the United States.
Cr. 3. The history of the economic development of the United States from the colonial period to the present.

ECON 365. Modern European Economic History.
Cr. 3. A history of the economic development of Western Europe from 1750 to the present. Emphasis is on the role of the industrial revolution and its impact on the modern person.

ECON 370. The History of Economic Thought.
Cr. 3. Economic thought in its historical development from the Mercantilists to the present day. Prerequisite: ECON 221 or 222 or consent of the instructor.

ECON 390. Topics in Economics.
Cr. 3. A course in which a special topic in economics is given intensive study. The topic varies from year to year. Prerequisites: ECON 221 and 222. Recommended for senior students.

Cr. 3. (Also offered as DS 493 and as MATH 493.) An intensive study of selected topics, methods, techniques, and problems in applied statistics. Prerequisites: DS 340, ECON 325, or MATH 340.

ECON 495. Independent Study in Economics.
Cr. 1-3. Independent study to be approved by the Chair and the economics adviser.

ECON 497. Honors Work in Economics.
Cr. 3. See Honors Work, page 50.

ECON 498. Honors Candidacy in Economics.
Cr. 3. See Honors Work, page 50.
Education

Professor Brandhorst (Chair); Associate Professors Dudzinski, Michelsen, Reiser, Riffel; Assistant Professors Cole, Duplechain.

The Education Department offers programs of study leading to certification for elementary and secondary school teaching. In addition, the teacher candidate may add an endorsement in reading or special education (learning disabilities). A junior high/middle school endorsement may be added to the elementary education certificate.

Certification. Students must meet state teacher certification and education program requirements. Students should be aware that these requirements are in transition. All students who expect to teach and have not been admitted to the Teacher Education Program should consult the Professional Development and Placement Office of this Department as early as possible to assure that certification requirements will be met. The mere completion of the prescribed courses outlined by the Education Department does not guarantee that the student will be recommended for certification or a teaching position.

Minor. Only students preparing to meet secondary education certification requirements may minor in education. University degree requirements call for a major outside the field of education. Normally this academic major is in the primary teaching field. For specific requirements of a teaching minor, consult the Chair of the Education Department.

Elementary Education

Completion of the degree requirements of the College of Arts and Sciences with a major in elementary education leads to the Bachelor of Science in Education degree. Undergraduate students who wish to teach in an elementary school should complete the requirements for this degree. This does not in itself qualify a student for a teacher's certificate or license in any given state. Course work must include the following as a minimum:

1. Language Arts:
   15 credit hours. Must include nine credit hours in written and oral communication and a course in children's literature, ENGL 478: Literature for Children. May include 3 credits from CORE 110.

2. Social Studies:
   12 credit hours. Must include a course in United States history, a course in world civilization, and a course in Social Analysis selected from economics, geography, political science or sociology. See list in point A.g. on page 41 for specific courses. May include three credits from CORE 115.

3. Conservation:
   3 credit hours. One course; see GEO 260: Conservation of Natural Resources, or BIO 370: Human Environmental Biology.

4. Science:
   8 credit hours. Must include a course in biology and one course in physical science selected from chemistry, physical geography or physics.

5. Mathematics:
   9 credit hours. Must include mathematics course work specifically designed for elementary teachers, MATH 211/213 and 212/214.

6. Fine Arts:
   6 credit hours. Must include one course in music appreciation or music history or methods of teaching music and one in art appreciation or art history or methods of teaching art.

7. Integrative Studies.
   3 credit hours.

8. Other subjects:
   Must include PSY 110, 1 credit hour of PE 101-105, SPED 340, and electives from categories 9 or 10.

9. General Education Electives:
   Elect from the above categories further courses to a total of 70 credit hours.

10. Freshman Core:
    10 credit hours.

11. Diversity: Global Cultures and Perspectives:
    3 credit hours. See courses that fulfill this requirement listed in point A.d. on page 41.

    3 credit hours. INTS 400, Problems and Possibilities of Children and Youth in America, fulfills this category as well as courses listed in point A.e. on page 41.

13. Theology:
    6 credit hours. One foundational and one upper level theology course.

14. Education:
    38 credit hours. Must include ED 203, 204, 205 or 206 or 307, 321, 322, 323, 324, 327, 328, 433, ED 439 or SPED 449, and ED 485.

15. Other electives:
    In addition to the above requirements, the student must present sufficient electives to achieve the 124 credit hours required for graduation.

Additional Teaching Endorsements.

Students completing an elementary education degree and certification requirements may also obtain additional teaching endorsements in junior high/middle school, learning disabilities, and reading, as well as other subjects. Additional coursework is necessary to satisfy requirements for these extra endorsements. However, in most cases, the requirements can be completed in a four-year program. Students who are interested in specific information about the requirements for additional endorsements should contact the Education Department.

Freshman students are advised by a department adviser assigned by the Chair. A recommended course program follows:

First Semester
CORE 110 The Human Experience ... 5 Cr.
Biology or Physical Science ........ 4 Cr.
Social Analysis or U.S. History .... 3 Cr.
PE 101-105 ................. 1 Cr.
13 Cr.

Second Semester
Core 115 The Human Experience ... 5 Cr.
Biology or Physical Science ........ 4 Cr.
Social Analysis or U.S. History .... 3 Cr.
PSY 110 ................. 3 Cr.
PE 101-105 ................. 1 Cr.
16 Cr.

A foreign language may be started in the freshman year by students who wish to concentrate in this area. Consult the adviser for adjustments in schedule.

Sophomore students should complete ED 203, 204, and COMM 145, 243, or TTVA 141 during this year. Application for admission to the Teacher Education Program should be made as soon as possible in the sophomore year.

Junior students who are admitted to the Teacher Education Program may take the Junior level courses (ED 321, 322, 323, 324, 327, 328). Please see your adviser to develop your program. Application for admission to supervised teaching (Professional Semester) for the next academic year must be filed by March 1 of the junior year.
Secondary Education

Programs in visual arts, physical education, and music can be taken as all-grade (K-12); all other programs are taken for senior-junior high/middle school licensing.

Advising. Before admission to the Teacher Education Program, secondary school teacher candidates are asked to consult the Education Department Office concerning programs leading to recommendations for teacher certification. A secondary education adviser will be assigned. Once formally admitted to the Teacher Education Program, students should regularly consult their advisers prior to registration.

Requirements. Undergraduate students preparing to obtain a secondary or all-grade license should complete requirements for appropriate degrees in their academic majors as well as those for the teaching major. General Education certification requirements for all secondary and all-grade teacher candidates, regardless of the degree sought, are given below. Students are responsible for meeting these General Education Requirements as well as the University degree requirements.

1. Humanities—22 credit hours
   - Oral communication (COMM 145, 243, or TITVA 141), 3 Cr.
   - Written communication, 6 Cr.
   - Literary studies or the equivalent, 3 Cr.
   - Foreign Language, Fine Arts-Literature, or other Humanities, 6 Cr.
   - Theology, 3-9 Cr.

2. Life and Physical Sciences—8 credit hours
   - The 8 Cr. are to be selected from at least two of the following areas: biology, chemistry, mathematics, physical geography and physics.

3. Social and Behavioral Sciences—9 credit hours
   - The 9 Cr. are to be selected from at least two of the following areas: economics, geography, history, political science and sociology.

4. PSY 110 (3 Cr.) or PSY 110 and 111 (4 Cr.).

Professional Education requirements include:

1. Sophomore level courses:
   - ED 203, 2 Cr.
   - ED 204, 3 Cr.
   (PSY 110 is a prerequisite)

2. Formal application and admission to the Teacher Education Program as soon as possible in the sophomore year (see below).

3. Junior level courses:
   - SPED 340 .................. 3 Cr.
   - ED 457 ................... 3 Cr.
   - ED 460 ................... 3 Cr.
   - ED 489 ................. 3 Cr.
   - ED 489, Special Methods, is only offered once a year. It must be completed prior to the professional semester. Check with the major adviser concerning when this course is offered.

4. Formal application for admission to the Professional Semester must be filed by March 1 of the year before the academic year in which the Professional Semester is to be taken.

5. Senior level courses:
   - ED 485 .................. 2 Cr.
   - Professional Seminar........... 15 Cr.
   - ED 306, 306, or 307 ........ 1 Cr.
   - ED 459 .................. 10 Cr.
   - ED 474 .................. 1 Cr.
   - ED 475 .................. 3 Cr.

Teaching Major and Teaching Minor Requirements. A teaching major, or all-grade major, is required of all secondary teacher candidates. A teaching minor is highly recommended. Students are strongly urged to take or audit the Special Methods 489 course in a teaching minor or a second teaching major. Note that a teaching major is not the same as an academic major in that it may have additional requirements; similarly, a teaching minor may have requirements different from those of an academic minor.

Credits earned by passing the appropriate examinations and noted on a student's transcript may be used to meet certification requirements.

Specific requirements for teaching majors and minors can be obtained from the Education Department Office.

Additional Teaching Endorsements. Students completing the requirements for a secondary teaching license may also obtain an additional all-grade (1-12) teaching endorsement in learning disabilities. Additional coursework is necessary to satisfy the requirements for this extra endorsement. However, in most cases, the requirements can be completed in a four-year program. Students who are interested in specific information about the requirements for the learning disability endorsement should contact the Education Department.

THE TEACHER EDUCATION PROGRAM

Admission. To be admitted to the Teacher Education Program, a student must submit an application to the Education Department. This application should be submitted after completion of ED 203 and when all other admissions criteria have been fulfilled. Students may obtain the application packet and information from the Professional Development and Placement Office. Action on each application is taken by the Admissions and Retention Committee of the Education Department and is based on the following criteria:

1. Grade point average.
   - An applicant must have a grade point average of 2.50 or better in all course work taken at Valparaiso University, a minimum of 12 credit hours at this University, and at least 2.00 in all course work taken in the Education Department. Post-baccalaureate students must have a 2.75 grade point average in all course work (12 credit hours minimum) taken at Valparaiso University after earning the bachelor's degree.

2. Communication grade point average.
   - An applicant must have obtained a grade point average of 2.25 or better in required composition courses and oral communication course (COMM 145, 243, or TITVA 141) at Valparaiso University. No course may be used to meet this requirement if the course grade is below a C. Students are expected to maintain acceptable standards in communication skills; proficiency is monitored by professors in education courses. If deficiencies in written or oral communication are noted, the applicant must take remedial steps under the direction of the Education Department.

3. Basic Skills Test.
   - Applicants to the Teacher Education program must furnish passing scores on the Pre-Professional Skills Test (PPST). These basic skills tests are administered at national testing sites eight times during the academic year. Students are responsible for registering and paying the fees for the test. Students are also responsible for designating that scores be sent to the Education Department. Students must submit passing scores in three skill areas (reading, writing, and math). Information about test registration and administration will be furnished to freshmen students at a Teacher Education information meeting or during the courses taken in the sophomore year or information may be obtained from the Professional Development and Placement Office.

   - An applicant shall be free of serious mental or physical health problems that might impair future teaching effectiveness.

5. Character.
   - An applicant must have shown the social and emotional maturity, moral character, responsibility and dependability necessary for success in the teaching profession.

   - Positive recommendations need to be obtained from the ED 203 instructor and the student's major adviser. A third recommendation must also be received from a field experience cooperating teacher.

The department has an alternate admissions policy. See your adviser for information.

To appeal a decision of the Admissions and Retention Committee, the student should first direct his/her concern to that Committee; if the decision is still unfavorable, the appeal should be submitted in writing and directed to the Education Department faculty through its Chair.

Professional Semester. This semester is required of all candidates who wish to be recommended for an initial teaching certificate. This semester includes coursework and student teaching required to
meet standards for certification. During this semester the student should enroll in courses approved for the Professional Semester.

**Admission to the Professional Semester.** Application for admission to the Professional Semester must be filed and completed in person with the Professional Development and Placement Office by March 1 of the Spring Semester before the academic year in which the student teaching is to be done. For admission into the Professional Semester and to be eligible for student teaching, the student must meet the following criteria:

1. Official admission to the Teacher Education Program.
2. The cumulative grade point average must be at least 2.50. A grade point average of 2.40 or better must be obtained in all secondary teaching fields.
3. Continued demonstration in class of facility in oral and written communication. The applicant must have obtained a grade point average of 2.25 or better in courses used to meet this requirement.
4. Completion of at least 12 credit hours at Valparaiso University of which 3 credit hours must be in education.
5. Senior standing. The applicant must be within two semesters and one summer of graduation.
6. Evidence of the social and emotional maturity, moral character, responsibility and dependability necessary for success in the teaching profession.
7. Secondary student teaching candidates must have completed ED 203, 204, 457, 460, 489, SPED 340, have earned a standing of 2.40 or higher in all education courses completed and have received a written recommendation from the major adviser to take the Professional Semester. If a teaching minor is to be obtained, written recommendation from the Chair of the department in which the minor is taken must be received.

Students are strongly urged to take or audit the Special Methods 489 course in the teaching minor area.

8. Elementary student teaching candidates must have earned a standing of 2.40 or higher in all course work in education. Students must complete the following courses before the Professional Semester: ED 203, 204, 321, 322, 323, 324, 327, 328 and SPED 340.

9. Obtain a "C" or better in each of the professional education courses taken prior to student teaching in the professional semester to be eligible to begin supervised teaching.

10. To be eligible for recommendation for certification, students must maintain the above requirements through the completion of the degree and the teacher education program.

**Placement of Student Teachers.** The placement and the direction of supervised teaching experiences are the responsibilities of the Professional Development and Placement Office. Approved elementary and secondary student teachers are assigned to selected schools in Northwest Indiana. Students are responsible for arranging for their own transportation.

**Placement of Graduating Teachers.** The Professional Development and Placement Office gives assistance to beginning and experienced teacher candidates who have completed requirements for certification. All candidates are encouraged to file their credentials with this office before graduation.

Students who complete their education at Valparaiso University are entitled to use the placement services at no cost until September 30 after completion of the certification program. A twenty dollar fee is charged per year if a teacher candidate wishes to use the placement service after this time.

**EDUCATION COURSES**

**ED 203. Introduction to Teaching and Field Experience.**

Cr. 2. For teacher education students or those who wish to explore teaching as a career. An introduction to the teaching profession, the role of teachers, and the standards that govern education in a multicultural society. One half of the course will be a 40 hour field experience in an elementary or secondary school.

**ED 204. Educational Psychology.**

Cr. 3. A study of psychological research and theory related to child and adolescent development and the learning process. Prerequisite: PSY 110.

**Note:** No student is admitted to any course beyond ED 203, 204, or SPED 340 or 345 unless admitted to the Teacher Education Program or permitted to do so by the Chair of the Education Department or the Admissions and Retention Committee.

**ED 205. Educational Psychology.**

Cr. 3. A study of principles, content, curriculum, methods and techniques involved in teaching the language arts in the elementary school. Includes a field component.

**ED 206. Computers in Education I.**

Cr. 1. An introductory course designed to prepare teachers to use computers in the classroom. Students will learn computer terminology and operations, critically evaluate tutorial software appropriate for use in schools (K-12), and gain skill in using word processing as a tool for personal and professional use.

**ED 207. Computers in Education II.**

Cr. 1. An intermediate course designed to prepare teachers to use computers in the classroom. Students will select appropriate software for use in specific content areas, gain skills in using Data Base and/or Spread Sheet as a tool for personal and professional use, and experienced LOGO as structured programming language.

**ED 320. Computers in Education III.**

Cr. 1. An advanced course designed to prepare teachers to use computers in the classroom. Students will select and/or develop appropriate software for use in specific content areas. An individualized format will be used. Topics include desktop publishing, advanced LOGO, CD ROM, Telecommunications, hyper-card, and new computer technologies as they are developed.

**ED 321. Principles of Elementary Education.**

Cr. 3. This course is designed to (1) study the organization of instruction, classroom assignment, measurement and evaluation and the legal rights and responsibilities of the teacher, (2) consider the elementary classroom from varied perspectives and (3) re-examine the purposes of education, schooling, instruction and the role of the professional teacher. Includes a field component.

**ED 322. Methods of Teaching Language Arts in the Elementary School.**

Cr. 3. A study of the principles, content, curriculum, methods and techniques involved in teaching the language arts in the elementary school. Includes a field component.

**ED 323. Methods of Science Education.**

Cr. 2. This course will (1) explore the basic orientations that will have survival value in our world, (2) study the philosophy of science education with an understanding of three methods used for science instruction: Discovery Model, Inquiry Model, and Experiential Model. Includes a field component.

**ED 324. Methods of Teaching Mathematics in the Elementary School.**

Cr. 2. A study of techniques and instructional materials for teaching mathematics in the elementary school. Topics include sequencing, diagnostic and remediation strategies, and appropriate use of concrete materials in planning, organizing, implementing and evaluating instructional practice. Includes a field component.

**ED 327. Methods of Teaching Social Studies in the Elementary School.**

Cr. 2. This course is designed to (1) study the historical development and present trends in the subject area of social studies, (2) explore the role of social studies in school curriculum, (3) examine current methods and materials unique to social studies, and (4) plan and implement a social studies unit. Includes a field component.

**ED 328. Developmental Reading for Elementary Teachers.**

Cr. 3. A detailed study of basic and developmental reading programs and methods. Students learn ethnic, cultural and linguistic differences and their effects on reading ability. A study of materials and procedures used in contemporary schools is an integral part of class work. A field experience is included.

**ED 361/561. Foundations of Language and Reading.**

Cr. 3. This course of lectures includes the interrelationship between thought and language processes, the basic elements of the reading process, diagnostic tools in reading assessment and sociocultural implications of the reading process.

**ED 433. Diagnostic and Corrective Reading for Elementary Teachers.**

Cr. 3. Examination of the psychology of reading difficulties, individual diagnostic techniques, and the planning of reading programs to meet individual needs. Special emphasis is placed on reading in the content areas. This course is taken during the student teaching semester and includes a field component.

**ED 439. Supervised Teaching in the Elementary Grades.**

Cr. 13. In this course each student is assigned to an elementary school classroom under the direction of a cooperating teacher and University field instructor. The field experience includes a minimum of twelve weeks during the semester of full-time classroom observations, classroom teaching and related activities. Prerequisites: senior standing and concurrent enrollment in the Professional Semester. See Admission to the Professional Semester above for conditions of eligibility. Students enrolled in this course may not carry a load of more than 15 credit hours. S/U grade.
Cr. 3. A study of the understandings, knowledge, and skills necessary for effective secondary and middle school teaching. Topics addressed are curriculum development, instructional planning, classroom management, the student-teacher interaction, methods and strategies of instruction, assessment, and issues of multiculturalism and equality. Students reflect on their own teaching and learning experiences and observations of current practices as they begin to formulate their own teaching philosophies. This course should be taken the semester prior to the professional semester.

Cr. 10. Each student is assigned to a middle or secondary school for laboratory experiences, which includes at least ten weeks of full-time classroom observation, classroom teaching and related activities. Prerequisites: senior standing and concurrent enrollment in the Professional Semester. See Admission to the Professional Semester above for conditions of eligibility. Students enrolled in this course may not carry a load of more than 19 credit hours. SU grade.

ED 460/560. Reading in the Content Areas.  
Cr. 3. This course offers students readings, experiences, writing opportunities, and discussions which lead to an understanding of the role of literacy, the reading process, and the critical role language plays in the learning process. Students gain knowledge of specific assessment tools and processes, methods for planning instruction, and a range of reading, writing, and study strategies appropriate for helping pupils read to learn.

ED 465/565. Reading Disabilities and Practicum in Corrective Reading.  
3+3, Cr. 4. Lectures and demonstrations on the general nature of identification, diagnosis, and classification of reading problems at all age levels and levels of instruction. Course also includes a practicum component with students at the elementary and secondary school levels whose reading disabilities are mild to moderate. Practicum provides experience in assessing reading performance, planning reading programs, and implementing various instructional strategies in the area of reading. Prerequisite: 3 credit hours of course work in reading or chair’s approval.

ED 470/570. Introduction to Educational Media.  
2+2, Cr. 3. An introduction into the ways of effective selection and utilization of media, both material and equipment. The course includes laboratory experience in the production of materials and equipment operation in different media.

ED 471/571. Kindergarten Education.  
Cr. 3. This course deals with the curriculum, teaching techniques and materials used in the nursery school and kindergarten. Special emphasis is given to the education needs of the preschool child.

Cr. 3. A course dealing with theory of measurement, interpretation of measurement data and testing in relation to pupil achievement and guidance.

ED 474. Teaching and Learning in a Multicultural Environment.  
Cr. 1. An exploration of issues related to teaching and learning in a school with a culturally diverse population. Restricted to students enrolled in the Secondary Education Professional Semester.

ED 475/575. Principles of Middle Level Education.  
2+3, Cr. 3. A study of the development, organization and curriculum of junior high and middle schools with emphasis on the unique societal and educational roles played by these institutions and the programs and methods appropriate for students at this level. Field experiences include a minimum of forty hours of practical involvement in activities in schools with diverse populations. Restricted to students enrolled in the Secondary Education Professional Semester or with chair’s approval.

ED 477/577. Practicum in Middle Level Education.  
Cr. 3. Each student is assigned a minimum of 80 hours of supervised field experiences in a junior high or middle school. The experience includes working with students individually and in small and large groups. May be taken concurrently with ED 475/575.

Cr. 2. A study of the historical, sociological, legal, and philosophical foundations of education, with emphasis on the multicultural aspects inherent in each area and current issues and trends in education.

ED 489. Special Methods in the Academic Courses in Secondary Education.  
Cr. 3. This course is administered by the Education Department. It is given in the various departments of the College of Arts and Sciences under the following titles:
- The Teaching of English
- The Teaching of Foreign Languages
- The Teaching of Mathematics
- The Teaching of Music
- The Teaching of Natural Sciences
- The Teaching of Physical Education
- The Teaching of Social Studies
- The Teaching of Visual Arts

ED 490/590. Current Problems in Education.  
Cr. 1-3. An intensive study of an area of education. Substitutes, amount of credit and content depend on instructor’s choice and student interest.

ED 486. Independent Study in Education.  
Cr. 1-3. Independent work to be done in a specific area of education as agreed upon by the student and faculty adviser. Proposals must be approved by the Chair of the Department.

ED 497. Honors Work in Education.  
Cr. 3. See Honors Work, page 50.

ED 498. Honors Candidacy in Education.  
Cr. 3. See Honors Work, page 50.

SPECIAL EDUCATION COURSES

Cr. 3. A course designed to introduce P.L. 101-476, P.L. 99-456, and P.L. 94-142; the special needs of exceptional students; the practice of educating them in multicultural settings in the least restrictive environment.

SPED 345. Individuals with Learning Disabilities and Practicum.  
2+6, Cr. 4. An examination of characteristics of learning disabilities and their effects on academic achievement, behavior, social interaction, and adult outcomes. Current and historical theoretical orientations regarding diagnosis, assessment, and interventions for students with learning disabilities are emphasized. The course also includes a minimum of 60 hours of practicum experience for prospective teachers of students with learning disabilities. The practicum emphasizes direct observation of diagnostic, teaching, and management techniques in classrooms serving students with learning disabilities. Prerequisite: SPED 340 or concurrent enrollment.

SPED 444. Assessment in Special Education.  
Cr. 3. This course will develop test administration and analysis techniques in identification and diagnosis of exceptionalities. Psychometric research, acuity screening, individualized diagnostic and achievement tests, learning capacity and aptitude instruments will be analyzed in case study contexts. Prerequisite: SPED 340 or concurrent enrollment.

SPED 445. Teaching the Student with Mild Disabilities.  
Cr. 4. This course will provide various compensatory, corrective, and remediation instructional strategies in reading, language arts, mathematics, content areas, social and vocational skills. The course will emphasize effective teaching methods, diagnostic-prescriptive teaching techniques, and individual educational planning for students with learning and mild disabilities. Required curriculum project. Prerequisite: SPED 340, 444, or concurrent enrollment.

SPED 449. Supervised Teaching in General and Special Education.  
Cr. 10-12. This course combines into one semester the experience of observation, classroom teaching, and participation in related activities in elementary or secondary school settings, and special education (learning disabilities) settings. Under the direction of the cooperating teachers and University field instructor, the student-teacher has both general and special education teaching experiences. Prerequisites: senior standing, SPED 445, and admission to the professional semester. SU grade.

SPED 490/590. Current Problems in Special Education.  
Cr. 1-3. An intensive study of an area of special education. Substitutes, amount of credit and content depend on instructor’s choice and student interest.

SPED 495. Independent Study in Special Education.  
Cr. 1-3. Independent work to be done in a specific area of special education as agreed upon by the student and faculty adviser. Proposals must be approved before registration by the Chair of the Department.
English

Professors Byrne, Elfrig, Feaster (Chair), Juneja, Maxwell, A. Meyer, Sponberg, Ushing, Wangerin; Associate Professors Bhattacharya, Mullon, Ruff, Sandock; Assistant Professors Bond, Burow-Fiak.

The English Department offers a variety of courses for both English majors and other students. These courses help students to use the English language maturely and sensitively and to develop their capacities to enjoy and understand imaginative literature. Many non-English majors enroll in upper-division courses and students can expect any class to display a spectrum of interests and backgrounds. Relatively small class size allows students to cultivate a close relationship with professors and to ripen their analytical and expressive skills through writing and discussion. In addition to preparing a student for graduate work or for teaching in secondary schools, an English major provides an excellent qualification for numerous careers and professions. Many schools of medicine, law and theology view an English major as highly desirable for acceptance into their programs. Business and government employ English majors for positions in human resources, sales and marketing, public relations, systems analysis and advertising, as well as editing and writing. The abilities to read and understand complex material, to write and speak precisely, to think clearly, thoroughly and subtly remain in high demand.

All students with an interest in literature are invited to join the English Society. Students of exceptional merit earn membership in Sigma Tau Delta, a national honor society, and may qualify for departmental scholarships. English elementary and secondary education majors may join the Valparaiso University affiliate of the National Council of Teachers of English.

**Major.** A major requires a minimum of 27 credit hours in English courses beyond ENGL 200 and numbered 300 or above. Courses must include ENGL 408 and 493; one course selected from 409, 410, 420; one from 430, 450, 456; one from 460, 470, 475; and either 401 or 402.

**Minor.** A minor requires a minimum of 15 credit hours in English courses beyond ENGL 200 and numbered 300 or above. Courses must include either ENGL 408 or 493; one course selected from 409, 410, 420; one selected from 430, 450, or 456; one selected from 460, 470, 475; and either 401 or 402.

**Minor in Writing.** Students who elect a minor in writing must complete a total of at least 15 credit hours in writing or language-related courses. Courses must include ENGL 300 or 301, 491 or 492. Additional courses may be selected from the following: ENGL 321, 380, 423, 424, 431, 441, 442, 443, 475, 252, COMM 230. Students who take both ENGL 321 and 431 must take 321 first. In some instances, students may apply internships and cooperative education toward fulfillment of requirements for the minor in writing.

**Diversity in Literature.** The English Department affirms the significance of writing by people of color and other ethnic or minority groups and regularly includes it in literature and writing courses. In addition the Department offers specific topics courses especially focused on this writing and designed to fulfill the U.S. Cultural Diversity Requirement which provide an overview of American ethnic literature. Representative topics include American Ethnic Literature and Black Spiritual Narratives.

**Credit by Examination.** Credit for ENGL 100 may be earned through the College Level Examination Program general examination in English or the subject area examination in English Composition, or through the Advanced Placement Examination offered by the College Entrance Examination Board. Credit for ENGL 200 may be earned through the College Level Examination Program subject examination in Analysis and Interpretation of Literature or through the Advanced Placement examination offered by the College Entrance Examination Board.

**Degree.** Completion of the degree requirements of the College of Arts and Sciences with a major in English leads to the Bachelor of Arts degree.

**Approval of Schedules.** All students declaring a major or a minor in English should make an appointment with the Chair of the Department. Students should bring their cumulative grade reports (from the Registrar's Office) and their current adviser's files. The Chair will explain the offerings and programs of the Department and give each student a bulletin which explains courses and faculty in more detail than is possible in this catalog. All students taking a major or minor in English must have their schedules approved by their English advisers at registration. This consultation assures students of places in courses they need and contributes to orderly progress toward the degree.

**Advising.** The Chair of the Department will introduce all students to the professors who will be their advisers as long as they remain majors in the Department. It is the student's responsibility to confer regularly with the adviser about course selection, career planning and related matters. It is the adviser's responsibility to help the student make a frank and realistic assessment of academic options and their consequences.

**Cooperative Education.** When it will clearly enhance their academic education, qualified students may engage in paid work experiences through which they may also earn credit. No more than six credits may be applied toward the minimum major requirements. All projects must receive prior approval from the Department Chair and must be monitored by a member of the English Department faculty. A report from the sponsoring agency is required, as well as a written report by the student. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

**Topics Courses.** Courses in English marked by an asterisk (*) may vary in content and in writers assigned, depending on the instructor and the year given. Such courses may be taken twice for credit, provided that the topics are different or that there is no significant overlapping in the reading lists.

**ENGL 100. College Composition.**

Cr. 3. An intensive course in the writing of expository and argumentative prose with emphasis upon coherent organization, the logical progression of thought and the effective use of language.

**ENGL 101. English for International Students.**

3+1, Cr. 3. A course in English grammar and basic composition skills open only to students whose native language is not English.
ENGL 409/509. Literature of the Medieval Period.
Cr. 3. A survey of medieval English lyric, ballad, narrative, drama, and romance (including Chaucer), with attention to intellectual, religious, and social background materials.

ENGL 410/510. Shakespeare.
Cr. 3. Close readings of representative plays: histories, comedies and tragedies.

ENGL 420/520. Literature of the Sixteenth and Seventeenth Centuries.
Cr. 3. An intensive survey of the poetry, prose, and drama of the English Renaissance, excluding Shakespeare, with attention to the historical and cultural backgrounds of the period. Representative writers may include More, Sidney, Spenser, Jonson, Donne, and Milton.

ENGL 423. Short Story Writing.
Cr. 3. A workshop in the various techniques of writing short fiction. English majors, as well as other students, may take this course on the S/U basis.

ENGL 424. Poetry Writing.
Cr. 3. A workshop in the various techniques of writing poetry. English majors, as well as other students may take this course on the S/U basis.

ENGL 430/530. Literature of the Restoration and Eighteenth Century.
Cr. 3. A survey of English poetry, fiction, nonfiction prose, and drama from 1660-1785, with attention to the historical and cultural background of the period. Representative writers may include Dryden, Swift, Pope, Fielding, Johnson, and Sheridan.

ENGL 431. Advanced Composition.
Cr. 3. A course for students who have mastered fundamental writing skills and are prepared to study and practice the writing process in a more sophisticated and rigorous fashion. The course considers how to generate and organize ideas, how to adapt writing to various audiences and purposes, and how to revise, edit, and polish writing components of a developing and mature style.

ENGL 441/541. History of the English Language.
Cr. 3. An introduction to the development of modern English from Indo-European with emphasis upon structure and vocabulary.

ENGL 442/542. Modern English Grammar.
Cr. 3. An introduction to recent linguistic developments such as structural grammar and transformational- generative grammar.

ENGL 443/543. Introduction to Linguistics.
Cr. 3. An introduction to the theory and methodology of linguistics. The course includes descriptive and historical linguistics, basic notions of grammatical theory and exploration of some of the relations of linguistics to other branches of knowledge. The presentation of general principles is supplemented by practical problems in linguistic analysis.

Cr. 3. A survey of British poetry and prose of the Romantic and Victorian eras, with reference to the context of British and European social and political history. Major writers may include Wordsworth, Coleridge, Keats, Hazlitt, Scott, Carlyle, Tennyson, Browning, Arnold, Dickens, Newman, and Hardy.

ENGL 455/555. The Novel.
Cr. 3. A study of representative English novels of the eighteenth and nineteenth centuries, with discussion of the social background.

ENGL 460/560. Twentieth Century Drama.
Cr. 3. A study of plays typical of the various phases of the development of British and American drama after 1890, with some attention to related Continental drama.

ENGL 470/570. Twentieth Century Fiction.
Cr. 3. Readings of representative works of the most important British and American novelists of the twentieth century, with emphasis on various theories of fiction dominant during the period.

ENGL 475/575. Twentieth Century Poetry.
Cr. 3. Readings in selected modern poets and their forerunners, especially the French Symbolists. The British and American poets included may range from Yeats and T.S. Eliot to Auden, Robert Lowell and other contemporary figures.

ENGL 478. Literature for Children.
Cr. 3. A survey, by types, of distinguished literature for children, with emphasis on developing analytical and evaluative techniques. Introduction to bibliographical aids, review media and research. Required of elementary education majors.

ENGL 479/579. Literature for Adolescents.
Cr. 3. A survey, by types, of distinguished literature suitable for students in secondary schools. Emphasis on the reading of selected books representing the wide range of literature for adolescents, and the developing of analytical and evaluative techniques. Introduction to bibliographical aids, review media, and current research in the field.

ENGL 481. Cooperative Education in English.
Cr. 0-5-3. Professional work experience which clearly augments the student's classroom education. Written report required. Prerequisite: ENGL 431 and approval of the Chair of the Department.

ENGL 482-483. Cooperative Education in English II-III.
Cr. 0-5-3. Continuation of ENGL 481. Prerequisite: ENGL 481. May be repeated beyond 483 for additional credit.

ENGL 489. The Teaching of English.
Cr. 3. (See ED 489) A study of methods of teaching English in secondary schools. Prerequisite: admission to the Professional Semester. This course may not be counted toward a major or minor in English.

ENGL 491/591. Seminar in Professional Writing.
Cr. 3. Students will reflect critically on the meaning of certain writing tasks in the cultures of working society. They will become more rigorously aware of such topics as the ethics of marketing strategies as applied to writing projects and assignments. They will learn enough about a subject to write not only exploratory but editorial and opinion pieces about it. Attention also will focus on the techniques, problems, and strategies of grant writing, editing the writing of others, and association publishing. Prerequisite: ENGL 300, 321 or 431 or approval of the Chair of the Department.

ENGL 492/592. Seminar in Creative Writing.
Cr. 3. Students consider various forms of creative writing (drama, fiction, nonfiction, poetry), but focus their work in a single genre. Requirements include a series of progress papers and a substantial portfolio of creative work. Prerequisite: ENGL 423 or 424 or 431 or approval of the Chair of the Department.

ENGL 493. Seminar in English.
Cr. 3. Designed for juniors and seniors interested in active participation, the seminar encourages independent thought and research, and relies on discussion rather than lectures. Some recent topics: Fiction of the Vietnam War, Austen and Feminism, Enrollment limited to 15 students. Required of English majors.

ENGL 495. Independent Study in English.
Cr. 3. Designed to provide advanced students an opportunity to do serious research on a topic which is not covered in any regularly scheduled course offered by the English Department. In advance of the semester in which students plan to undertake projects, they must arrange for directors and secure approval from the Chair of the English Department.

ENGL 497. Honors Work in English Literature.
Cr. 3. See Honors Work page 50.

ENGL 498. Honors Candidacy in English Literature.
Cr. 3. See Honors Work page 50.
Environmental Science

**Administrative Committee:**
- Professors Arkkelin (Psychology), Caristi (Mathematics and Computer Science), Janke (Geography and Meteorology); Associate Professors Al-Jobeh (Civil Engineering), Bradley (Chemistry), Shingleton (Economics); Assistant Professors Eberhardt (Biology, Chair), J. Knox (Geography and Meteorology), Luther (Mathematics and Computer Science), Morris (Physics and Astronomy).

Students who complete the Environmental Science program will have fulfilled the major field requirements for the Bachelor of Science degree.

**Objectives.** The Environmental Science Program gives the student the requisite scientific background for adequately assessing environmental systems. Field work extends that knowledge into environmental modelling techniques to give the student an opportunity for directed research and tempers the student’s expertise with a modicum of philosophical and social reflection on his or her undertakings. An Environmental Science major should well position the student to enter into graduate work in environmental science or policy or into the professions of environmental management and protection. Science courses are distributed among biology, chemistry, and geography; a modelling course provides techniques for applying knowledge and skills gained in the science courses to environmental problems; philosophy and economics courses help students develop conceptual frameworks in which to link environmental and human concerns. Outside the classroom, Earthtunes, a student organization, coordinates campus and community environmental action.

Students interested in pursuing the Environmental Science Program should confer with a member of the Administrative Committee.

**Requirements.** A minimum of 66 credit hours approved by the Administrative Committee is required. Courses must include BIO 171, 172, 290; Botany, 350, 440 (18 credits); CHEM 121, 122, 221, 222, 230 (20 credits); GEO 104, 490; Biogeography, 490; Environmental Management (10 credits); calculus: one of MATH 122, 131, 151 (4 credits); statistics: one of MATH 240, PSY 201, DS 205, CE 202 (2-4 credits); one of BIO 370, GEO 260, PSY 355 (3 credits); Environmental Science 320 and 425 (4 credits); an independent research project in biology, chemistry, or geography; and three credits of an elective from the list below.

Students will undertake an independent research project under the direction of one of the science professors; research results will be presented during the Environmental Science Colloquium.

The History/Philosophy General Education Requirement must be fulfilled with PHIL 270; one of the Social Analysis General Education Requirements must be fulfilled with ECON 210.

The Introductory Courses fulfill the Natural and Behavioral Sciences/ Mathematics General Education Requirement.

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 270</td>
<td>Environmental Philosophy and Ethics</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Environmental Economics and Policy</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Introductory Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 171 Unity of Life</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>BIO 172 Diversity of Life</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CHEM 121 General Chemistry I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CHEM 122 General Chemistry II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>GEO 104 Geomorphology</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>Calculus</td>
<td>4 Cr.</td>
</tr>
</tbody>
</table>

**Environmental Issues**

One of the following:

- **BIO 370 Human Environmental Biology** | 3 Cr. |
- **GEO 260 Environmental Conservation** | 3 Cr. |
- **PSY 355 Environmental Psychology** | 3 Cr. |

**Total** | 3 Cr. |

**Upper Level Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 290</td>
<td>Biological Topics: Botany</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>BIO 350</td>
<td>Field Biology: Spring</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>BIO 440</td>
<td>Ecology</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CHEM 221</td>
<td>Organic Chemistry I</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CHEM 222</td>
<td>Organic Chemistry II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CHEM 230</td>
<td>Quantitative Analysis</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>GEO 490</td>
<td>Topics: Biogeography</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 490</td>
<td>Topics: Environmental Management</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**Statistics**

One of the following:

- **MATH 240 Statistical Analysis** | 3-4 Cr. |
- **PSY 201 Statistical Methods** | 3 Cr. |
- **DS 206 Business Statistics** | 3 Cr. |
- **CE 202 Statistical Applications in Civil Engineering** | 3 Cr. |

**Total** | 31-32 Cr. |

**Capstone Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 320</td>
<td>Environmental Modeling</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ENVS 425</td>
<td>Colloquium: Communicating Environmental Research</td>
<td>1 Cr.</td>
</tr>
</tbody>
</table>

**Independent Research Project**

One of the following:

- **BIO 495 Research in Biology** | 1-2 Cr. |
- **CHEM 495 Special Problems in Chemistry** | 1-2 Cr. |
- **GEO 495 Independent Study** | 2-3 Cr. |

**Total** | 5-7 Cr. |

**Elective Courses**

Select one from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 390</td>
<td>Topics: Environmental Literature</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 210</td>
<td>Current Themes: Human Impacts</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 215</td>
<td>Introduction to Geographic Information Systems</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 230</td>
<td>Remote Sensing in Geography</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 385</td>
<td>Field Study (Environmental)</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>GEO 415</td>
<td>Advanced Geographic Information Systems</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MET 103</td>
<td>Meteorology</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>MET 215</td>
<td>Climatology</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>HIST 390</td>
<td>Topics: American Environmentalism</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CE 181</td>
<td>Construction Surveying</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CE 332</td>
<td>Hydrology</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CE 364</td>
<td>Environmental Engineering I</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CE 365</td>
<td>Environmental Engineering II</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CE 466</td>
<td>Environmental Engineering Design</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**Total Program Requirement** | 66-70 Cr. |
Acquaintance with a foreign language and a foreign culture has a profound effect on the way individuals view their own language and their own heritage. Pursuit of studies in this area raises the sights of individuals from the level of provincialism to the level of broadened human concern and is, therefore, a vital part of students' experience, regardless of their fields of specialization. Students, while thus deepening their backgrounds in the humanities, at the same time acquire a working knowledge of another time and acquire a working knowledge of another.

**Objectives.** In the lower division courses, numbered in the 100s, the Department has the following objectives:

**Modern Foreign Languages**
1. To teach the fundamental skills of reading, writing, aural comprehension and speaking in a foreign language.
2. To provide students with a solid basis for further study of the language, literature and civilization.
3. To enhance students' awareness of language in general: its structures, uses and relationship to the culture of the lands in which the language is spoken.

**Classical Languages and Hebrew**
1. To read the original text with understanding.
2. To study the ideas, history and culture that are the basis of Western Civilization.

In the upper division courses, numbered 200 to 499, the objectives are to continue the work done in the lower division, to prepare students for graduate study, for teaching or for entering careers which demand use of a foreign language; more specifically:

1. To refine the skills acquired in the lower division courses.
2. To study literature both as individual works of art and as a reflection of the civilization and era from which it sprang.
3. To study a foreign civilization and its development.
4. To offer such specialized work as is necessary for those who plan to teach or those who would use foreign language in their careers.

The Department of Foreign Languages and Literatures cooperates with the Departments of Economics, Geography, History and Political Science in a major in International Economics and Cultural Affairs designed for students considering careers in the fields of international commerce or government service (see page 108 for details) and also participates in the International Service major.

**Study Abroad.** Through University programs and affiliations, an opportunity to study abroad is afforded students of any of the foreign languages. Foreign language majors and minors are strongly encouraged to study abroad. See pages 18-24 for details.

**Placement and Special Credit.** Before beginning the study of a foreign language already studied in high school, students are required to take a placement examination administered by this Department. Students who wish to begin languages they have not studied before must register for course 101 of those languages.

Students who have completed Level II of a foreign language in high school and also place into 101 of that language may enroll in 101 for elective credit only, but must complete level 103 to fulfill the foreign language requirement.

Students who are placed directly into level 103 of a language shall receive 4 credit hours for level 102 and 4 credit hours for level 103 by passing course 103 at Valparaiso University.

Students who are placed directly into a 200-level course in a language shall receive 4 credit hours for level 102, 4 credit hours for level 103 and the credit hours for the 200-level course by passing the 200-level course at Valparaiso University.

**Advanced Placement by Examination.** It is possible to fulfill the Foreign Language General Education Requirement through the Advanced Placement Program of the College Entrance Examination Board or through the College Level Examination Program.

**Special Exception to Foreign Language Requirement.** Foreign students whose native language is not English and who are studying on a nonimmigrant visa are exempt from the Foreign Language General Education Requirement provided that they fulfill the General Education Requirements in English.

Members of the College of Adult Scholars and other non-traditional students who have completed Level II of a foreign language in high school (9-12) but have not studied that language for at least six full years may be allowed to count credit earned for level 101 toward the foreign language requirement.

Students should consult with the Dean of the College of Adult Scholars.

**Degree.** Completion of the degree requirements of the College of Arts and Sciences with a major in Classics, French, German, or Spanish leads to the Bachelor of Arts degree.

**Cooperative Education.** Qualified students may participate in the Cooperative Education program, subject to the availability of suitable positions. During the time of their employment, students are financially reimbursed by the cooperating employer and also receive credit toward the Foreign Language major. Eligible students are normally junior or senior Foreign Language majors who have completed 12 credits beyond the third semester of their language with a cumulative grade point average of 3.00 in their foreign language courses.

Cooperative Education may be repeated for a total of 12 credit hours, only 3 of which may be counted toward meeting the minimum requirements of the major. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

**Approval of Schedules.** All students who take a major or minor in the Department and all students who plan to teach a foreign language must have their schedules approved by the Chair of the Department at the beginning of each semester. A list of specific courses required of teaching majors and minors is available from the Chair of the Education Department.

**Chinese**

**Study Abroad Opportunities:** Hangzhou Program available fall semester only. See page 20 for details. Students considering study abroad should consult with the Department Chair and their academic adviser as early as possible.

**FLC 101. Beginning Chinese I.**
Cr. 4. Basic elements of modern Chinese (Mandarin), including the four tones, sentence structure and some Chinese characters. May not be taken by students who have taken language study courses in China.

**FLC 102. Beginning Chinese II.**
Cr. 4. Continuation of FLC 101. Prerequisite: FLC 101 or equivalent. May not be taken by students who have taken language study courses in China.

**FLC 203. Intermediate Chinese I.**
Cr. 4. Development of FLC 101 and 102, focusing on speaking, aural comprehension, reading and writing. Emphasis on drills and discussion of readings. Introduction of simplified characters and cursive script. Continuously increasing use of Chinese in class. Prerequisite: FLC 102 or permission of the instructor.

**FLC 204. Intermediate Chinese II.**
Cr. 4. Continuation of FLC 203, emphasizing development of speaking, aural comprehension, reading and writing. Includes readings from a variety of sources including contemporary Chinese short stories, lectures, and newspapers. Class sessions conducted in Chinese as much as possible. Prerequisite: FLC 203 or permission of the instructor.

**Classics**

**Major.** Students must choose one of two tracks: the Classical Language and Literature track or the Classical Civilization track.

**Classical Language and Literature Track:** Requirements for the major are CLC 220 and 311 and one of the following language concentrations:

1. Greek (24 credits); or
2. Latin (16 credits beyond FLL 103); or
3. Classical Languages (16 credits of Greek and 8 credits of Latin beyond FLL 103).

**Note:** Students planning to pursue a graduate program in Classics should take as many Greek and Latin courses as possible. Sixteen hours of Greek language courses is normally the minimum recommendation for...
Foreign Languages and Literatures

Classical Civilization
See Classics for description of Classical Civilizations concentration in Classics major and minor.

Cr. 3. A study of Greek and Roman literature in translation and art. May be repeated for credit provided there is no duplication of material. No knowledge of Greek or Latin required.

CLC 220. Introduction to Classical Archaeology.
Cr. 3. A study of classical archaeological sites including sculpture, painting, and architecture, and their relationship to political and cultural history. Field trip to a major museum. No knowledge of Greek or Latin required. This course may be used to fulfill the Fine Arts/Fine Arts Literature component of the General Education requirements.

Cr. 3. A travel course in which the study of Greek or Roman artistic and literary expression takes place in a classical environment. Study trips will be conducted to Greece, Italy, or Roman Germany. May be repeated for credit if the trips are different. No knowledge of Greek or Latin required. Offered summers only.

CLC 251. Classical Mythology.
Cr. 3. Survey of Greek and Roman myths and their influence on modern literature and art. No knowledge of Greek or Latin required. This course may be used to fulfill the Fine Arts/Fine Arts Literature component of the General Education Requirement.

CLC 290. Special Topics in Classical Civilization.
Cr. 3. A study of a particular issue or theme in Classical Civilization. Topics will be selected on the basis of student and faculty interest. Possible topics include The Roman World in Film, and Cultural Diversity in the Classical World. May be repeated for credit provided there is no duplication of material. No knowledge of Greek or Latin required.

CLC 311. Greek and Roman Civilization.
Cr. 3. Also offered as HIST 311.) A study of the Greek and Roman political, social, and intellectual development from the Mycenaean period to 326 B.C. No knowledge of Greek or Latin required. Prerequisite: sophomore standing or consent of the Chair of the Department. This course may be used to fulfill the Philosophical and Historical Studies component of the General Education Requirements.

French
Major. A minimum of 27 credit hours in French beyond FLF 103 constitutes a major. Courses must include FLF 204, 221, 222, 231, 232, and 493.

Minor. A minimum of 14 credit hours beyond FLF 103 constitutes a minor. Courses must include FLF 204 and one course in each French civilization or literature.

Teaching Programs. Students who plan to teach French in secondary schools with a major or minor in French should consult the Chair of the Department and the Education Department for specific requirements.

The Roger and Hazel Guillaumet Award. See page 28 for details.

Study Abroad Opportunities:
Sorbonne Paris Program (available full year or spring semester)
Paris Internship Program (available fall or spring semester)
See page 22 for details; students considering study abroad should consult with the Department Chair and their academic adviser as early as possible.

FLF 101. First Semester French.
Cr. 4. A course designed to give the student the essentials of French. Refer to foreign language credit policies stated on pages 90-91.

FLF 102. Second Semester French.
Cr. 4. A continuation of FLF 101. Prerequisite: FLF 101 or equivalent.

FLF 103. Intermediate French.
Cr. 4. A course designed to review and refine knowledge of basic grammar, to improve aural comprehension and verbal skills through classroom and laboratory work and to introduce reading and composition. Prerequisite: FLF 102 or equivalent.

FLF 204. French Composition and Conversation I.
Cr. 4. Practice in speaking, understanding, reading and writing everyday French. Use of practical vocabulary and common idioms. Prerequisite: FLF 103 or equivalent. May be repeated for credit at the Paris Centers or similarly accredited programs.

FLF 205. French Composition and Conversation II.
Cr. 4. A continuation of FLF 204 with work of increased difficulty. Prerequisite: FLF 204. May be repeated for credit at the Paris Centers or similarly accredited programs.

FLF 221. French Literature from the Middle Ages to 1788.
Cr. 3. A survey of French literary history from the Middle Ages to the end of the 18th century with reading of representative works. Prerequisite: FLF 204.

FLF 222. French Literature from 1800 to the Present.
Cr. 3. A survey of French literary history of the 19th and 20th centuries with reading of representative works. Prerequisite: FLF 204.

FLF 231. French Civilization to 1780.
Cr. 3. A historical survey of the French cultural heritage in the fields of history, sociology and the fine arts to the beginning of the Third Republic. Prerequisite: FLF 204.
FLF 232. French Civilization from 1870 to the Present.
Cr. 3. A study of the Franco-Prussian War, the two world wars, decolonization and participation in the European Community and their impact on the politics, social development, economy and thought of France today. Prerequisite: FLF 204.

FLF 240. French Phonetics.
Cr. 3. A study of the principles of French phonetics with special emphasis on the difficulties encountered by American students. Much practical training in the laboratory. Prerequisite: FLF 103 or equivalent.

FLF 250. Topics in French Literature and the Fine Arts.
Cr. 3. Study of selected works of French literature in English translation and of their correlates in the visual arts and/or music. No knowledge of French required. May not be counted toward a major or minor in French.

FLF 308. Contemporary French Language and Communication.
Cr. 4. French newspapers, magazines, radio, television and films are used as a basis to build more advanced language skills and to familiarize the student with modern-day France. Prerequisite: FLF 204.

FLF 307. Professional French.
Cr. 3. A study of the French language as it is used in the international business world, including writing of business letters and general commercial terminology. Prerequisite: FLF 204.

FLF 390. Seminar in French.
Cr. 3. A study of selected themes or issues in French or Francophone literature, language, or civilization. Prerequisite: one course from the following: FLF 221, 222, 231, or 232.

FLF 481. Cooperative Education in French I.
Cr. 0.5-3. Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond FLF 103 and approval of the Chair of the Department. S/U grade.

FLF 482-483. Cooperative Education in French II-III.
Cr. 0.5-3. Continuation of FLF 481. Prerequisites: FLF 481 and approval of the Chair of the Department. S/U grade. May be repeated beyond 483 for additional credit.

FLF 489. The Teaching of Foreign Languages.
Cr. 3. (See ED 489). A study of the methods of teaching foreign languages in secondary schools. May not be counted toward a major or minor in the Department of Foreign Languages and Literatures. Prerequisite: admission to the Professional Semester. Given upon sufficient demand.

FLG 493. Senior French Seminar.
Cr. 3. A senior-level capstone course which integrates knowledge and skills from previous French courses. Language skills (speaking, listening, writing, reading) are refined as depth and nuance are added to the understanding of French history, literature, culture and contemporary events. Prerequisites: senior standing and consent of the Chair of the Department.

FLG 495. Supervised Reading and Research in French.
Cr. 1-4. Intended for students capable of doing independent study in French language, civilization and literature. Prerequisite: consent of the Chair of the Department.

FLG 497. Honors Work in French.
Cr. 3. See Honors Work, page 50.

FLG 498. Honors Candidacy in French.
Cr. 3. See Honors Work, page 50.

German

Major. A minimum of 27 credit hours in German beyond FLGR 103 constitutes a major. Courses must include FLGR 204, 221, 222, 231, 232, and 493.

Minor. A minimum of 14 credit hours beyond FLGR 103 constitutes a minor. Courses must include FLGR 204 and one course in either German civilization or literature.

Teaching Programs. Students who plan to teach German in secondary schools with a major or minor in German should consult the Chair of the Department and the Education Department for specific requirements.

Study Abroad Opportunities: Reutlingen Program (available fall or spring semester) Tübingen Program (available full year only) See pages 23-24 for details; students considering study abroad should consult with the Department Chair and their academic advisor as early as possible.

The Walther M. Miller Memorial Prize. See page 29 for details. Also available is a Reutlingen Semester Scholarship.

FLGR 101. First Semester German.
Cr. 4. A course designed to give the student the essentials of German. Refer to foreign language credit policies stated on pages 90-91.

FLGR 102. Second Semester German.
Cr. 4. A continuation of FLGR 101. Prerequisite: FLGR 101 or equivalent.

FLGR 103. Intermediate German.
Cr. 4. Reading, writing and discussion in German on the intermediate level; review of German grammar. Upon demand a special reading section will be offered. Prerequisite: FLGR 102 or equivalent.

FLGR 204. German Composition and Conversation I.
Cr. 4. Practice in speaking (general conversation beyond survival needs), understanding (standard German spoken at a normal rate), reading (nonspecialized texts), and writing (paragraphs). Prerequisite: FLGR 103 or equivalent. May be repeated for credit at Reutlingen Center.

FLGR 205. German Composition and Conversation II.
Cr. 4. A continuation of FLGR 204, with work of increased difficulty. Prerequisite: FLGR 204.

FLGR 221. Selected Readings in German Literature to 1800.
Cr. 3. Representative examples from different genres of German literature through the end of the 18th century. Prerequisite: FLGR 204.

FLGR 222. Selected Readings in German Literature since 1800.
Cr. 3. Representative examples from different genres of German literature from the age of Goethe to the present. Prerequisite: FLGR 204.

FLGR 231. German Civilization to 1800.
Cr. 3. A historical and interdisciplinary survey of German culture to the end of the 18th century. Prerequisite: FLGR 204.

FLGR 232. German Civilization since 1800.
Cr. 3. A historical and interdisciplinary survey of German culture in the 19th and 20th centuries. Prerequisite: FLGR 204.

FLGR 250. Topics in German Literature and the Fine Arts.
Cr. 3. Study of selected works of German literature in English translation and of their correlates in the visual arts and/or music. No knowledge of German required. May not be counted toward a major or minor in German.

FLGR 260. History of the German Film.
Cr. 3. A survey of the German film from the 1920's to the present. No knowledge of German required. May not be counted toward a major or minor in German. This course may be used to fulfill the Fine Arts/Literature component of the General Education Requirements.

FLGR 306. Contemporary German Language in the Mass Media.
Cr. 4. The contemporary German language as used in radio broadcasts, newspapers, magazines and other sources from German-speaking countries. Prerequisite: FLGR 204.

FLGR 307. Professional German.
Cr. 3. A study of the German language primarily for participants in the Program in International Economics and Cultural Affairs. The course is adjusted to the career needs of the individual class. Prerequisite: FLGR 204.

FLGR 341. History of the German Language.
Cr. 3. A historical study of the development of the German language. Prerequisite: FLGR 204.

FLGR 390. Seminar in German.
Cr. 3. A study of selected themes or issues in German literature, language, or civilization. Prerequisite: one course from the following: FLGR 221, 222, 231, or 232.

FLGR 481. Cooperative Education in German I.
Cr. 0.5-3. Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond FLGR 103 and approval of the Chair of the Department. S/U grade.

FLGR 482-483. Cooperative Education in German II-III.
Cr. 0.5-3. Continuation of FLGR 481. Prerequisites: FLGR 481 and approval of the Chair of the Department. S/U grade. May be repeated beyond 483 for additional credit.

FLGR 489. The Teaching of Foreign Languages.
Cr. 3. (See FLG 489 and ED 489). Prerequisite: admission to the Professional Semester.

FLGR 493. Senior German Seminar.
Cr. 3. A senior-level capstone course which integrates knowledge and skills from previous German courses. Language skills (speaking, listening, writing, reading) are refined as depth and nuance are added to the understanding of German history, literature, culture and contemporary events. Prerequisites: senior standing and consent of the Chair of the Department.

FLGR 495. Supervised Reading and Research in German.
Cr. 1-4. Intended for students capable of doing independent study in German language, civilization and literature. Research paper required. Prerequisite: consent of the Chair of the Department.

FLGR 497. Honors Work in German.
Cr. 3. See Honors Work, page 50.

FLGR 498. Honors Candidacy in German.
Cr. 3. See Honors Work, page 50.
### Greek

See Classics for description of Greek concentration in Classics major and minor.

**FLGK 101. First Semester Greek.**
- Cr. 4. A course designed to give the student the essentials needed to read ancient Greek and to provide a brief introduction to Greek literature and culture.

**FLGK 102. Second Semester Greek.**
- Cr. 4. A continuation of FLGK 101 with readings from Classical and/or New Testament authors. Prerequisite: FLGK 101 or equivalent.

**FLGK 203. Intermediate Hebrew.**
- Cr. 4. Selected reading of Old Testament prose and poetry, with attention to increased vocabulary and linguistic structure. Prerequisite: FLH 202 or equivalent.

**FLGK 495. Supervised Reading and Research in Hebrew.**
- Cr. 1-4. Intended for students capable of doing independent study in Hebrew language and literature. Research paper required. Prerequisite: consent of the Chair of the Department.

**Japanese**

**Minor.** A minimum of 16 credit hours in Japanese constitutes a minor.

**Study Abroad Opportunities:**
- Kansai Gaidai Program (available fall and/or spring semesters)
- Osaka International University Program (available full year only)

See page 21 for details. Students considering study abroad should consult with the Department Chair and their academic advisor as early as possible.

**FLJ 101. Beginning Japanese I.**
- Cr. 4. An introduction to the basic grammar of Japanese.

**FLJ 102. Beginning Japanese II.**
- Cr. 4. A continuation of FLJ 101. Prerequisite: FLJ 101 or equivalent.

**FLJ 203. Intermediate Japanese I.**
- Cr. 4. Reading, writing, and discussion in Japanese on the intermediate level, with a review of Japanese grammar. Prerequisite: FLJ 202 or equivalent.

**FLJ 204. Intermediate Japanese II.**
- Cr. 4. A continuation of FLJ 203. Prerequisite: FLJ 203 or equivalent.

**FLJ 250. Topics in Japanese Literature and the Fine Arts.**
- Cr. 3. Study of selected works of Japanese literature in English translation and of their correlates in the visual arts and/or music. No knowledge of Japanese required.

**FLJ 251. Introduction to Japanese Literature.**
- Cr. 3. Readings of representative works of Japanese literature in English. No knowledge of Japanese required. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

**FLJ 305. Advanced Japanese I.**
- Cr. 4. Continuation of FLJ 204. Introduction of extended prose readings. Simple conversation and composition in everyday Japanese. Prerequisite: FLJ 204 or equivalent.

**FLJ 306. Advanced Japanese II.**
- Cr. 4. Continuation of FLJ 305. Emphasis on syntax of prose texts; review of grammar. Conversation in everyday Japanese. Composition in the expository style. Prerequisite: FLJ 305 or equivalent.

**FLJ 481. Cooperative Education in Japanese I.**
- Cr. 0.5-3. Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond FLJ 203 and approval of the Chair of the Department. 5/9 grade. May be repeated beyond 483 for additional credit.

**FLJ 482-483. Cooperative Education in Japanese II-III.**
- Cr. 0.5-3. Continuation of FLJ 481. Prerequisites: FLJ 481 and approval of the Chair of the Department. 5/9 grade. May be repeated beyond 483 for additional credit.

See Classics for description of Latin concentration in Classics major and minor.

### Latin

See Classics for description of Latin concentration in Classics major and minor.

**Teaching Programs.** Students who plan to teach Latin in secondary schools should consult the Chair of the Department and the Education Department for specific requirements.

**FLL 101. First Semester Latin.**
- Cr. 4. A course designed to give the student the essentials of Latin and to provide a brief introduction to Roman literature and culture. Credit may not be counted for graduation by a student who has completed a second-year Latin course in high school.

**FLL 102. Second Semester Latin.**
- Cr. 4. A continuation of FLL 101, followed by easy selections from Latin prose. Prerequisite: FLL 101 or equivalent.

### Spanish

**Major.** A minimum of 27 credit hours beyond FLS 103 constitutes a major. Courses must include FLS 204, 220, 230 or 231, 321 or 322, and 493.

**Minor.** A minimum of 14 credit hours above FLS 103 constitutes a minor. Courses must include FLS 204 and one course in either civilization or literature.

**Teaching Programs.** Students who plan to teach Spanish in secondary schools with a major or minor in Spanish should consult the Chair of the Department and the Education Department for specific requirements.

**Study Abroad Opportunities:**
- Puebla, Mexico Program (available spring semester only)
FLS 101. First Semester Spanish.
Cr. 4. A course designed to give the student the essentials of Spanish. Refer to foreign language credit policies stated on pages 90-91.

FLS 102. Second Semester Spanish.
Cr. 4. A continuation of FLS 101. Prerequisite: FLS 101 or equivalent.

FLS 103. Intermediate Spanish.
Cr. 4. A course designed to improve communication and comprehension skills in Spanish, review and refine knowledge of grammar, broaden vocabulary and increase familiarity with Hispanic cultures. Prerequisite: FLS 102 or equivalent.

FLS 204. Spanish Composition and Conversation.
Cr. 4. Practice in speaking, understanding, reading and writing everyday Spanish. Increased understanding of the Hispanic world through reading and discussion. Prerequisite: FLS 103 or equivalent.

FLS 220. Selected Readings in Hispanic Literature.
Cr. 4. The reading and discussion of works of Hispanic literature representative of various literary genres, with emphasis on the techniques of literary analysis. Prerequisite: FLS 204.

FLS 230. Spanish Civilization.
Cr. 4. A course intended to further the student’s knowledge of the varied elements of Spanish history and culture. Lectures and individual oral participation in Spanish. Prerequisite: FLS 204.

FLS 231. Spanish-American Civilization.
Cr. 4. A course intended to further the student’s knowledge of the varied elements of Spanish-American history and culture. Lectures and individual participation in Spanish. Prerequisite: FLS 204.

FLS 250. Topics in Hispanic Literature and the Fine Arts.
Cr. 3. Study of selected works of Hispanic literature in English translation and of their correlates in the visual arts and/or music. No knowledge of Spanish required. May not be counted toward a major or minor in Spanish. The topic, Spanish America in Literature and the Arts, may be used to fulfill the Fine Arts/Foreign Language requirement. Credit toward the Major, Minor, and/or the Global Cultures and Perspectives component of the General Education Requirements.

FLS 306. Contemporary Hispanic Society through Communications.
Cr. 4. Latin American and Spanish newspapers, magazines, radio, television, and films are used to build more advanced language skills and to familiarize the student with the modern-day Hispanic world. Prerequisite: FLS 204.

FLS 307. Professional Spanish.
Cr. 3. A study of the Spanish language as it is used in the international business world, including writing of business letters and general commercial terminology. Prerequisite: FLS 204.

FLS 321. Spanish Literature.
Cr. 3. A study of representative works of the literature of Spain from the Middle Ages to the present. Prerequisite: FLS 220.

FLS 322. Spanish American Literature.
Cr. 3. A study of representative works of the literature of Spanish America from the Encounter to the present. Prerequisite: FLS 220.

FLS 341. The Spanish Language.
Cr. 3. An introduction to the historical development of the Spanish language through the study of linguistics, phonetics and philology. Prerequisite: FLS 204.

FLS 390s. Seminar in Spanish.
Cr. 3. A study of selected themes or issues in Spanish or Spanish American literatures, language, or civilization. Prerequisite: one course from the following: FLS 220, 230, or 231.

FLS 481. Cooperative Education in Spanish I.
Cr. 0.5-3. Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond FLS 103 or approval of the Chair of the Department. S/U grade.

FLS 482-483. Cooperative Education in Spanish II-III.
Cr. 0.5-3. Continuation of FLS 481. Prerequisites: FLS 481 and approval of the Chair of the Department. S/U grade. May be repeated beyond 483 for additional credit.

FLS 489. The Teaching of Foreign Languages.
Cr. 3. (See FLF 489 and ED 489.) Prerequisite: admission to the Professional Semester.

FLS 493. Senior Spanish Seminar.
Cr. 3. A senior-level capstone course which integrates knowledge and skills from previous Spanish courses. Language skills (speaking, listening, writing, reading) are refined as depth and nuance are added to the understanding of Hispanic history, literature, culture and contemporary events. Prerequisites: FLS 220, senior standing and consent of the Chair of the Department.

FLS 495. Supervised Reading and Research in Spanish.
Cr. 1-4. Intended for students capable of doing independent study in Hispanic language, civilization or literature. Research paper required. Prerequisite: consent of the Chair of the Department.

FLS 497. Honors Work in Spanish.
Cr. 3. See Honors Work, page 50.

FLS 498. Honors Candidacy in Spanish.
Cr. 3. See Honors Work, page 50.

Geography and Meteorology

Professor Janke, (Chair); Assistant Professors Kilpinnen, J. Knox, Wolf; Instructor Stevens.

Geography

Geography is a diverse subject which provides students with a strong, practical liberal arts education and offers a wide variety of employment opportunities. The diversity of the discipline stems from its fundamental concern with how humans as individuals and in groups interact with the physical environment.

The Department’s two major objectives are:
1. To provide students with knowledge of the physical environment and human use of that environment;
2. To equip students with marketable skills for employment positions related to the discipline or to prepare them for graduate programs leading toward advanced degrees.

While graduate training usually enlarges a student’s opportunities, employment may be found upon graduation with a baccalaureate degree and a geography major. The following are some of the fields of employment for geography majors: cartography, demography, climatology, industrial location planning, land use planning, soil conservation, transportation planning, teaching of geography.

Student interest in geography outside the classroom is encouraged through the Geographical Society, which organizes social activities as well as cultural programs. In addition, those who distinguish themselves by high scholarship may be elected to membership in Gamma Theta Upsilon, the international geographic honor society. The Alpha Xi Chapter of Gamma Theta Upsilon was installed at Valparaiso University in 1950.

Valparaiso University, with over 125,000 maps, is the only map repository of the Army Map Service and the United States Geological Survey in Northwest Indiana. Annually thousands of national, regional and topographic maps of all continents are received.

Major. A minimum of 30 credit hours in geography, chosen by the student in consultation with the Chair of the Department, constitutes a major. Two 100 level, two 200 level, and four 300 level or higher courses must be included.

Within the geography major, students may focus their studies further by selecting one of the following concentrations: Cartography and Geographic Information Systems (GIS), Environmental Geography, Urban Geography and Regional Planning, and Human/Cultural Geography. The Department maintains detailed information sheets on these concentrations, including course listings, internship recommendations, and career options. Contact the Chair of the Department for details.

Minor. A minimum of 16 credit hours in geography, chosen by the student in consultation with the Chair of the Department, constitutes a minor. One 100 level, one 200 level, and two 300 level or higher courses must be included.

Because geography offers undergraduate students excellent opportunities to develop their professional skills through course work, field study, and internships, the Department maintains information sheets on geography as a second major or minor tailored specifically to disciplines such as biology, civil engineering, business, foreign language, history, sociology/anthropology, and political science. The new Kallay Laboratory was designed to facilitate research and teaching in the area of computerized geographic analysis, including GIS, remote sensing, and cartography.

Other courses analyzing ethnic relations and global cultures will strengthen student interests in the humanities and social sciences. Contact the Chair of the Department for more information.

For more information visit the Department’s webpage at http://www.valpo.edu/geomet/.

Meteorology

The meteorology course of study at Valparaiso University is a dual-track program leading to either a Bachelor of Science degree in Meteorology or a Bachelor of Arts degree in Broadcast Meteorology. Requirements for either may be modified to suit the latter option, designed for those interested in careers with the media, are found on page 63.

The science of meteorology draws heavily on the fields of mathematics, physics, chemistry, and computer science. As such,
students considering the Bachelor of Science option should possess a strong mathematics and science background. The job market in meteorology is as rich and diverse in scope as the field itself. A majority enter the job market with the National Weather Service, airlines, and private forecasting and environmental consulting firms. Graduate training is required for careers in research and academia.

Students interested in extracurricular learning opportunities are encouraged to participate in the Meteorology Club and avail themselves of the program's field course opportunities, including the Severe Convective Storm Field Studies. Internships and cooperative education experiences are also available to qualified students. The department maintains a well-equipped weather center with instrumented tower, DIFAX, MciDAs-OS/2, and Doppler radar data available.

Major. A minimum of 32 credit hours constitutes a major in meteorology for the Bachelor of Science degree. For this meteorology program, students are required to take MET 103, 215, 216, 369, 372, 373, 480, 481, and one course from 279, 319, or 490. The meteorology major also must take PHYS 141, 141L, 142, and 142L, (MATH 131 and 132) or (MATH 151 and 152) and MATH 253. Students must attain a minimum grade point average of 2.00 in the 20 credits of mathematics and physics prerequisites (MATH 131 or 151, 132 or 152, and 253 and PHYS 141, 141L, 142, and 142L) before continuing the meteorology major beyond MET 379.

Minor. A minimum of 17 credits in meteorology constitutes a minor. This must include the following meteorology courses: MET 103, 215, 216, 369, and 372.

Geography

The Valparaiso University-Indiana University Northwest Geography and Geology Association (VIGGA) Major in Geography. The purpose of this association is to provide educational opportunities at the undergraduate level in the geological and geographical sciences to the students enrolled at Valparaiso University and Indiana University Northwest, Gary. Since the school year of 1970-1971, full-time undergraduate students in these academic disciplines have been permitted to enroll in Association courses under the following conditions:

1. Students may take a maximum of two courses per semester at the other participating institution.
2. These courses are treated as part of the student’s normal load at the home institution and tuition and fees are levied accordingly.
3. The total number of credit hours to be taken is determined by the student’s home institution.
4. Students who wish to take courses at the host institution should obtain the recommendation of the Chair of the Geography Department (VU).
5. Grades earned shall be recorded at the student home institution.
6. A C or 2.00 average must be achieved on VIGGA courses to qualify the student to register for courses at the host institution in the following semester. Association students at Valparaiso University are expected to complete satisfactorily the following curriculum from course offering at Valparaiso University and Association offerings at Indiana University Northwest in order to complete the major in geography. Degrees are awarded by the home institution.

Geography and Meteorology

GEOGRAPHY

GEO 101. World Human Geography.
Cr. 3. A topical introduction to the many themes and subfields of human geography, especially population, economic, cultural, urban, and political geography. Examples highlighting these themes draw from relevant contemporary events in both the industrialized and developing worlds. This course may be used to fulfill a part of the Social Analysis component of the General Education Requirements.

GEO 102. Geography of the Non-Industrialized World.
Cr. 3. A regional survey of the so-called "Third World." The emphasis is on cultivation of a cosmopolitan sensitivity to and respect for cultures other than our own. This course may be used to fulfill a part of the Social Analysis component and the Global Cultures and Perspectives component of the General Education Requirements.

GEO 104. Geomorphology.
2+4, Cr. 4. The scientific analysis of natural processes and human impacts affecting the development of landscapes on the earth and other planets. Emphasis is on the interrelationships of geologic, climatic, hydrologic and biological cycles in creating and reshaping landforms. Field trips. This course may be used to fulfill four credit hours of the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

GEO 115. Map Analysis and Interpretation.
2+4, Cr. 3. An introduction to the fundamental uses and types of maps, with emphasis on their properties, coordinate systems, and projection. Utilizing a number of laboratory exercises, some computerized, the course examines a variety of map types (from topographic and weather maps to thematic maps) and forms (from paper maps to satellite images and internet maps). Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

Cr. 3. An analysis of the rich ethnic diversity of the United States, including the immigration and regional settlement of each of the major cultural groups and their physical expression on the North American Landscape. Topical themes include language, religion, politics, and urban imprints. This course may be used to fulfill the U.S. Diversity component of the General Education Requirements.

Cr. 2-3. This course is designed to examine current geographic topics. These may include American minority settlement patterns and communities, cultural ecology, national parks, geographic techniques, the American Indian, travel and tourism, medical geography, and problems associated with the physical environment. May be repeated when the topic is different. The three-credit course extends throughout the semester, the two-credit course for seven weeks.

GEO 215. Introduction to Geographic Information Systems.
Cr. 2+2, Cr. 3. An introduction to the theory and practical use of geographic information systems. These power research tools combine computer mapping and databases to provide diverse combinations of spatial information and modeling capabilities to enhance decision-making processes and environmental planning. GIS usage is also highly multidisciplinary; the class may be of interest to students of several other programs such as civil engineering, biology, business, health sciences. Prerequisite: GEO 115.

GEO 225. Cartography.
Cr. 2+2, Cr. 3. An introduction to cartographic history and techniques and the composition and construction of maps, with a focus on the contributions of both manual and computerized techniques to modern map design. Prerequisite: GEO 115.

Cr. 3. An introduction to sensors and techniques of data acquisition by remote means, and the use of the data in geography and planning. Topics: cover energy sensors common to satellites and aircraft, photographic sensors, the interpretation of data produced, and theory and practice of using remotely sensed data in research. May be of interest to students in biology, political science and civil engineering.

Cr. 3. A study of American and international resource problems and environmental issues; the institutions and attitudes involved and solutions for correcting them.

GEO 274. North American Indian Film.
Cr. 3. Through history, plays, novels, and film, this course helps us to understand distinctive features of Native American life as understood by Native Americans. It dispels common myths about Native Americans, examines the struggle of different tribes to maintain their identities, and provides insights into their values and religious beliefs. May be used to fulfill the U.S. Diversity component of the General Education Requirements.

GEO 301. Regional Geographies of the World.
Cr. 3. A geographic interpretation of the environmental, cultural, political, and economic patterns of one of the world's major regions, such as...
as the United States and Canada, Latin America, Europe, Asia, or Africa. May be repeated for credit when the regional offering is different. Certain regional offerings may satisfy the Global Diversity component of the General Education Requirements. Prerequisite: junior or senior standing or consent of the Chair.

**GEO 318. Field Study in European Geography.** Cr. 3. Overseas Study Program only.

**GEO 320. Urban Geography.** Cr. 3. A course treating urban settlements as distinct geographic units. Topics covered include the history of urban settlement, economic classification of cities and patterns of urban land use. Field trip. Prerequisite: junior or senior standing.

**GEO 415/515. Advanced Geographic Information Systems.** Cr. 3. A course in research design and execution using GIS. Students will enhance their knowledge of GIS packages and advanced operations while researching a topic or problem. Individual and/or class projects will also focus on designing research for GIS. Prerequisite: GEO 215.

**GEO 446/566. Profession of Geography.** Cr. 3. This course treats the nature of geography as a professional field through readings, papers, presentations, and discussions. Topics covered include the history of the discipline, the variety of geographic subfields, the growth of GIS and computer applications, the proliferation of geographic resources on the Internet, and the overall "state of the art." Prerequisite: junior or senior standing.

**GEO 470/570. Political Geography.** Cr. 3. An investigation of the relations among political activities and organizations and the geographic conditions within which they develop. Political power is discussed in terms of spatial, human, cultural and ethnic geography. May be of interest to political science majors.

**GEO 474/574. Historical Geography of the United States.** Cr. 3. A regional treatment of the exploration, colonization, territorial expansion, migration, transportation, settlement and economic development of our country in relation to the physical environment. Course is primarily designed for students majoring in one of the social sciences. Prerequisite: junior or senior standing. May be of particular interest to history majors.

**GEO 486. Internship in Geography.** Cr. 1-6. Students gain experience by work in public or private agencies, such as planning firms, national parks and map companies. Prerequisites: junior or senior geography major and application for an internship in writing to the Chair of the Department.

**GEO 490/590. Selected Topics in Geography.** Cr. 2-3. Advanced studies in geography. Such topics as landform analysis, human environmental impact, biogeography, environmental management, and international business are considered. May be repeated when the topic is different. Prerequisite: junior or senior standing.

**GEO 495. Independent Study.** Cr. 2-3. Individual research readings on a topic in geography agreed upon by a student and a faculty member of his/her choice from the Department. Prerequisites: junior or senior standing and consent of the Chair of the Department.

**GEO 497. Honors Work in Geography.** Cr. 3. See Honors Work, page 50.

**GEO 498. Honors Candidacy in Geography.** Cr. 3. See Honors Work, page 50.

**MET 216. Introduction to Meteorological Observation and Analysis.** Cr. 3. Introduces the student to upper-air, surface and radar observation codes; elementary techniques of surface and constant pressure map analysis; case studies of various examples. Introduction to atmospheric observing systems, emphasizing those being phased in by the National Weather Service, including conventional and Doppler radar, satellite interpretation, wind profiler systems, ASOS, and McIDAS. Prerequisite: MET 103 or consent of instructor.

**MET 279. Severe Storm Prediction and Nowcasting.** Cr. 3. Introduces the student to the structure of supercell and multicell thunderstorms and tornadoes, as well as their synoptic or mesoscale environments. Examines current methods of forecasting convective weather systems. Prerequisite: MET 216.

**MET 319. Tropical Meteorology.** Cr. 3. Introduction to the synoptic and dynamics of tropical weather systems, including their interaction with and influence on the global circulation. Topics include oceanic current systems, monsoons, tropical cyclones, ENSO, and local/mesoscale circulations. Prerequisite: MET 216 and MATH 131 or 151.

**MET 369/569. Atmospheric Thermodynamics.** Cr. 3. Introduces the atmospheric system, including basic characteristics and variables; basic radiation thermodynamics; vertical temperature structures; stability concepts and evaluation; physics of clouds and precipitation processes. Prerequisites: MATH 131 or 151 and MET 103.

**MET 372/572. Atmospheric Dynamics I.** Cr. 3. A general survey of the fundamental forces and laws that govern atmospheric processes, particularly those motions associated with weather and climate. Emphasis is on the applications of the basic equations of motion, atmospheric thermodynamics, gradient and geostrophic flow, and the general circulation. Prerequisites: MATH 253 or concurrent registration and MET 216.

**MET 373/573. Atmospheric Dynamics II.** Cr. 3. Second semester dynamics course emphasizing quasi-geostrophic dynamics; wave motions, barotropic and baroclinic instabilities; cyclones, air masses, fronts and frontogenesis, various development theories; cyclone climatologies, jet streams, and secondary thermal circulations. Laboratory case studies and exercises. Prerequisite: MET 372.

**MET 385/585. Field Study in Meteorology.** Cr. 0-4. A field study course emphasizing severe storm prediction, spotting and interception. Additional fees charged to cover expenses. Prerequisites: junior or senior meteorology or broadcast meteorology major and consent of the instructor.

**MET 480/580. Synoptic Scale Analysis and Forecasting.** Cr. 3-6. Introduces the student to mesoscale meteorology and analysis, classification and forecasting challenges; analysis techniques; mechanically/thermally driven circulations, including land-sea breezes and lake effect snow; downslope flows; synoptic setting for severe weather; atmospheric stability; analysis and forecast procedures; convection theory; thunderstorm models, isolated convective systems, organized convective systems and tornadoes; atmospheric discontinuities; drylines, outflow boundaries, fronts; introduction to atmospheric observing systems. Prerequisites: MET 480 and 373 or concurrent registration.

**MET 481/581. Mesoscale Forecasting and Analysis.** Cr. 3. Introduces to mesoscale meteorology and analysis, classification and forecasting challenges; analysis techniques; mechanically/thermally driven circulations, including land-sea breezes and lake effect snow; downslope flows; synoptic setting for severe weather; atmospheric stability; analysis and forecast procedures; convection theory; thunderstorm models, isolated convective systems, organized convective systems and tornadoes; atmospheric discontinuities; drylines, outflow boundaries, fronts; introduction to atmospheric observing systems. Prerequisites: MET 480 and 373 or concurrent registration.

**MET 486/586. Internship in Meteorology.** Cr. 1-6. Students gain experience by working in National Weather Service offices, government laboratories, private consulting firms, or media and broadcasting stations. Prerequisite: meteorology or broadcast meteorology and consent of internship coordinator.

**MET 490/590. Selected Topics in Meteorology.** Cr. 3. Advanced studies in applied and theoretical meteorology. Topics such as weather systems analysis, microscale meteorology and atmospheric observing systems may be considered. May be repeated when topic is different. Prerequisite: MET 103 and 216 and consent of instructor.

**MET 495. Independent Study.** Cr. 2-3. Individual research readings on a topic in meteorology agreed upon by a student and a faculty member of his/her choice from the Department. Prerequisites: junior or senior standing and consent of the Chair of the Department.

**MET 497. Honors Work in Meteorology.** Cr. 3. See Honors Work, page 50.

**MET 498. Honors Candidacy in Meteorology.** Cr. 3. See Honors Work, page 50.
History

Professors Austensen, Berg; Associate Professor Rubchak; Assistant Professors Craft, Racine, Schaefer (Chair), and Seguin.

One of the central disciplines of the traditional liberal arts, history is concerned with understanding the development of societies and cultures which produced the world as we know it. The historian is present-minded, convinced that illumination of the past is of fundamental importance in today's decision-making and for tomorrow's dreams. History provides a solid major for those with career goals in law, teaching, journalism, government and the ministry. Combining a history major with a Liberal Arts Business Minor has proved to be a popular alternative for those who have strong interests in history and who plan to pursue a business career. Since the history student integrates materials from the social and behavioral sciences, literature, philosophy, religion and the arts, history is also a field for students who view the undergraduate years as time to explore a variety of subjects.

Major. A minimum of 30 credit hours in history constitutes a major. Courses must include HIST 200, 210, and 493. Twelve hours of the major must be taken in courses numbered 300 or above in addition to those listed; for these twelve hours the student must elect at least one course in each of the following fields:

History of the Americas, European history, Non-Western history. Students who plan on graduate work in history are strongly urged to acquire reading proficiency in at least one modern foreign language.

Minor. A minimum of at least 18 credit hours in history constitutes a minor. Courses must include HIST 200 and 210. Nine of the remaining hours must be in courses numbered 300 or above, one course from each of the three fields listed under the major.

Degree. Completion of the degree requirements of the College of Arts and Sciences with a major in history leads to the Bachelor of Arts degree.

Pre-Law Students. Pre-law students who are taking a major in history should consult their advisor about appropriate course selections and about the selection of a second major or a minor.

Credit by Examination. Credit for HIST 200 and 210 may be earned through the College Level Examination Program subject examination in Western Civilization or through the Advanced Placement examination offered by the College Entrance Examination Board.

Approval of Schedules. Students taking a major or minor in history must have their schedules approved by the Chair of the Department each semester. In addition, each class of majors is assigned to a member of the Department for advising.

Note: The survey courses, HIST 200 through 250, may be used to fulfill the Philosophical and Historical Studies component of the General Education Requirements. HIST 232, 240, 242, and 250 may be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Cr. 3. A survey of American history from Reconstruction to the present, with emphasis on industrialization, reform movements, immigration, civil rights, and global wars.

HIST 225. Alternative Perspectives of United States History: Racial Minorities and Mainstream America.
Cr. 3. An examination of interactions between the dominant Anglo-Saxon culture and three separate minority cultures, Indian, African-American, and Asian American, in order to discover the nature of their individual transformations. May be used to fulfill the U.S. Diversity component of the General Education Requirements.

HIST 226. The Hispanic U.S.
Cr. 3. A study of the Hispanic experience in the territory that has become the United States. Beginning with Spanish explorers and continuing through colonial institutions, the course will culminate in a discussion of contemporary Hispanic communities: Cubans in Miami, Mexicans in Los Angeles, Dominicans and Puerto Ricans in New York, and Tejanos in Texas. Field trip to Chicago's Hispanic neighborhoods and markets. May be used to fulfill the U.S. Diversity component of the General Education Requirements.

Cr. 3. A survey of Latin American history, encompassing indigenous civilizations, the Spanish colonial period, and national histories, with emphasis on enduring colonial patterns in the region's government, economy, gender and race issues, and church-state relations. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

HIST 240. Introduction to East Asian Culture.
Cr. 3. An exploration of the main political, social, and cultural values in traditional China, Japan, Korea, and Vietnam and of the ways that they flourish today. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

HIST 242. East Asia on Film.
Cr. 3. A survey of the history and culture of modern China and Japan through the use of documentary and feature films. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

HIST 250. African History and Society.
Cr. 3. A survey of pre-colonial and colonial African history that highlights the diversity of African societies. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Note: HIST 351 and 352 are available in Overseas Study Centers only.

HIST 351. Survey of English History and Culture.
Cr. 3. A survey of English life from Roman times to the present, emphasizing broad movements, themes and institutions. Cambridge Center.

HIST 352. Problems in Modern German History.
Cr. 3. An examination of modern German history emphasizing selected problems. Reutlingen Center.

Note: The courses listed below require at least sophomore standing or consent of the Chair of the Department.

EUROPEAN HISTORY

HIST 311/511. Greek and Roman Civilization.
Cr. 3. (Also offered as CLC 311) A study of the Greek and Roman political, social and intellectual development from the Mycenaean period to the fourth century A.D.

HIST 313/513. History of Modern Britain.
Cr. 3. An overview of British history from the Glorious Revolution to the present. Particular attention is given to industrialization, sex and gender in the Victorian era, social reform, imperialism, Anglo-Irish relations, and World Wars I and II.

Cr. 3. A study of twentieth-century Europe, with emphasis on relations between Nazi Germany and Europe, including the USSR. The course explores the rise of ideologies such as communism and fascism and themes associated with the post-World War II world.

HIST 316/516. The Great Witchcraft Delusion.
Cr. 3. A study of the social, cultural, economic, religious, and political causes of the early modern European witchhunt. It includes the formation of the concept of witchcraft, the systematization of beliefs, and methods of persecution.

HIST 319/519. Imaging Revolution in Modern Russia.
HISTORY OF THE AMERICAS
Cr. 3. A detailed study through readings and discussion of the unresolved conflicts between Great Britain and her American colonies; the political, military and social aspects of the revolution, and the war problems culminating in the adoption of the Constitution.

Cr. 3. A detailed study through readings and discussion of the institution of slavery, the growth of abolitionism and other reform movements, and the development of sectionalism leading to the outbreak of the Civil War.

HIST 323/523. Civil War and Reconstruction.
Cr. 3. A study of the great watershed conflict in American history, with special emphasis on the problems of Black Americans.

Cr. 3. This course examines the nature of the Great Depression and its effects on the relationship of government to citizens in the United States. It also traces the European and Far Eastern origins of the American involvement in World War II as well as the diplomatic and military conduct of that war.

Cr. 3. An examination of the post war American response to the prospect of living in an uncertain world.

Cr. 3. A study of the relationship between ideas and power in Latin America. Using primary sources and important works that have conditioned the way Latin Americans view their world, the course looks at the intellectual impact of the European discovery of America, the nature of the new world, the nineteenth century idea of progress, and the significance of modernism, indigenismo, Marxism, anarcho- syndicalism, and liberation theology. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

NON-WESTERN HISTORY
Cr. 3. A study of the decline of traditional civilization resulting from domestic crises and foreign pressures, and the search for a new orthodoxy in the Chinese revolution. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Cr. 3. A study of Japan's rise to its position as a world power, the tragedy of the war period, and its triumph as an economic power in the post-war world. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Cr. 3. A topical study of Africa's struggle for political, economic, and cultural identity in the twentieth century with emphasis on exploring new historiographical methods emerging in African/World history. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

SPECIALIZED OFFERINGS
HIST 390/590. Topics in History.
Cr. 3. A study that covers a particular, large subject in history (e.g., a period or a field), selected according to student interest and instructor choice. This course may be repeated for credit if the selected subjects are different. Although history majors may take any number of these courses, they may include no more than two in a thirty-hour major.

HIST 393/593. The Vietnam War through Film and Literature.
Cr. 3. Through history, memoirs, novels, and film, this seminar studies the sources and nature of U.S. involvement in the Vietnam War (1961-1973). It examines the war's effects on the participants and the home front. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Cr. 3. A study of the nature of post-World War II American culture through the examination of a cross section of its critics. Course materials include writings of poets, novelists, essayists, and journalists as well as collections of photos, documentaries, and commercial films.

HIST 489. The Teaching of Social Studies.
Cr. 3 (See ED 489.) A study of methods of teaching social studies in secondary schools. Prerequisite: admission to the Professional Semester. This course may not be counted toward a major or minor in the Department.

HIST 492/592. Reading and Discussion Seminars.
Cr. 2-3. Full- or half-semester courses cover a variety of subject areas with subtitles and content dependent on student interest and instructor choice. In recent years these have included Slavery in the Americas, History of the American South, American Environmentalism, Pearl Harbor, American Immigration History and Cuban Revolution. This course may be repeated for credit if topics are different. Prerequisite: junior or senior standing or consent of the Chair of the Department.

HIST 493. Research Seminars.
Cr. 3. These are full-semester courses designed for majors, but also open to other students with junior or senior standing. They offer intensive research in both primary and secondary sources and instruction in historical methodology. A major paper constitutes the largest part of the semester's work. This course may be repeated for credit if topics are different. Prerequisites: junior or senior standing and the consent of the Chair of the Department.

HIST 495. Supervised Study.
Cr. 2-3. An opportunity for students to read a number of significant works on a given topic in history, or to do research and write a major paper on a topic not covered in any scheduled offering of the Department. Open to students who have taken at least eighteen credit hours of history and who have obtained the prior consent of both the instructor and the Chair of the Department. This course may be taken only once from a given instructor, only once per subject area and only once for a thirty-hour major.

HIST 497. Honors Work in History.
Cr. 3. See Honors Work, page 50.

HIST 498. Honors Candidacy in History.
Cr. 3. See Honors Work, page 50.
International Economics and Cultural Affairs

Administrative Committee:
Associate Professor DuVick (Foreign Languages and Literatures, Chair); Professors Falkenstein (Foreign Languages and Literatures), Racine (History), Trot (Political Science); Associate Professor Bernard (Economics); Assistant Professors Herrera (Foreign Languages and Literatures), Kavanagh (Foreign Languages and Literatures), Kilpinen (Geography and Meteorology).

Students who complete the International Economics and Cultural Affairs Program will have fulfilled major area requirements for the Bachelor of Arts degree under the Interdisciplinary Program Option.

Objectives. This interdisciplinary program, with a focus on Europe, Latin America, or Asia, is designed to provide essential background for students considering careers in the fields of international commerce or government service. To implement this goal, it provides a foundation in a modern language and the culture and customs of those who speak it, instruction in international economics, and a survey of appropriate areas of geography, history, and political science. Students interested in pursuing the International Economics and Cultural Affairs Program should confer with the Chair of the Administrative Committee.

Qualified students are encouraged to consider the following Cooperative Education courses: FLC 481, FLGR 481, FLJ 481, or FLS 481.

Requirements. A minimum of 54 credit hours in courses approved by the Administrative Committee. Courses must include Foreign Language and Literature, 17-18 credit hours beyond course number 103 (or 19 credit hours in Japanese or 19-21 credit hours in Chinese); Economics, 15 credit hours; appropriate courses in Geography, History, and Political Science, 18 credit hours. See course listing below.

A senior seminar of one credit (IECA 493) in the fall semester is followed in the spring semester of the senior year by a senior research project earning 3 credits (IECA 495). Students create an academic portfolio containing examples of their academic work and records of their co-curricular activities relevant to the IECA major. Students work in conjunction with the Chair of the Administrative Committee and appropriate IECA faculty to develop the portfolio, which will serve as a tangible record of achievement and expertise gained in coursework and beyond the classroom. Honors Work may be undertaken in International Economics and Cultural Affairs with appropriate approval. Students should register for Honors Work in International Economics and Cultural Affairs (IECA 497), and Honors Candidacy in International Economics and Cultural Affairs (IECA 498) (see page 50).

Any departmental major or departmental minor may be added to the International Economics and Cultural Affairs program, with the exception of an Economics minor and a Foreign Language minor.

Foreign Language and Literature

Choose one of the following language options:

CHINESE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLC 101</td>
<td>Beginning Chinese I</td>
<td>4-5</td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>EAST 109</td>
<td>Intensive Elementary Chinese</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLC 102</td>
<td>Beginning Chinese II</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>EAST 110</td>
<td>Intensive Elementary Chinese: Conversation</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>FLC 203</td>
<td>Intermediate Chinese I</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>EAST 208</td>
<td>Intensive Intermediate Chinese</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>FLC 204</td>
<td>Intermediate Chinese II</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>EAST 210</td>
<td>Intensive Intermediate Chinese: Conversation</td>
<td></td>
<td>4-5Cr.</td>
</tr>
<tr>
<td>FLJ 250</td>
<td>Topics in Japanese Literature and the Fine Arts</td>
<td></td>
<td>3Cr.</td>
</tr>
<tr>
<td>FLJ 251</td>
<td>Introduction to Japanese Literature or East 395 Chinese Culture and Civilization</td>
<td></td>
<td>3Cr.</td>
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FRENCH

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLC 204</td>
<td>French Composition and Conversation</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLC 232</td>
<td>French Civilization from 1870 to the Present</td>
<td>3Cr.</td>
</tr>
<tr>
<td>FLC 250</td>
<td>Topics in French Literature and the Fine Arts</td>
<td>3Cr.</td>
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</tbody>
</table>

GEPAN

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLGR 204</td>
<td>German Composition and Conversation I</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLGR 232</td>
<td>German Civilization since 1800</td>
<td>3Cr.</td>
</tr>
</tbody>
</table>

JAPANESE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLJ 101</td>
<td>Beginning Japanese I</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLJ 102</td>
<td>Beginning Japanese II</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLJ 203</td>
<td>Intermediate Japanese I</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLJ 204</td>
<td>Intermediate Japanese II</td>
<td>4Cr.</td>
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SPANISH

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>FLS 204</td>
<td>Spanish Composition and Conversation</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLS 230</td>
<td>Spanish Civilization or FLS 231 Spanish-American Civilization</td>
<td>4Cr.</td>
</tr>
<tr>
<td>FLS 250</td>
<td>Topics in Hispanic Literature and the Fine Arts</td>
<td>3Cr.</td>
</tr>
<tr>
<td>FLS 306</td>
<td>Contemporary Hispanic Society Through Communications</td>
<td>4Cr.</td>
</tr>
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</table>

ECONOMICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 221</td>
<td>Principles of Economics-Micro</td>
<td>3Cr.</td>
</tr>
<tr>
<td>ECON 222</td>
<td>Principles of Economics-Macro</td>
<td>3Cr.</td>
</tr>
<tr>
<td>ECON 326</td>
<td>Comparative Economic Systems</td>
<td>3Cr.</td>
</tr>
<tr>
<td>ECON 336</td>
<td>Economics of Developing Nations</td>
<td>3Cr.</td>
</tr>
</tbody>
</table>

INTERNATIONAL ECONOMICS AND CULTURAL AFFAIRS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLY 201</td>
<td>Economic Geography</td>
<td>3Cr.</td>
</tr>
<tr>
<td>FLY 301</td>
<td>Regional Geographies of the World (Appropriate regional offering)</td>
<td>3Cr.</td>
</tr>
</tbody>
</table>

HISTORY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 232</td>
<td>Survey of Latin American History</td>
<td>6Cr.</td>
</tr>
<tr>
<td>HIST 301</td>
<td>Ideas and Power in Latin American History</td>
<td>6Cr.</td>
</tr>
<tr>
<td>HIST 210</td>
<td>The World in the Twentieth Century</td>
<td>6Cr.</td>
</tr>
<tr>
<td>HIST 315</td>
<td>Contemporary Europe: Century of Violence</td>
<td>6Cr.</td>
</tr>
</tbody>
</table>

POLITICAL SCIENCE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 130</td>
<td>Comparative Politics</td>
<td>3Cr.</td>
</tr>
<tr>
<td>POLS 230</td>
<td>International Relations</td>
<td>3Cr.</td>
</tr>
<tr>
<td>POLS 330</td>
<td>Politics of Industrialized States</td>
<td>3Cr.</td>
</tr>
<tr>
<td>POLS 335</td>
<td>Politics of Developing States</td>
<td>3Cr.</td>
</tr>
</tbody>
</table>

IECA 498. Internship.
Cr. 1-4. Direct, supervised experience in a cooperating business, government agency, or service agency, abroad or in the United States. Prerequisite: consent of the Chair of the Program.

IECA 493. Senior Seminar.
Cr. 1. A course required of all senior majors in International Economics and Cultural Affairs in which students explore a central topic, learn research methodology, and prepare the proposal and outline for their senior independent research project (IECA 496). Prerequisite: senior standing or consent of the Chair.

IECA 498. Senior Independent Research Project.
Cr. 3. Senior IECA majors write a major research paper on a topic identified in IECA 493. Senior Seminar. Prerequisite: IECA 493, and senior standing or consent of the Chair.

Cr. 3. See Honors Work, page 50.

Cr. 3. See Honors Work, page 50.
Theology of Service Issues and Theory (select two courses):

- **THEO 330** Topics in Contemporary Theology (when topic is approved) 3 Cr.
- **THEO 337** Black Theology and Black Church 3 Cr.
- **THEO 353** Studies in Theology and Practice (Christian Faith and Contemporary Politics; Christian Response to Social Victims) 3 Cr.
- **THEO 357** The Church in the World 3 Cr.
- **THEO 451** Theology of Diaconal Ministry 3 Cr.
- **THEO 490** Topics in Theology (when topic is approved) 3 Cr.

Theology of World Religions (select one course from this category or an additional course from the above category):

- **THEO 362** Understanding Islamic Religion and Culture 3 Cr.
- **THEO 363** Religions of China and Japan 3 Cr.
- **THEO 364** The Buddhist Tradition 3 Cr.
- **THEO 365** Religion in Africa 3 Cr.

**Regional Emphasis**

Foreign Language appropriate for the region:

- French, German or Spanish 204 4 Cr.
- One elective numbered above 204 3-4 Cr.

Chinese or Japanese 203 and Chinese or Japanese 204 4 Cr.

**Introductory Courses**

- **GLST 150** Global Perspectives 3 Cr.
- **ECON 136** Economics of Health, Education, and Welfare 3 Cr.

**Service Learning Core**

- **POL 230** International Relations 3 Cr.
- **SOCW 210** Social Welfare Policy and Services 3 Cr.
- **SOCW 330** American Minority Lifestyles and Human Rights 3 Cr.

**Support Core**

Each student develops a support core in consultation with the ISP advisor. The following courses have prior approval (courses with an asterisk have prerequisites):

- **BIO 205** Fundamental Nutrition 3 Cr.
- **BIO 260** Human Nutrition* 3 Cr.
- **ECON 223** Principles of Economics 3 Cr.
- **ECON 233** Economics of Race and Gender 3 Cr.
- **ECON 236** Comparative Economic Systems 3 Cr.
- **ECON 326** International Economics* 3 Cr.
- **ECON 336** Economics of Developing Nations* 3 Cr.
- **ENGL 390** Teaching English as a Second Language 3 Cr.
- **PHIL 220** Non-Western Philosophy 3 Cr.
- **POL 360** Public Administration* 3 Cr.
- **PSY 390** Cross-Cultural Psychology 3 Cr.
- **SOC 347** Race and Ethnic Relations 3 Cr.
- **NUR 318** Global Health Issues 3 Cr.

**Introduction to International Service**

- **GLST 315** Contemporary Europe/Century of Violence 3 Cr.
- **HIST 352** Problems in Modern German History (Reutlingen) 3 Cr.
- **POLS 330** Politics of Industrialized States 3 Cr.
- **FLF 232** French Civilization from 1870 3 Cr.
- **OR FLGR 232** German Civilization since 1800 3 Cr.
- **OR FLS 230** Spanish Civilization 4 Cr.

**Latin America**

- **HIST 232** Survey of Latin American History 3 Cr.
- **HIST 231** Contemporary Latin American Civilization 3 Cr.
- **POLS 233** Politics of Developing States 3 Cr.
- **SOC 330** Points of Intersection (Puebla) 3 Cr.
- **FLS 250** Hispanic Literature and Arts 3 Cr.
- **FLS 230** Spanish Civilization 4 Cr.

**Africa**

- **POLS 490** Topics (when topic is Africa) 3 Cr.
- **ISP 490** topics in Africa 3 Cr.
- **ISP 390** topics in Africa 3 Cr.

**Asia**

- **HIST 240** Introduction to East Asian Culture 3 Cr.
- **HIST 341** Revolution and Its Roots: The Making of Modern China 3 Cr.
- **HIST 342** Tragedy and Triumph: The Making of Modern Japan 3 Cr.
- **POLS 301** Regional Geography of Africa 3 Cr.
- **POLS 490** Topics (when topic is Africa) 3 Cr.
- **ISP 390** topics in Africa 3 Cr.

**Support Core**

Each student develops a support core in consultation with the ISP advisor. The following courses have prior approval (courses with an asterisk have prerequisites):
Mathematics and Computer Science

Professors Caristi, D. Johnson, Marion; Associate Professors Gillman, Hull, Hume, J. Lehmann, Sullivan (Chair), Treener, Wagenblast; Assistant Professors (Visiting), Luther, Pearson, Surma; Visiting Instructor Whitehead.

Mathematics is the disciplined form of communication which serves both to structure to scientific, engineering and economic principles, and to provide a beauty of formalism in its own right. It is characteristic that many important mathematical discoveries have been made by scientists, while at the same time pure mathematics has opened up unexpected new advances in science. As a data processing tool, the computer has made possible extending both numerical manipulation and forms of language communication far beyond ordinary human capabilities. Computing science has developed languages of its own to ease the human-machine interface. Learning how best to use these languages and to design strategies for problem solving are major objectives of computer science. Computer science also studies computer design and computer architecture and the integration of computer components into systems.

Careers in mathematics include statistical analysis, education, scientific, industrial, and mathematical research, operations research and actuarial science. Students can prepare themselves for the first two actuarial examinations by completing an appropriate sequence of courses. Careers in computer science include systems programming, applications programming and data management.

Mathematics

Program 2. Emphasis on Operations Research: MATH 240, 322, 344, 422, and two courses numbered above 300.

 Majors from both programs must also complete CS 157. Mathematics majors are strongly encouraged to take CS 158 and 225.

Completion of the degree requirements of the College of Arts and Sciences with a Program 1 or Program 2 major in mathematics leads to the Bachelor of Arts or Bachelor of Science degree.

Complementary Major. A student with a major in another discipline may take a complementary major in mathematics. A minimum of 31 credit hours in mathematics constitutes a complementary major. Courses must include MATH 131 or 151, 152, (240 or 253), 264, 265, 399, (422 or 451 or 461), 499, and three other courses numbered above 300.

A student having a mathematics major in view should begin mathematics in the freshman year. A mathematics major should learn French or German to satisfy the foreign language component of the General Education Requirements. Anyone in either program planning to do graduate work in mathematics should include MATH 452 and 462.

A student in either program may tailor a mathematics major with a statistical emphasis. This option includes MATH 240, 340, 341, 342, and 344. In addition to regular courses, members of the faculty offer study sessions that prepare students to take the first examination offered by the Society of Actuaries. Valparaiso University is a testing center for these examinations.

The Mathematics Club and Student Chapters of both the Mathematical Association of American and the Association for Computing Machinery involve students in extracurricular activities.

Minors. A minimum of 15 credit hours in mathematics, including one of MATH 122, 132, or 152 constitutes a minor in mathematics. No more than two of the following courses may be included: MATH 120, 122, 124, 131, 132, 151, 152, 213, 214. See page 202 for a description of the Applied Statistics Minor.

Teaching Programs. Students who plan to teach mathematics in secondary schools with a major or minor in Mathematics should consult the Chair of the Department and the Education Department for specific requirements.

Cooperative Education. Qualified students may combine semesters of professional experience with other semesters of traditional academic studies, usually lengthening their college education beyond the normal eight semesters. During the semesters of their employment, students are financially reimbursed by the cooperating employer and receive college credit. This program normally commences at the end of the sophomore year and consists of two semesters plus three summers of full time employment with the same company. Two credits in mathematics are granted for each semester and one for each summer. These credits may not be counted toward the minimum required for the major and cannot replace a required course, with the exception of MATH 399/499. To qualify, students must possess a minimum 2.50 cumulative grade point average and a 2.50 grade point average in all required Mathematics courses taken prior to participation in the program.

Placement and Special Credit. Before registration, each new student will take a placement exam. The Department of Mathematics and Computer Science will recommend which course(s) each student should take. A student who is recommended for MATH 110 may not take any other Mathematics or Computer Science course without the consent of the Chair of the Department. A student who is recommended for MATH 120 or MATH 114 may not take a Mathematics course numbered above 120 without the consent of the Chair of the Department. Qualified students may also take a Calculus Placement Exam. A student who is placed into MATH 152 will receive 4 credits for MATH 151 and 4 credits for MATH 152 by passing MATH 152 with a grade of C or higher.

Credit by Examination. Credit for MATH 151 and 152 may be earned through the College Level Examination Program subject examination in Introductory Calculus.

Approval of Schedules. All students taking a major or minor in the Department must have their schedules approved by the Chair of the Department or his representative before registration each semester.

Mathematics and Computer Science

MATH 109. Quantitative Problem Solving. 2+2 or 3. A course to assist students in developing fundamental mathematical concepts and processes. Emphasis placed on problem solving, reasoning, communication, and mathematical connections. Students recommended for this course should take it prior to enrolling in courses with quantitative content. This course is offered for SU grade only and may not be used to fulfill the General Education Requirement in the College of Arts and Sciences nor be counted toward a major or minor in mathematics.

MATH 114. Precalculus. Cr. 1-4. (See paragraph on Placement.) A course for students who plan to take a calculus sequence. Topics may include sets and numbers, relations and functions, trigonometric functions, exponential and logarithmic functions. This course may not be used to fulfill the General Education Requirement in the College of Arts and Sciences nor be counted toward a major or minor in mathematics. Prerequisite: MATH 110 or placement higher than MATH 100 on the math placement examination.

MATH 120. Mathematical Ideas. Cr. 4. (See paragraph on Placement.) A one-semester course intended primarily for students majoring in the humanities. The relationship between mathematics and modern science is studied. Emphasis is placed on the development of mathematical concepts. Prerequisite: MATH 110 or placement higher than MATH 100 on the math placement examination.

MATH 122. Intuitive Calculus of One or More Variables. Cr. 4. (See paragraph on Placement.) A course for students with a good foundation in mathematics who are interested in mathematical models for the life, management or social sciences. Topics include limits, continuity, derivatives and their applications, integrals and their applications and selected topics in multivariate calculus. Not open to students with credit for MATH 131 or 151. Prerequisite: MATH 114 or placement of MATH 122, 131, or 151 on the math placement examination.

MATH 124. Finite Mathematics. Cr. 4. (See paragraph on Placement.) A course for students with a good foundation in mathematics who are interested in mathematical models for the life, management or social sciences. Topics include matrix algebra, linear programming, finite probability, sequences, and mathematics of finance. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

MATH 131. Analytic Geometry and Calculus I. 3-2, Cr. 4. (See paragraph on Placement.) A first course in the calculus sequence designed for
students who plan to major in mathematics, engineering or a physical science. In contrast to MATH 151, more time is devoted to the precalculus aspects of the material and to comprehensive treatment of trigonometric functions. Topics include an extensive review of set theory, the real number system, inequalities, absolute value, elementary functions and their graphs, and continue to limits, continuity and derivatives; applications of the derivative; an introduction to the theory of the integral. Not open to students with credit for MATH 122 or 151. Prerequisite: MATH 114 or placement of MATH 131 or 151 on the math placement examination.

MATH 204. Calculus I. Cr. 4. A continuation of MATH 203. Topics include additional techniques of integration; applications of the definite integral; exponential, logarithmic and inverse trigonometric functions; indeterminate forms and improper integrals; sequences and series. Prerequisite: MATH 132 or 152 or the equivalent.

MATH 207. Calculus II. Cr. 4. A continuation of MATH 204. Topics include techniques of integration; applications of the definite integral; exponential, logarithmic and inverse trigonometric functions; indeterminate forms and improper integrals; sequences and series. Prerequisite: MATH 132 or 152 or the equivalent.

MATH 250. Linear Algebra. Cr. 3. A continuation of MATH 250. Elementary and linear differential equations, applications of differential equations, matrices and systems of linear equations, eigenvalues and eigenvectors, introduction to systems of linear differential equations. Prerequisite: MATH 132 or 152.

MATH 260. Foundations of Advanced Mathematics. Cr. 3. An introduction to the type of mathematical reasoning and subject matter which will be encountered in advanced mathematics. Topics include basic logic, set theory, relations and functions, and infinite sets. Prerequisite: MATH (124 and 122) or 132 or 152 or the equivalent.

MATH 267. Algebraic and Discrete Structures I. Cr. 3. Also offered as ECE 307. An introduction to mathematical reasoning, algorithm analysis and the concepts that provide a mathematical foundation for computer science. Topics include a review of sets, relations, functions and matrices; proof techniques, including mathematical induction; counting techniques; difference equations; applications and elementary analysis of iterative and recursive algorithms. Prerequisite: MATH 250.

MATH 300. Topics in Mathematics. Cr. 1-3. Topics may include problem solving techniques, computer applications or topics from finite mathematics. Prerequisite: consent of the instructor.

MATH 344. Applied Probability and Statistical Decision Theory. Cr. 3. A survey of probabilistic models used in decision theory. Topics include stochastic processes, queuing theory, forecasting, Bayesian decision theory, reliability, and simulation. Prerequisites: MATH 240 or DS 206. Offered in alternate years.

MATH 350. Differential Equations. Cr. 3. Elementary and linear differential equations, systems of equations, series solutions including the method of Frobenius, LaPlace transforms, applications. Prerequisites: MATH 253 and (124 or 264).

MATH 366. Analysis of Algorithms. Cr. 3. Survey and analysis of standard algorithms from among: sorting, searching, graph theory, set theory, geometry, pattern matching, and cryptography. Strategies for algorithm design and
MATH 368. Algebraic and Discrete Structures II.
Cr. 3. A continuation of MATH 267. Topics are selected from graph theory, propositional and predicate calculus, Boolean algebra, numerical methods and probability. Prerequisite: MATH 267. No longer offered after spring semester 1990.

Cr. 3. (Also offered as CS 370.) The analysis and implementation of basic numerical techniques: matrix methods for the solution of systems of equations, interpolating polynomials, finite differences, numerical differentiation and integration, numerical solution of differential equations, zeros of non-linear equations and error analysis. Students are expected to solve problems using a digital computer. Prerequisites: CS 225 or its equivalent and one of the following: MATH 234 and 253; 265; or 350.

MATH 381. Cooperative Education in Mathematics I.
Cr. 1-2. The application of mathematical concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. Prerequisites: MATH 265 or approval of the Chair of the Department. S/U grade.

MATH 382-383. Cooperative Education in Mathematics II-III.
Cr. 1-2. Continuation of MATH 381. Prerequisite: MATH 381. S/U grade. May be repeated beyond 383 for additional credit.

MATH 399. Mathematics Colloquium.
Cr. 0. All mathematics majors with at least sophomore standing are expected to register for this course. Students are required to attend sessions of MATH 499 and to participate in the discussion of topics presented by faculty and students. S/U grade.

MATH 422. Graphs and Networks.
Cr. 3. A theoretical study of applied graph theory and network theory. Topics include graph colorings, Hamiltonian and Eulerian graphs, trees, assignment problems, and max-flow/min-cut problems. Prerequisite: MATH 322. Offered in alternate years.

MATH 430. Fourier Series and Boundary Value Problems.
Cr. 3-4. Fourier representation of functions. Generalized orthogonal sets of functions including Bessel Functions and Legendre polynomials, Fourier, Fast Fourier, and LaPlace transforms. An introduction to distributions. A variety of applications depending on the interests of the students. Prerequisites: MATH 253 and (234 or 265).

MATH 434. Introduction to Complex Variables.
Cr. 3. Analytic functions, derivatives, power and Laurent series, integrals, residues, conformal mapping, applications to partial differential equations. Prerequisite: MATH 253 and 234 or 264. Offered upon sufficient demand.

MATH 451. Analysis I.
Cr. 3. Differentiation and convergence in real n-space, implicit and inverse function theorems, topology of real n-space, and uniform convergence. Prerequisites: MATH 253 and 264.

MATH 452. Analysis II.
Cr. 3. Theory of integrals, multiple integration and the Jacobian, line and surface integration, metric spaces and their topology. Prerequisite: MATH 461. Offered upon sufficient demand.

MATH 461. Abstract Algebra I.
Cr. 3. A study of mathematical structures: groups, rings, and fields. Properties of groups; substructures, quotient structures, and homomorphisms. Prerequisite: MATH 264.

MATH 462. Abstract Algebra II.
Cr. 3. A continuation of MATH 461. Topics may include a more detailed study of rings, polynomial rings, field extensions, field automorphisms, an introduction to Galois theory, further work in group theory, an introduction to additional structures. Prerequisite: MATH 461. Offered upon sufficient demand.

MATH 489. The Teaching of Mathematics.
Cr. 3. (See ED 489.) A study of the methods of teaching mathematics in secondary schools. Prerequisite: admission to the Professional Semester. This course may not be counted toward a minor in Mathematics.

MATH 491. Advanced Topics in Mathematics.
Cr. 3. An advanced course for mathematics majors. The topic studied may change from year to year, is ordinarily one of the following: number theory, advanced abstract algebra, differential geometry, partial differential equations, measure and integration or functional analysis. Prerequisite: consent of the Chair of the Department. Specific course requirements depend on the content. Offered upon sufficient demand.

MATH 492. Research in Mathematics.
Cr. 1-3. Each student must undertake a research problem in mathematics under the direction of a faculty member. Written and oral reports are required. Prerequisite: consent of the Chair of the Department.

Cr. 3. (Also offered as ECON 493 and as DS 493.) An intensive study of selected topics, methods, techniques, and problems in applied statistics. Prerequisite: MATH 340 or DS 340 or ECON 325.

MATH 495. Independent Study in Mathematics.
Cr. 1-3. Students study advanced topics in mathematics under the supervision of a faculty member. Written work is required. Prerequisite: consent of the Chair of the Department.

MATH 497. Honors Work in Mathematics.
Cr. 3. See Honors Work, page 50.

MATH 498. Honors Candidacy in Mathematics.
Cr. 3. See Honors Work, page 50.

MATH 499. Mathematics Colloquium.
Cr. 1. Student presentation of selected topics in mathematics arising from the mathematical literature. Students register for this course during one semester of their senior year. Prerequisite: MATH 399.

Computer Science

**Major.** A minimum of 28 credit hours in Computer Science constitutes a major. Courses must include CS 157, 158, 235, 246, 355, 375, 493. Of the remaining credits all must be from Computer Science courses numbered above 120, including at least 6 credits from Computer Science courses numbered above 300. Majors must complete the following mathematics courses: MATH 122 or 132 or 152; MATH 267; and MATH 366. Any student considering the study of computer graphics or graduate study in Computer Science is strongly encouraged to take a course in linear algebra before graduation.

A student seeking the Bachelor of Science degree with a major in Computer Science must complete the above program. In addition the student must complete CS 358. The minimum number of credits in Computer Science for the Bachelor of Science degree is 32.

Computer Science majors who elect to or who must satisfy the foreign language component of the General Education Requirements should take German or French.

A student planning to major in Computer Science should begin both Computer Science and Mathematics in the freshman year.

**Minor.** A Computer Science minor consists of a minimum of 15 credit hours in computer science. Courses must include CS 157, 158, 235, 246, and one 3 credit Computer Science course numbered above 300. In addition, the student must complete MATH (122 and 267) or (131 and 132) or (151 and 152) and 240.

**Cooperative Education.** Credit in Computer Science may be obtained for cooperative education experiences relating to Computer Science. Students must prepare a brief proposal describing the intended experience and secure a Computer Science advisor, who will decide whether the work merits Computer Science credit. For each term of Computer Science related work, students may receive 2 credits for a summer experience, or 3 credits for a full-time semester experience. No more than 3 credits may be counted toward the minimum major requirements or the Computer Science minor. (An exception may be made in the case of the Bachelor of Science degree, where up to 4 credits in Cooperative Education may be counted toward the 32-hour single major.) If these credits are used to fulfill minimum credit hour requirements for a major or minor, at least two Computer Science experiences are required, at least one of which must be a full-time semester experience. In addition to meeting the College of Arts and Sciences 2.50 cumulative grade point average requirement, students must present a 2.50 grade point average for all required Computer Science courses in the major taken prior to participation in the Cooperative Education program. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.
Computer Science

CS 157. Algorithms and Programming. Cr. 2+2. Cr. 3. A first course in algorithm development and problem solving and an introduction to the use of a computer system with special emphasis on object-orientation. The student designs algorithms for the solution of elementary problems, and writes, documents, and debugs programs for the implementation of those algorithms. Techniques of software design and algorithm analysis are introduced. Students may not receive credit for both CS 157 and ECE 155. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

CS 158. Algorithms and Abstract Data Types. Cr. 2+2. Cr. 3. (Also offered as ECE 256.) A continuation of CS 157, with emphasis on developing more skills in complex program development and data structures. Topics include stacks, queues and linked lists. Students design and write intermediate sized programs. Prerequisites: CS 157 or ECE 155.

CS 220. Digital Logic Design. Cr. 3. (Also offered as ECE 221.) An introduction to digital logic concepts, including the analysis and design of combinational and sequential digital circuits.

CS 225. The FORTRAN Language. Cr. 2. An introduction to FORTRAN as a second programming language. Prerequisite: CS 157 or ECE 155 or permission of the instructor.

CS 226. COBOL Programming. Cr. 3. An introduction to computer programming in a business environment. Emphasis on the fundamentals of structured program design and development, testing, implementation, and documentation of common business-oriented applications using COBOL. Includes coverage of sequential and random access files and the techniques for manipulating them in COBOL. Prerequisite: CS 157 or ECE 155.

CS 235. Abstractions and Paradigms in Programming. Cr. 3. (Also offered as ECE 333.) A more detailed study of data structures and programming paradigms. Special attention will be given to pertinent methodologies such as object-oriented design and generic programming. Students design and write complex programs. Prerequisites: MATH 122 or 132 or 182, CS 158.

CS 246. Computer Architecture and Programming. 2+2, Cr. 3. (Also offered as ECE 246.) Fundamentals of the structure of digital computers and an introduction to assembly language programming. Topics include machine instructions, data representation, addressing techniques and program segmentation and linkage. Corequisite: CS 158.

CS 290. Topics in Computer Programming. Cr. 1 (7 weeks) or 2 (semester). The content of this course may change from semester to semester, but is ordinarily a study of a computer programming language not covered in other Computer Science courses. Possible languages to be studied include Ada, C, Lisp, and Prolog. This course may be repeated for credit, provided that topics are different. Prerequisite: usually equivalent to CS 157. Specific requirements depend on course content.

CS 325. Simulation and Modeling. Cr. 3. An introduction to computer simulation of mathematical models of discrete and continuous phenomena. Some standard simulations are examined, others implemented using a simulation language. Prerequisites: a course in calculus, a course in probability and statistics, and a course in programming.

CS 339. Database Management Systems. Cr. 3. Concepts and structures used in designing and implementing database management systems. Topics include the important data models, normalization, data dictionaries, languages for data definition and manipulation, security, integrity, and reliability. Prerequisite: CS 235.

CS 345. Operating Systems and Systems Programming. Cr. 3. Introduction to the concepts of operating system programming and interrelationships between the operating system and machine architecture. Topics include procedures, processes, resource management and interrupt-driven processing. Students program in assembly language. Prerequisites: CS 235 and 246. Offered upon sufficient demand.

CS 355. Organization of Programming Languages. Cr. 3. (Also offered as ECE 355.) Formal language constructs as exhibited in a variety of programming languages. Topics include syntax and basic characteristics of grammars, parsing, data types and structures, run-time considerations. Prerequisite: CS 235. Recommended: MATH 267.

CS 358. Software Design and Development. 3+2, Cr. 4. The specification, design, implementation, documentation and testing of software systems. Principles of project management. Case studies. Intensive work on a group project, directed by the instructor, to design and develop a usable software system. Prerequisites: CS 235.

CS 365. Interactive Computer Graphics. Cr. 3. A study of the fundamentals of interactive computer graphics systems and software. Emphasis is placed on graphics primitives, geometric transformation and projection, methods of creating visual realism, and selected graphics algorithms. Prerequisites: CS 156 (CS 235 is recommended) and MATH 234 or 262 or 264.

CS 367. Artificial Intelligence. Cr. 3. Introduction to the techniques used in the field of artificial intelligence. Topics include knowledge representation, search strategies, and heuristic programming, with some discussion of areas such as expert systems, natural language translation, pattern recognition, learning programs, and robotics. Students will program in the LISP programming language. Prerequisite: CS 365.

CS 370. Numerical Methods. Cr. 3. (Also offered as MATH 370). The analysis and implementation of basic numerical techniques: matrix methods for the solution of systems of equations, interpolating polynomials, finite differences, numerical differentiation and integration, numerical solution of differential equations, zeros of non-linear equations and error analysis. Students are expected to solve problems using a digital computer. Prerequisites: CS 225 or the equivalent and one of the following: MATH 260, MATH 234 or 263, MATH 265.

CS 378. Theory of Computation. Cr. 3. Basic principles of computer science in formal languages, automata, nondeterminism, regular expressions, context free grammars, Turing machines, the halting problem, and unsolvability. Prerequisites: CS 235 and MATH 267.

CS 381. Cooperative Education in Computer Science I. Cr. 0.5-3. The application of computer science concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. Prerequisites: CS 235; approval of Cooperative Education Adviser and the Chair of the Department. S/U grade.

CS 382-383. Cooperative Education in Computer Science II-III. Cr. 0.5-3. Continuation of CS 381. Prerequisites: CS 381 and approval of the Chair of the Department. S/U grade. May be repeated beyond 383 for additional credit.

CS 445. Principles of Systems Programming. Cr. 3. Problems and techniques associated with programming in systems with shared resources, e.g., operating systems and database management systems. Topics include concurrent processes, communication and deadlock, queuing and scheduling, resource protection and access. Prerequisites: CS 345 and a course in probability and statistics. Offered upon sufficient demand.

CS 455. Theory of Programming Languages. Cr. 3. Concepts used in the translation of programming languages and the design of computers. Topics include grammars, scanners and symbol table manipulation, parsers and pushdown automata and techniques of automatic code generation and improvement. Applications may include general purpose languages as well as special purpose languages such as data base definition and inquiry languages. Prerequisites: CS 246 and 355 and MATH 267. Offered upon sufficient demand.

CS 458. Senior Project. Cr. 3. The student defines a suitable computer application, develops the necessary software using appropriate techniques and prepares documentation for the use and support of the completed system. An oral report is required. Prerequisites: CS 358, senior standing and a proposal approved by the Chair of the Department.

CS 491. Advanced Topics in Computer Science. Cr. 3. An advanced course for computer science majors. The topic studied may change from year to year. Possible topics: data communications and networks, supercomputers, parallel processing or computer architecture. Prerequisites: consent of the Chair of the Department. Specific course requirements depend on topic. Offered upon sufficient demand.

CS 492. Research in Computer Science. Cr. 3. The student undertakes a research problem in Computer Science under the direction of a faculty member. Written and oral reports are required. Prerequisites: CS 355 and 358 and a proposal approved by the Chair of the Department.

CS 493. Seminar in Computer Science. Cr. 1. Student-staff presentation of selected topics in computer science arising from journal reading and research. Prerequisites: CS 235 and 246. Offered upon sufficient demand.

CS 495. Independent Study in Computer Science. Cr. 1-3. The student studies an advanced topic in Computer Science under the direction of a faculty member. Written work is required. Prerequisite: consent of the Chair of the Department.


Modern European Studies

Administrative Committee:
Professor Henderson (Economics),
Trost (Political Science); Associate
Professors Morgan (Art), Rubchak
(History, Chair), Ruff
(English).

Modern European Studies is an interdisciplinary program that may be taken either as a complementary academic major or as an academic minor in partial fulfillment of the major field requirements.

Objectives. Throughout all of the modern centuries, Europe has been central to the cultural, economic, and political development of the entire West as well as a major force in shaping events and patterns of change in the world beyond the West. Today there are numerous signs to indicate that it will continue as one of the world’s several most significant areas far into the future. For a comprehensive understanding of Europe, it is necessary to study it in terms of time and space and to inquire into the major currents detectable in its cultural, economic, and political life, past and present. The Modern European Studies Program affords an opportunity for this broad study. By combining courses from various departments, it spans the modern centuries (i.e., from the sixteenth century to the present) and explores present thought and issues from a variety of perspectives. Designed to address the needs of students who consider an understanding of movements, issues, and achievements associated with modern Europe as an essential part of a broad liberal education, the Program will provide a natural extension or supplement for a number of traditional departmental majors. It affords a particular strong background for students planning to pursue graduate work in a field involving knowledge of Europe and for those preparing themselves for a professional future in the cultural arts, public affairs, and business fields with a European dimension. For those hoping to work in educational, informational, and journalistic areas related to Europe, the Program is an ideal course of study.

Major. Thirty-three credit hours constitutes a major. They must include the Program Core courses, 15 credit hours in courses selected from at least three of the participating departments, and MEUR 495. No more than four courses from the Program major may be used to fulfill another major, minor, or general education requirement.

Minor. Eighteen credit hours constitutes a minor. They must include the Program Core courses and 3 credit hours of electives. No more than two courses from the Program minor may be used to fulfill another major, minor, or general education requirement.

Students in this Program must meet the general education requirement in a European language. Courses approved by the Program Chair taken at the university’s European study centers or in European study-abroad programs may also be counted as part of the Program. All courses beyond those in the Program Core must have the approval of the Chair of the Program’s Administrative Committee.

Program Core

There are no prerequisites for ECON 370 for Modern European Studies majors. Foreign language and English literature courses listed as option in the Program Core but not selected may be taken as electives in the Program.

ART 318 19th Century European Art or
ART 319 Early 20th Century European Art 3 Cr.
ECON 368 Modern European Economic History or
ECON 370 History of Economic Thought 3 Cr.
HIST 315 Contemporary Europe: Century of Violence 3 Cr.
POLS 330 Politics of Industrialized States 3 Cr.

Select one of the following:
FLGR 222 French Literature from 1800 to the Present 3 Cr.
FLGR 222 Selected Readings in German Literature since 1800 3 Cr.
FLS 321 Spanish Literature 3 Cr.
ENGL 470 Twentieth Century Fiction 3 Cr.

Elective Courses

Foreign Language courses numbered 250 are taught in translation and may be counted when the topic is appropriate. Topical courses numbered 390 or 490 may be taken from participating departments when they focus on a European topic.

ART 102 Renaissance to Modern Art History 3 Cr.
ART 311 Topics in the Theory and History of Art 1-4 Cr.
ART 317 17th and 18th Century European Art 3 Cr.
ART 318 19th Century European Art 3 Cr.
ART 319 Early 20th Century European Art 3 Cr.
ECON 236 Comparative Economic Systems 3 Cr.
ECON 368 Modern European Economic History 3 Cr.
ENGL 420 Literature of the 16th and 17th Centuries 3 Cr.
ENGL 430 Literature of the Restoration and 18th Century 3 Cr.
ENGL 450 Literature of the 19th Century 3 Cr.
ENGL 456 The Novel 3 Cr.
ENGL 460 Twentieth Century Drama 3 Cr.
ENGL 470 Twentieth Century Fiction 3 Cr.
ENGL 475 Twentieth Century Poetry 3 Cr.
FLGR 221 French Literature from the Middle Ages to 1800 3 Cr.
FLGR 222 French Literature from 1800 to the Present 3 Cr.
FLGR 231 French Civilization to 1870 3 Cr.
FLGR 232 French Civilization from 1870 to the Present 3 Cr.
FLGR 250 Topics in German Literature and the Fine Arts 3 Cr.
FLS 230 Spanish Civilization 3 Cr.
FLS 260 Topics in Hispanic Literature and the Fine Arts 3 Cr.
FLS 321 Spanish Literature 3 Cr.
GEO 301 Regional Geography of Europe 3 Cr.
HIST 313 History of Modern Britain 3 Cr.
HIST 316 The Great Witchcraft Delusion 3 Cr.
HIST 319 Imaging Revolution in Modern Russia 3 Cr.
HIST 492 Reading the World: Seminars (when the topic is appropriate) 3 Cr.
PHIL 280 Early Modern Philosophy 3 Cr.
POLS 130 Comparative Politics 3 Cr.
POLS 230 International Relations 3 Cr.
TTVA 238 World of Theatre I 3 Cr.
TTVA 239 World Of Theatre II 3 Cr.

MEUR 495. Independent Study.
Cr. 3. An independently supervised course that may be taken in any of the departments participating in the Program. Students are expected to produce a major paper involving at least two of the disciplines included in the Program and meet the course criteria established by the Administrative Committee. Before registering for the course, students must have the approval of the supervising professors and the Program Chair.
Music

Associate Professors Bernthal, Cock, L. Ferguson (Chair), Friesen-Carper, Lewis; Assistant Professors Brugh, Doebler; Instructor Bogner.

The Department of Music offers three degree programs: Bachelor of Arts, Bachelor of Music, and Bachelor of Music Education. The Bachelor of Arts may be pursued as a traditional liberal arts music major, as an interdisciplinary track in Music Enterprises, or with an emphasis in Theatre. Deaconess training may be combined with the study of music through Deaconess Program Plan 2 (see page 50). The Bachelor of Music may be earned through concentrated professional study in one of three tracks: performance, church music, or composition. The Bachelor of Music Education carries full teaching certification in a combination of vocal and instrumental music. Valparaiso University is an accredited institutional member of the National Association of Schools of Music. Graduates from the Department of Music pursue careers of varied kinds: teaching music in elementary and secondary schools and in private studios; professional music leadership in churches; and positions in arts related businesses (arts management, recording, publishing, music retailing, music technology, and entertainment). The Music curriculum is also especially well designed to prepare students for graduate study in music leading to professions in higher education and performance. Mastery of performance, verbal, and critical thinking skills are expected in most music-related professions. Some fields, such as music education, church music, and music business, require hands-on training through internship experiences. Skill in use of electronic technology is increasingly important in many music-related fields. Ability to improvise, compose, arrange, and conduct increases the musician's chances for success. The Music curriculum is designed to meet these expectations.

Admission. A performance audition and diagnostic profile exam in musicianship is required for entry into the music major. Music majors must also meet all admissions requirements set by the University and by the College of Arts and Sciences.

Departmental Requirements. Majors and minors must meet all requirements set for them by this department, as outlined in the Department Handbook for Music Students which is distributed at the beginning of each academic year and which is available on request from the Department of Music Office. Regulations concerning student performance, concert attendance, ensemble participation, music colloquium, and the Keyboard Proficiency Tests are included in the Handbook.

Special Co-Curricular Programming. Visiting performers, scholars, and clinicians supplement the regular curricular instruction through frequent recitals, lectures, workshops, and seminars presented by the Department. Annual events of long-standing include the Jazz Festival, the Church Music Seminar, and the Guest Artist Series. A wide array of faculty and guest performances, combined with regular presentation of student soloists, chamber musicians, and ensembles are programmed annually. The concert calendar is deliberately designed to support student learning in the major; at the same time it offers rich cultural opportunities to other students and all members of the University community, as well as audiences in Northwest Indiana.

Bachelor of Arts

The Bachelor of Arts in music, the traditional liberal arts music track, allows ample time for a second major or a minor; an international or urban semester is also possible. Candidates for the Bachelor of Arts degree with a major in music must meet all General Education Requirements as well as departmental requirements.

Music Major. A minimum of 31 credit hours in Music constitutes a major. Courses must include MUS 109, 110, 163, 164, 263, 264, 499; two from MUS 317, 318 and 319; six credit hours in the student's principal performing medium (completion of MUS 203) and four credit hours of ensemble participation. Students pursuing the 40 credit hour music major option must include MUS 209, 264, 317, 318, and 319.

Music Enterprises Option. This interdisciplinary concentration in Music/Business combines the 31 credit music core (see above), 6 additional credits in music (MUS 375 and 486), and the minor in Business Administration (see page 203). The Music Enterprises option is designed to prepare students for management positions in the manufacturing, publishing, distribution, and retailing aspects of the music industry.

Theatre Emphasis Option. Music majors with a particular interest in musical theatre are advised to complete the 31 credit music core (see above) plus the following: MUS 210 and 211 (or TTVA 134), MUS 404 (1 credit); TTVA 136, 235, and 290 (Topics in Dance). Music majors may also opt to take a second major in theatre.

Bachelor of Music Education

The General Education Requirements for this degree are given on page 44. Also required are PSY 110 and one course from COMM 145, 243 or TTVA 141. The music requirements are outlined below:

Music Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 109, 110, 209</td>
<td>9</td>
</tr>
<tr>
<td>MUS 163, 164, 263, 264</td>
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</tr>
<tr>
<td>MUS 317, 318, 319</td>
<td>9</td>
</tr>
<tr>
<td>MUS 213</td>
<td>2</td>
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<td>MUS 313</td>
<td>2</td>
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<td>MUS 404</td>
<td>2</td>
</tr>
<tr>
<td>MUS 473</td>
<td>4</td>
</tr>
<tr>
<td>Composition</td>
<td>12</td>
</tr>
<tr>
<td>Piano</td>
<td>12</td>
</tr>
<tr>
<td>Organ</td>
<td>8</td>
</tr>
<tr>
<td>Voice</td>
<td>12</td>
</tr>
<tr>
<td>Elective credits</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
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</table>

Music Education Core

<table>
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<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Principal Instrument**</td>
<td>8</td>
</tr>
<tr>
<td>Secondary Instrument*</td>
<td>5</td>
</tr>
<tr>
<td>MUS 259</td>
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</tr>
<tr>
<td>MUS 231, 233, 236, 237</td>
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<tr>
<td>MUS 312</td>
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<td>MUS 389</td>
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<td>MUS 489</td>
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<td>Total credits</td>
<td>26</td>
</tr>
<tr>
<td>Total for graduation</td>
<td>142</td>
</tr>
</tbody>
</table>

*Piano 2 Cr. and Guitar 1 Cr.; if principal instrument is piano, then Voice 2 Cr. and Guitar 1 Cr. (which may be fulfilled either by 1 Cr. of studio guitar or MUS 236, Guitar Methods).

**Completion of level 303 is required.

Bachelor of Music

For the General Education Requirements for this degree, see page 43. The music requirements are outlined below:

Music Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 109, 110, 209</td>
<td>9</td>
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<td>MUS 163, 164, 263, 264</td>
<td>12</td>
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<tr>
<td>MUS 317, 318, 319</td>
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<td>MUS 213</td>
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<td>MUS 463</td>
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<td>MUS 464</td>
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<td>MUS 499</td>
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<td>Total</td>
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Other Requirements

Program: Church Music Composition

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<tbody>
<tr>
<td>MUS 312</td>
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<td>MUS 313</td>
<td>2</td>
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<tr>
<td>MUS 404</td>
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<tr>
<td>MUS 415</td>
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</tr>
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<td>MUS 454</td>
<td>1.5</td>
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<tr>
<td>MUS 473</td>
<td>4</td>
</tr>
<tr>
<td>Composition</td>
<td>12</td>
</tr>
<tr>
<td>Piano</td>
<td>12</td>
</tr>
<tr>
<td>Organ</td>
<td>8</td>
</tr>
<tr>
<td>Voice</td>
<td>12</td>
</tr>
<tr>
<td>Elective credits</td>
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<tr>
<td>Total</td>
<td>126</td>
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</tbody>
</table>

Program: Performance

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</tr>
<tr>
<td>MUS 404</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS 423</td>
<td>2</td>
</tr>
<tr>
<td>MUS 454</td>
<td>1</td>
</tr>
<tr>
<td>Piano</td>
<td>4</td>
</tr>
<tr>
<td>Principal Instrument</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
</tr>
<tr>
<td>Elective credits</td>
<td>26</td>
</tr>
<tr>
<td>Total required</td>
<td>126</td>
</tr>
</tbody>
</table>

Other Requirements

Program: ORCHESTRAL ORGAN PIANO VOICE INSTRUMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 313</td>
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</tr>
<tr>
<td>MUS 210, 211</td>
<td>3</td>
</tr>
<tr>
<td>MUS 404</td>
<td>1.5</td>
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<tr>
<td>MUS 423</td>
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</tr>
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<td>MUS 454</td>
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</tr>
<tr>
<td>Piano</td>
<td>4</td>
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<tr>
<td>Principal Instrument</td>
<td>2</td>
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<tr>
<td>Total</td>
<td>36</td>
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<td>Elective credits</td>
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</tr>
<tr>
<td>Total required</td>
<td>126</td>
</tr>
</tbody>
</table>

Music Minor. A minimum of 16 credit hours in Music constitutes a minor. Courses must include MUS 109, 110, 163, 164, and 4 credit hours of studio instruction (completion of MUS 103).
Music

Master of Music

This program is intended for music teachers in the public and private schools, studio teachers, church musicians and others who wish to continue their professional studies at the graduate level. An appropriate bachelor's degree in music is a prerequisite.

In addition to completing the admission procedures of the Graduate Division, students must audition in their principal performing medium and submit two letters of recommendation, addressed to the Department of Music.

Students whose undergraduate degree is not the one specified as a prerequisite for a specified undergraduate course; such courses do not apply to the M.M. degree. For further information, consult the Graduate Division Catalog.

THEORY, HISTORY AND METHODS

MUS 101. Introduction to Music. Cr. 3. A study of the basic forms and styles of musical art in Western civilization and in non-Western cultures. The course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

MUS 109. Musicianship I. Cr. 3. A practical course in which basic musicianship is developed through sight singing, dictation and guided listening. The course is usually taken concurrently with MUS 163.

MUS 110. Musicianship II. Cr. 3. A continuation of MUS 109. Prerequisites: Music 109 and passing the Keyboard Competency Test No. 1. Usually concurrent with Music 164.

MUS 163. Music Theory I. Cr. 3. A course in the fundamentals of music which includes the development of analytical and listening skills and deals with notation, elements of pitch and rhythm, harmonic organization, and part writing.

MUS 164. Music Theory II. Cr. 3. A continuation of MUS 163 including the study of melodic organization, non-chord tones, diatonic seventh chords, secondary dominants, and modulation. Prerequisite: MUS 163.

MUS 209. Musicianship III. Cr. 3. A continuation of MUS 110. Prerequisites: MUS 110 and passing the Keyboard Proficiency Level 2 as outlined in the Music Department Student Handbook. Usually concurrent with MUS 263.


MUS 211. Foreign Language Diction. Cr. 2. Application of IPA to perform the principal singer's languages (Italian, French, and German) and actor's international dialects. Prerequisite: MUS 210.

MUS 213. Basic Conducting. Cr. 2. An introduction to conducting including a study of score reading, beat patterns, acoustics and interpretive principles. Prerequisite: MUS 164 or consent of the instructor.

MUS 231. Stringed Instructional Methods. 0+2, Cr. 1. Violin, viola, violoncello and contrabass are studied for the purpose of giving the student a fundamental playing and teaching knowledge of the instruments.

MUS 233. Woodwind Instructional Methods. 0+2, Cr. 1. Clarinet, saxophone, oboe, bassoon and flute are studied for the purpose of giving the student a fundamental playing and teaching knowledge of the instruments.

MUS 236. Guitar Instructional Methods. 0+2, Cr. 1. Guitar is studied for the purpose of giving the student the basic playing skills necessary for the use of the guitar in classroom music teaching.

MUS 237. Percussion Instructional Methods. 0+2, Cr. 1. Percussion instruments are studied for the purpose of giving the student a fundamental playing and teaching knowledge of the instruments.

MUS 239. Voice Instructional Methods. 0+2, Cr. 1. This course is designed to give the student a fundamental technical and teaching knowledge of the voice as an instrument.

MUS 263. Music Theory III. Cr. 3. A continuation of MUS 164 with special emphasis on the harmonic developments of the 19th century and an introduction to 20th century practices. Topics include binary and ternary forms, modal mixture, quartal chords, enharmonic modulation, as well as melodic and harmonic materials of the 20th century. Prerequisite: MUS 164.

MUS 264. Music Theory IV. Cr. 3. A course in which the skills of analysis, writing, and listening are developed in the study of 18th century counterpoint (melodic construction, two-voice writing, canon, invention, and fugue). Also included is a study of larger forms (sonata, variations, rondo, and twelve-tone techniques). Prerequisite: MUS 263.

MUS 307. Music Methods for the Elementary Teacher. Cr. 3. A study of materials, methods and techniques of general classroom music for the primary grades. This course is open only to elementary education majors and may not be counted toward a major or minor in Music.

MUS 310. Music in History. Cr. 3. A study of music as a cultural expression in the history of Western civilization through the examination of the major stylistic traditions of musical art. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

MUS 312. Scoring and Arranging. Cr. 2. The techniques of scoring for orchestra and band and of arranging music for choral performance. Through guided exercises and assigned readings, students learn how to prepare music written in one medium for use in another. Knowledge of vocal and instrumental capabilities is learned; skills in combining voices and instruments in various ensembles are practiced. Prerequisite: MUS 164.

MUS 313. Intermediate Conducting. Cr. 2. A continuation of MUS 213. Includes rehearsal techniques, specific choral and instrumental conducting problems and ensemble conducting experience. Prerequisite: MUS 213.

MUS 317. History and Literature of Music I. Cr. 3. The development of musical thought and literature to 1700. Prerequisites: MUS 110 and 263. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

MUS 318. History and Literature of Music II. Cr. 3. The development of musical thought and literature from 1700 to 1880. Prerequisites: MUS 110 and 263. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

MUS 319. History and Literature of Music III. Cr. 3. A study of music and musical thought from 1880 to the present. Prerequisites: MUS 110 and 263. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements.

MUS 375. Music Enterprises. Cr. 3. The major objective of this course is to acquaint the student with basic information for successful music merchandising and to help the student understand the place of music in our contemporary society. Field trips are a vital component of this course. Areas and principles covered include legal aspects of music, manufacturing, performing and recording and managing musical enterprises.

MUS 381. Cooperative Education in Music. Cr. 0.5-3. Professional work experience with a cooperating employer. Written report required. Prerequisite: chair's approval of written proposal submitted to the department office at least 6 weeks prior to start of the semester.

MUS 389. School Music I. Cr. 3. A course designed to deal with materials, procedures, organization, administration and musical growth and development of children in elementary and junior high schools. Prerequisite: Music 164.

MUS 390. Topics in Music. Cr. 3. Specific topics based on interests of students and faculty. Topics may vary from one semester to another. May be repeated for credit if topics are different. Prerequisite: Junior standing.


MUS 413/513. Advanced Conducting, Choral/Institutional. Cr. 2. A study of instrumental and choral scores, conducting techniques and materials. Prerequisite: Music 313 or the equivalent.


MUS 415/515. Liturgical Organ Playing. Cr. 2. A practical course in playing hymns and chants, accompanying, realization of figured bass, score reading and improvising in small forms. The historic and current roles of the organ in the liturgy are discussed. Prerequisites: three years of organ study and Music 164, or permission of the instructor. Offered in alternate years.

MUS 421/521. Pro-Seminar in Music. Cr. 2-3. An intensive study of a limited area in the history or theory of music. This course may be repeated for credit. Prerequisite: consent of the Chair of the Department.

MUS 423/523. Pro-Seminar in the Pedagogy of Music. Cr. 2. A consideration of the problems of teaching basic musicianship at all levels. Special attention is given to the adaptation of basic principles to the needs of music majors and to the needs of the members of the pro-seminar. Prerequisite: consent of the Chair of the Department.

MUS 432/532. Workshop in Music Education. Cr. 1-2. A study of current topics in music education in summer workshop sessions of one or two weeks.

MUS 454. Teaching of Performance Music. Cr. 1. A survey of pedagogical materials and methodology of the student's performance area. Students will be required to observe lessons and
do practice teaching during the semester. Must be taken concurrently with Music 453.

MUS 463/563. Twentieth Century Techniques. Cr. 3. In this course, impressionism, neoclassicism, nonserial atonality, serialism, innovations in timbre and texture, electronic music, aleatoric music, and minimalism are investigated. Musical works of Debussy, Stravinsky, Hindemith, Bartok, Britten, Schoenberg, Webern, Penderecki, Crumb, and Riley are studied, with particular attention to compositional technique and style. Prerequisite: Music 264.

MUS 464/564. Studies in Counterpoint. Cr. 3. In this course 18th century counterpoint is studied through the writing of music based on stylistic models and through analysis of representative works of the period. Also included in the course is an introduction to Schenkerian analysis. Prerequisite: Music 264.

MUS 473/673. Church Music. Cr. 4. An intensive academic study of the history, philosophies, and practices of music in Christian churches with an emphasis on the Lutheran heritage. Readings from the standard scholarly texts in the field and from current professional publications, discussed in a seminar format. Topics include theologies of music, hymnody, music in worship, church music organizations, and sacred music repertoire. Open to upper division and graduate music majors; non-majors may be admitted by permission of the instructor.

MUS 486. Internship. Cr. 3. Controlled, on-the-job experience with participating businesses for senior music students. May be taken during the regular term with part-time employment of 18 to 20 hours weekly or during the summer session with 36 to 40 hours per week. Term project required. Applications should be made early in the semester preceding registration for this course. The application is reviewed on the basis of the student's academic standing, faculty recommendations, professional progress and demonstrated interest. May not be repeated for credit. S/U option may be elected. Prerequisite: Music 376.

MUS 489. School Music II. Cr. 3. A study of music materials, procedures, organization, administration and musical growth and development of students in junior high/ middle and high schools. Includes introduction of philosophical foundations, principles and literature of the music education profession. Prerequisites: MUS 388 and admission to the Professional Semester.

MUS 498. Independent Study in Music. Cr. 1-3. A course of study arranged by the student with the consent of and under the supervision of a faculty adviser. The study results in a written essay on a topic approved by the adviser. Prerequisites: MUS 264 and 318.


MUS 499. Music Colloquium. Cr. 0. All music majors will register for this course each semester in residence as outlined in the Handbook for Music Students. S/U grade.

PERFORMANCE
Note: Non-music majors who are candidates for degrees in the College of Arts and Sciences are restricted to a maximum of 16 credit hours in performance, including no more than four credit hours in ensemble music, which may be applied toward degree requirements.

A. Studio Instruction. See page 226 for appropriate fees.

Cr. 1-3. A four-year undergraduate and graduate program of studio instruction is offered to students of Valparaiso University in piano, organ, harpsichord, orchestral and band instruments, voice, guitar, and composition. The choice and use of materials are determined by the instructor in each area following guidelines which appear in the Department of Music Handbook for Music Students. All students, regardless of major, may register for 1 credit hour of studio instruction. Bachelor of Music Education and Bachelor of Music majors may register for 2 credit hours in their principal performance medium. Only Bachelor of Music majors may register for 3 credit hours in their principal performance medium. Studio instruction for music majors is supplemented with a required performance colloquium which meets for one 50-minute period per week (MUS 499, 0 cr.), non-majors enrolled in studio instruction are welcome to participate in the colloquium and are urged to do so.

Students will register for one of the following levels in their studio instruction medium: MUS 003, 103, 203, 303, 453, 503, 603. Students with no prior or minimal study should register for MUS 003. Music majors are accepted into the music program following an audition and are placed at an appropriate level as specified by the guidelines of their chosen degree program. Other students will be placed at an appropriate level through consultation with the Chair of the Department and the studio faculty. Studio instruction is available in:

- Voice
- Piano and Jazz Piano
- Harp
- Harpsichord (by audition only)
- Organ (by audition only)
- Organ Improvisation (by audition only)
- Violin
- Viola
- Violoncello

Contrabass

Flute

Oboe

Clarinet

Bassoon

Horn

Trombone

Bass Trombone

Percussion

Classical Guitar

Private instruction in musical forms, techniques, and materials leading the development of new works. Approval of the chair required.

B. Ensemble Music Instruction. Instruction in one of the major ensembles for a period of one semester gives one credit hour. Instruction in one of the minor ensembles gives 0.5 credit hour. If a student has earned eight credit hours in ensemble music, any additional enrollments are graded on the S/U basis. The following are considered major ensembles:

- University Singers, Valparaiso University Chorale, Kantorei, Gospel Choir, admission by audition only.
- Also Choral Society, audition not required.

MUS 502/552. Bands. Concert Band, Jazz Band, admission by audition only. Also University Band, audition not required.

MUS 504/554. Orchestras. University Chamber Orchestra, University Symphony Orchestra. Admission by audition only.

MUS 505/556. Music/Theatre Workshop. Admission by audition only.

Philosophy

Professor Bachman; Associate Professors Geiman, Kennedy (Chair); Assistant Professor Visser.

Courses in philosophy offer students the opportunity to examine the basic issues which arise in all fields of endeavor and also to explore the positions of the great thinkers of both Western and non-Western civilizations. These courses encourage students to reflect philosophically on those concepts which significantly shape human life because of the key role they play in language, thought, belief, and action. Reflection is philosophical if it is analytical, critical, and evaluative. The study of philosophy tends to develop and sharpen analytical and critical thinking generally, not only about philosophical topics, but also about other disciplines as well. Philosophy courses can also help educate Christians think critically about various issues raised by involvement in their religious communities.

A major in philosophy may lead to careers such as law, the ministry, and teaching, and enhances careermakers in medicine, business, education, writing, and public service.

Major. A minimum of 27 credit hours in philosophy constitutes a major. Courses must include PHIL 150, 275, 280 and one additional 200-level course, 375 and two additional 300-level courses, 425 and 450. The Department recommends specific plans of study for those preparing for entrance into law school, seminary, or graduate study in philosophy. Majors who are preparing for graduate study in philosophy are advised to complete a minimum of 36 credit hours of philosophy. Recommended plans of study are available at the Departmental Office.

Minor. A minimum of 15 credit hours in philosophy constitutes a minor. Courses must include PHIL 150, 275, and 280.

Degree. Completion of the degree requirements of the College of Arts and Sciences with a major in philosophy leads to the Bachelor of Arts degree.

Approval of Schedules. All students taking a major or minor must have their schedules approved by the Chair of the Department at the beginning of each semester.

Prerequisites. Courses numbered 100 are considered introductory courses and have no course prerequisites. Courses numbered 200 are considered advanced introductory courses and have no prerequisites, but sophomore standing is recommended. Courses numbered 300 and above are considered advanced courses and have, as prerequisite, any one course numbered under 300, or sophomore standing in Christ College, or consent of the instructor. Courses numbered 400 and above are designed for majors and minors.

General Education. Any course in philosophy will satisfy the General Education Historical and Philosophical Studies requirement, but students will usually be best served by choosing PHIL 115, 120, 125, or 150. From time to time certain philosophy courses are cross-listed with upper level Theology courses and thus may satisfy that requirement under the Theology number. PHIL 120 will also satisfy the U.S. Cultural Diversity requirement. PHIL 220 will satisfy the Diversity: Global Cultures and Perspectives requirement. PHIL 210 will satisfy the Fine Arts/Fine Arts Literature requirement.

Note: Students should consult the Philosophy Department Course Descriptions Brochure published by the Department each semester and the Schedule of Classes to ascertain when any particular course will be offered. The brochure gives a detailed description of each course offered the following semester. Copies are available at the departmental office and before every registration.

PHIL 115. Introduction to Philosophy: Reason and Reality. Cr. 3. An introduction to philosophy which features some of the most fundamental questions raised by both ordinary persons and philosophers in their attempts to understand themselves and their world. Questions are raised about the nature of reality, the foundations of knowledge and value, the nature of persons, freedom and causality, and the relationship between faith and reason.

PHIL 120. Introduction to Philosophy: Democracy, Education and Multiculturalism. Cr. 3. An introduction to some philosophical problems related to ethnicity and multiculturalism particularly as these arise in political philosophy and philosophy of education in the American context. May be used to fulfill the U.S. Cultural Diversity component of the General Education Requirements.

PHIL 125. Introduction to Philosophy: The Good Life. Cr. 3. A philosophical introduction to moral issues which confront us in everyday life. When should the concerns of others inhibit my personal freedom? How much should I care about others? What are my responsibilities to myself? my family? the hungry of the world? What sort of person should I be? The course emphasizes the importance of being reflective about how to live one’s life.

PHIL 150. Logic and Critical Thinking. Cr. 3. An introduction to different strategies for constructing and evaluating arguments. Emphasis is placed on the development of skills needed to deal competently with arguments encountered in everyday life as well as on some of the more formal techniques of logical analysis.

PHIL 205 (formerly PHIL 320). Philosophy of Science. Cr. 3. A philosophical approach to the language, practices, and goals of the physical sciences. Special attention is given to the concepts, methods, and theories of the physical and biological sciences, leading toward an interpretation of science.

PHIL 210 (formerly PHIL 305). Philosophy of Art. Cr. 3. A study of theories of art and aesthetic experience. Readings from classical and contemporary sources. Reference is made to works of art accessible to the student through field trips, slides, performances and recordings. This course may be used to fulfill the Fine Arts/Fine Arts Literature component of the General Education Requirements.

PHIL 220 (formerly PHIL 260). Non-Western Philosophy. Cr. 3. An introduction to some major philosophical themes in non-Western thought. Emphasis is upon the analysis of primary texts. Prerequisite: sophomore standing. This course fulfills the Global Cultures and Perspectives component of the General Education Requirements.

PHIL 230 (formerly PHIL 270). Environmental Philosophy and Ethics. Cr. 3. A survey of major conceptions of the relationship between humanity and the environment and the kinds of beliefs, attitudes, and actions entailed by those conceptions. Topics may include conservationism, deep ecology, bioregionalism, political ecology, and creation spirituality.

PHIL 240. Feminist Philosophy. Cr. 3. A philosophical examination of feminist theory or some issue or issues in feminist philosophy. Issues may include gender and knowledge, the social construction of reality, women and law, and nature and identity.

PHIL 250. Political Philosophy. Cr. 3. Also offered as POLS 250. A survey of the major formulations and problems of Western political thought as developed by political philosophers from the Greeks through the modern era. Prerequisite: sophomore standing.

PHIL 275 (formerly PHIL 215). Ancient and Medieval Philosophy. Cr. 3. An introduction to great philosophers and themes of the ancient and medieval world. Emphasis will be placed upon Plato and Aristotle, Augustine and Thomas Aquinas. Primary documents are read throughout.

PHIL 280 (formerly PHIL 225). Early Modern Philosophy. Cr. 3. An introduction to major thinkers and themes of seventeenth and eighteenth century Europe: Descartes, Leibniz, Hobbes, Locke, and Hume. Emphasis will be placed upon the Rationalist and Empiricist traditions and their synthesis in Kant. Primary documents are read throughout.

PHIL 290. Philosophical Topics. Cr. 3. A study of a focused philosophical theme or issue. This course may be repeated for credit if the topics are different.

PHIL 310 (formerly PHIL 410). Theory of Knowledge. Cr. 3. An examination of selected topics which illustrate dominant themes of traditional and contemporary theories of knowledge, such as skepticism, perception, evidence, verifiability, memory, belief, justification, and truth.

PHIL 315. Philosophy of Language. Cr. 3. How do words mean? The nature of meaning and of language has been at the center of twenty-first century philosophy. This course will examine these and other issues in the philosophy of language, concentrating on the discussions of recent philosophers.

PHIL 320 (formerly PHIL 420). Metaphysics. Cr. 3. An examination of traditional and contemporary metaphysical topics, such as time, substance, agency, freedom, appearance and reality, persons, the mind-body problem.
PHIL 330. Philosophy of Religion.
Cr. 3. A philosophical analysis of some of the beliefs, concepts, and problems involved in traditional theistic belief and its critics. Problems include arguments for the existence of God, religious experience, the problem of evil, and faith and reason. Course prerequisite can be satisfied by any Level II Theology course instead of a philosophy course.

PHIL 335(formerly PHIL 405). Ethical Theory.
Cr. 3. A study of some significant ethical theories and issues. Emphasis is on issues concerning the nature of moral discourse and practice: the existence of objective moral values, the relation of religion and morality, the possibility of moral knowledge, the place of reason and convention in moral discourse and practice.

PHIL 341. Biomedical Ethics.
Cr. 3. (May also be offered as THEO 341.) A study of moral issues raised in health-care and biological research (e.g., abortion, euthanasia, genetic engineering, and resource allocation). Attention is given both to ethical theory and to practical issues. Course prerequisite can be satisfied by any Level II Theology course instead of a philosophy course.

PHIL 345. Advanced Logic.
Cr. 3. A study of formal deductive logic as codified in first-order predicate logic, including the concepts of proof, consistency, and completeness, and topics in logical theory and the foundations of mathematics. The relationship between formal logic and rational inquiry is also explored. Prerequisite: PHIL 150 or its equivalent.

PHIL 375. Advanced History of Philosophy.
Cr. 3. An advanced study of the major philosophical themes of some period, for example, nineteenth century German philosophy, eighteenth century Scottish philosophy, or medieval philosophy.

PHIL 425. Advanced Philosophical Topics.
Cr. 3. An examination of the work of one major philosopher such as Aristotle, Wittgenstein, or Kant, or of a single philosophical approach such as Augustinianism or phenomenology, or of one philosophical problem such as free will or moral realism.

PHIL 450. Philosophy Seminar.
Cr. 3. A seminar required of all philosophy majors in their senior year. An examination of the nature and value of philosophy through the study of some philosophical problem, and classic and contemporary texts.

PHIL 485. Independent Projects.
Cr. 1-3. A student may undertake independent study of some person, problem, theme, etc., under the supervision of some member of the Philosophy Department. The student will propose a topic, generate a bibliography and specify the scope and goals of the study.

PHIL 487. Honors Work in Philosophy.
Cr. 3. See Honors Work, page 50.

PHIL 488. Honors Candidacy in Philosophy.
Cr. 3. See Honors Work, page 50.

Physical Education

Professor Steinbrecher; Associate Professor Steiger (Chair); Assistant Professors Carl, Smith; Part-Time Assistant Professors Criswell, Moore; Part-Time Instructors Daugherty, Seibert.

The Physical Education Department seeks to provide students with knowledge and skills designed to enhance the quality of campus life as well as to provide them with suitable basic experiences for lifelong personal use.

Although physical education within a school setting is a continuing area of professional opportunity, personal physical activity and enjoyment of spectator sports has created new areas of opportunity for the physical educator: adult fitness, leisure services, athletic training, exercise science, sports writing and broadcasting, and sports management. Students can select courses from the departmental curriculum to reflect these new areas.

Major. A minimum of 28 credit hours in physical education constitutes a major. Courses must include PE 150, 190, 230, 235, 240, 350, 370, 410, and 440. In addition, students must complete BIO 151, 152, and 205, CHEM 111, and PSY 110.

Minor. A minimum of 18 credit hours in physical education constitutes a minor. Courses must include PE 150, 190, 230, and 370.

Teaching Programs. Students who plan to teach physical education in elementary or secondary schools with a major or minor in Physical Education should consult the Chair of the Department and the Education Department for specific requirements.

Athletic Training Concentration. A minimum of 42 credit hours in physical education and athletic training is required. Courses must include PE 150, 190, 230, 235, 310, 335, 340, 355, 370, 375, 410, 435, 440, 455, and 486 (3 credit hours). In addition, students must complete BIO 151, 152, and 205, CHEM 111, and PSY 110. Completion of this concentration plus 1500 hours of athletic training experience should qualify a student to take the NATA Certification Examination.

Sports Management Concentration. A minimum of 30 credit hours in physical education is required. Courses must include
Physical Education

PE 101. Individual Exercise. 0+2, Cr. 1. Principles and physiology of physical fitness with topics such as resistive exercise training, nutrition and aerobic conditioning. A personalized exercise program is developed.

PE 102. Aerobic Dance. 0+2, Cr. 1. Principles and physiology of physical fitness is included in conjunction with the physical activities involved in an aerobic dance program.

PE 103. Aerobic Run. 0+2, Cr. 1. Principles and physiology of physical fitness is included in conjunction with the physical activities involved in an aerobic run program.

PE 104. Aerobic Swim. 0+2, Cr. 1. Principles and physiology of physical fitness is included in conjunction with the physical activities involved in an aerobic swim program.

PE 105. Weight Training. 0+2, Cr. 1. Principles and physiology of physical fitness is included in conjunction with the physical activities involved in a weight training program.

PE 106-149. Elective Activities. 0+1, Cr. 0.5. Individual, dual, team, indoor and outdoor activities are presented in various combinations. A specific activity may not be repeated for credit. Each course meets twice a week for seven weeks. S/U graded only.

PE 150. Introduction to Physical Education. Cr. 1. Seven weeks course. An introductory course for students interested in physical education. The course provides an opportunity for students to explore physical education: teacher education, athleti training, exercise science or sports management as fields of study.

PE 160. Advanced Lifesaving/Lifeguarding. 1+2, Cr. 2. Analysis and practice of skills in swimming and lifesaving which lead to an American Red Cross Advanced Lifesaving Certificate (2 Cr.). Analysis and practice of skills in swimming, lifesaving and lifeguarding which lead to an American Red Cross Lifeguarding Certificate (2 Cr.: Mini or Summer Session only). Prerequisite: Intermediate Swim, instructor’s approval.

PE 170. Water Safety Instruction. 1+2, Cr. 2. A study of the techniques for teaching swimming and lifesaving. This course leads to an American Red Cross Water Safety Instructor’s Certificate. Additional hours may be assigned. Prerequisite: PE 160 or approval of instructor.

PE 180. Officiating in Sports. Cr. 1. May be offered as a seven weeks course. A study of the general principles and techniques involved in officiating interscholastic sports. May lead to state certification when appropriate. Because the course is divided into one-credit sections each dealing with a specific sport, no section may be repeated for credit.

PE 190. First Aid, Health and Safety. Cr. 2. Seven weeks course. A study of the prevention and emergency care of sudden illness and injury, which leads to American Red Cross Certification in Advanced First Aid and Community CPR.

PE 220. Coaching Theory. Cr. 1-2. Seven week course. The 1-credit sections involve a study of the methods and principles of coaching interscholastic and intercollegiate sports. The 2-credit section also includes a study of the methods associated with the planning, periodization, peaking, and bio-motor development in coaching. Students will develop a comprehensive seasonal plan for a specific sport. The 1-credit sections may not be repeated with the same sport.


PE 233. Theory and Principles of Sports Management. Cr. 3. This is the foundations course for the Sports Management concentration. The course includes a study of the organization and the management function within these settings. Students are exposed to basic organizational and problem-solving techniques.

PE 235. Prevention and Care of Athletic Injuries. 2+2, Cr. 3. An investigation of principles pertaining to the prevention and care of athletic injuries. Prerequisite: approval of the instructor.

PE 240. Philosophical, Historical, and Organizational Perspectives in Physical Education. Cr. 3. A study of the philosophical, historical, organizational and administrative aspects of physical education.

PE 250. Dance Patterns and Forms. 2+2, Cr. 3. A study of dance with emphasis on modern, folk, social and square dance forms as well as teaching techniques.

PE 260. Gymnastics. 1+2, Cr. 2. This course consists of methods and teaching cues of apparatus and tumbling techniques. May meet three times a week.

PE 270. The Learning Potentials of the Out-of-Doors. 1+2, Cr. 2. Seven weeks course. An experience of learning opportunities as provided by camping and outdoor education, including outdoor elementary educational activities. Field trips are required as part of the laboratory experience.

PE 290. Special Topics in Recreation and Leisure Studies. Cr. 1-3. An open topic course which may investigate various topics pertaining to recreational and leisure programs (e.g., organization of intramural programs, adult fitness, outdoor recreation program management, pool management, SCUBA).

PE 310. Psychology of Sport. Cr. 3. A study of the competitive sports experience, with emphasis on the multidimensional factors involved in the psychology of sport. Prerequisite: PSY 110.

PE 320. Sport and Society. Cr. 3. A study of the role of sports in society and the effects of culture and society on sports.

PE 333. Management and Development of Facilities. Cr. 3. The course explores planning, developing, and managing sports facilities. Students examine existing facilities and plan for the development and management of new sports facilities. Prerequisite: PE 233 or approval of the Chair of the Department.

PE 335. Advanced Athletic Training. Cr. 3. An investigation and application of advanced athletic training, emphasizing the prevention and evaluation of athletic injuries. Field trip to a sports medicine/physical therapy clinic. An additional 5-10 hours per week will be required in the Athletic Training facility. Prerequisite: PE 235 and approval of the instructor.

PE 340. Movement and Learning. 2+2, Cr. 3. A study of the place of movement in the life of the child and the ways in which various types of activity can affect the development of the child.

PE 343. Sports Marketing, Promotions and Fund Raising. Cr. 2. A study of the roles of marketing, promotions, and fund raising in the sports enterprise. Students are involved in planning and organizing programs in these areas. Students also receive experience in implementing a group project on campus or in a community setting. Prerequisite: PE 233 or approval of the Chair of the Department.

PE 350. Methods of Physical Education. 1+2, Cr. 2. Analysis and application of teaching techniques and organizational methods for the instruction of physical education, with emphasis on indoor/outdoor activities and team/individual sports. Meets three times a week.

PE 355. Therapeutic Modalities. Cr. 3. The study and application of the use of thermal, electrical, and mechanical agents in the treatment of sports-related injuries. Field trip to a sports medicine/physical therapy clinic. An additional two (2) hours per week will be required in a sports medicine/physical therapy clinic. Prerequisite: PE 235 and approval of the instructor.

PE 360. Adapted Physical Education. Cr. 3. A study of the needs and problems of the exceptional individual with emphasis on adapting appropriate activities to meet these needs.

PE 370. Kinesiology. 2+2, Cr. 3. A study and application of the kinesiological and biomechanical principles of movement. Prerequisite: BIO 151.

PE 375. Therapeutic Exercise. Cr. 3. The study of the principles and practices of therapeutic exercise involving sport-related injuries. Field trip to a sports medicine/physical therapy clinic. An additional two (2) hours per week will be required in a sports medicine/physical therapy clinic. Prerequisite: PE 235 and approval of the instructor.

PE 387. Fitness Assessment and Exercise Prescription. Cr. 3. Introduction to physiological testing protocols, fitness evaluations and the design of exercise prescriptions based on direct and indirect measures, e.g., oxygen uptake, heart rate, caloric expenditure. Areas of study include but are not limited to cardiac rehabilitation, COPD, diabetes, pregnancy, youth and the elderly. Prerequisite: BIO 151, 152 or approval of the instructor.

PE 410. Measurement and Evaluation in Physical Education. Cr. 3. An analysis of evaluation techniques for activities and an investigation of the measure of central tendency, statistical designs, computer use and empirical research for physical education.

PE 435. Evaluation of Athletic Injuries. Cr. 3. An in-depth study of techniques used in the evaluation of athletic injuries. An additional 5-10 hours per week will be required in the Athletic Training facility. Prerequisite: PE 235 and 335, junior standing or approval of the instructor.

PE 440. Physiology of Exercise. 2+2, Cr. 3. An investigation of the physiological response of the human body to exercise and training, with laboratory experience. Prerequisite: BIO 152.

PE 455. Administration of Athletic Training Programs. Cr. 3. An in-depth study of various problems, issues and responsibilities affecting athletic trainers in their role as administrators. Prerequisite: PE 235 and 335, junior standing and approval of the instructor.

PE 473. Physical Education Senior Project. Cr. 3. A personal investigation of a specific area in the field of Physical Education, Sports Management, or Exercise Science. Students utilize research techniques common to the field and culminate the experience with a written report. Prerequisites: senior standing and approval of the Chair of the Department.
Physics and Astronomy

Professors Hrivnak, Koetke (Chair), Manweiler; Associate Professor Zygmunt; Assistant Professor Morris, Pickett (Visiting); Lecturer Stanislaus.

Physics is the study of natural phenomena in an attempt to explain the interactions of matter and energy in terms of a limited number of fundamental laws. This study is predicated on careful observation and experimentation, thoughtful analysis, and creative insights. It is both descriptive and prescriptive and encompasses a realm from the submicroscopic particles of the atomic nucleus to the distant constituents of the universe.

In this context, the Physics and Astronomy Department offers a program of study to prepare students for graduate study and for entry-level work as a physicist in government or industry. Fields of study and employment include, but are not limited to, atomic physics, nuclear physics, elementary particle physics, molecular physics, condensed matter physics, quantum electronics, laser optics, astronomy, astrophysics, geophysics, biophysics, medical physics, computational physics, electrical engineering, nuclear engineering, scientific writing and reporting, high school physics teaching, criminology, patent law, and scientific equipment sales.

The Department is well equipped, having a subcritical nuclear reactor, a particle accelerator, an astronomical observatory, and extensive computer resources. Students pursue research projects under the direction of members of the faculty.

The Department sponsors a local chapter of the national Society of Physics Students. Qualified students are elected to membership in the national honor society, Sigma Pi Sigma. More information about the department can be found on the internet at <http://www.physics.valpo.edu/>.

Qualified students may obtain cooperative education experiences in a variety of employment situations, including research laboratories and industrial and engineering companies. Up to four credits may be counted towards the minimum 26 credit hours needed for a physics major. With departmental approval, PHYS 481-483 or 497 may be substituted for PHYS 445. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

**Major.** A minimum of 28 credit hours in physics and astronomy (32 credits for a Bachelor of Science degree) constitutes a major. Courses must include the core courses PHYS 243, 245, 250, 281, 310, 345, 371, 445 and 499.

Four concentrations within the physics major have been designed to meet students' educational and career goals. The departmental adviser will assist students in selecting the most appropriate physics major emphasis and the courses which apply within the emphasis.

One year of chemistry is recommended. It is assumed that students majoring in physics will acquire competency in at least one computer programming language (FORTRAN, C, C++). Courses in astronomy may be taken as electives.

The **Fundamental Physics Concentration** is intended for students primarily interested in pursuing a career in physics and who may anticipate graduate study in physics. In addition to the core courses, the following courses may be used to complete the major: PHYS 360, 372, 381, 421, 422, 430, 440, MATH 430 and 434 are also recommended.

The **Astronomy and Space Science Concentration** is intended for students interested in careers in astronomy and related fields and who might pursue graduate studies in astronomy or space science. In addition to the core courses, the following courses may be used to complete the major: ASTR 101, 190, 221, 252, 390, and 445, the latter substituted for PHYS 446.

The **High School Physics Teaching Concentration** is intended for students planning to teach physics at the secondary school level. This emphasis combines the physics major with education courses and professional field experience, and includes Physics 489. See the description of the Secondary Education program on page 78 for further details. In addition to the Core courses, ASTR 101, 101L, and 221 are recommended.

The **Applied Physics Concentration** is intended for students interested in the application of physics to problems in a...
students planning to teach physics must have their schedules approved by the department adviser.

ASTRONOMY

ASTR 101. Astronomy. 3+0, Cr. 3. A study of the history of man's view of the universe including our contemporary understanding of the physical universe. The tools and techniques employed by contemporary astronomers to probe the universe are studied. Topics include the structure of the solar system as revealed by modern space probes, the sun, stellar systems and classification, and the structure and evolution of stars, galaxies and the universe. Special topics such as neutron stars, black holes and the big bang model may also be examined. Only elementary mathematics is required. This course, along with ASTR 101L, may be used to fulfill the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

ASTR 101L. Astronomy Laboratory. 0+3, Cr. 1. Laboratory experiences designed to give students personal experience with astronomical equipment, including the astronomical observatory, and with the analysis of astronomical data. Techniques and skills appropriate to physical sciences will also be stressed. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination. Prerequisite or concurrent registration: ASTR 101 or 262.

ASTR 190. Topics in Astronomy and Space Science. Cr. 1-2. The study of various topics of current interest in astronomy and space science, on an introductory level. Prerequisites are dependent on the topic. Interested students are urged to consult the instructor or the Department Chair for specific information.

ASTR 221. Observational Astronomy. 0+3, Cr. 1. Practical observational experience using the 16 inch reflecting telescope and other instrumentation including photometric cameras, photovoltaic photometer, spectograph, and CCD camera and computer. Prerequisite: ASTR 101 and 101L or 252 or consent of the instructor.

ASTR 252. Introduction to Astrophysics. 3+0, Cr. 3. A study of modern astronomy and the physical principles involved. Topics to be studied include the properties and evolution of stars and galaxies. Problems illustrating the quantitative nature of modern astronomy will be solved. This course along with ASTR 101L may be used to fulfill the Natural Science component of the General Education Requirements. Prerequisite or concurrent registration: MATH 131 or 151 and PHYS 243. Students who have taken ASTR 101L need permission from the Department Chair to also take ASTR 252.

PHYS 109. Mechanics—Statics. Cr. 3. (Also offered as GE 109) A course in the resolution and composition of forces and moments as applied to the free body diagram. Topics include principles of equilibrium, first and second moments of areas, study of trusses, frames and machines, friction. Prerequisite: MATH 131 or 151, and PHYS 141.

PHYS 111. Essentials of Physics. 3+0, Cr. 3. The development of basic concepts of physics emphasizes intuition, logic and experience rather than complex mathematical analysis. Specific topics include space, time, motion, energy, conservation laws, fluids, sound and heat. Not open to students who have taken PHYS 141. This course along with PHYS 111L may be used in fulfillment of the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement examination.

PHYS 111L. Essentials of Physics Laboratory. 0+3, Cr. 1. Laboratory experiments test and illustrate fundamental physics concepts and laws closely related to those studied in PHYS 111. Emphasis is placed on experimental learning and on the development of laboratory skills in physics. Prerequisite or concurrent registration: PHYS 111L. Not open to students who have taken PHYS 111L.

PHYS 112. Essentials of Physics. 3+0, Cr. 3. This course is a continuation of PHYS 111. Specific topics include the study of electricity and magnetism, wave phenomena, optics, relativity, atomic and nuclear physics. Not open to students who have taken PHYS 142. Prerequisites: PHYS 111 and 111L or consent of the instructor. This course along with PHYS 112L may be used in fulfillment of the Natural Science component of the General Education Requirements.

PHYS 112L. Essentials of Physics Laboratory. 0+3, Cr. 1. Laboratory experiments test and illustrate fundamental physics concepts and laws closely related to those studied in PHYS 112. Emphasis is placed on experimental learning and on the continued development of laboratory skills in physics. Prerequisite or concurrent registration: PHYS 112L.
for axial loading of prismatic members, torsional loading of circular shafts and bending of beams, combined loading; plastic elastic action, and an introduction to statically indeterminate problems.

Prerequisite: MATH 132 and PHYS 109.

PHYS 223. Waves and Particles.
Cr. 4. An introduction to the wave and particle nature of modern physics. Topics include oscillations, waves, sound, light (geometrical and physical optics), relativity, quantum mechanics, atomic and solid state physics, nuclear physics, elementary particles.

Cr. 3. An introduction to the special theory of relativity, physical chemistry, the structure of the atom, the nuclear atom, the nature of radiation. Prerequisite: PHYS 142 and MATH 152 (may be taken concurrently).

PHYS 245. Experimental Physics III.
0+3, Cr. 1. Selected experiments include both the measurement of fundamental constants such as the speed of light, Planck's constant, the gravitational coupling constant, as well as investigations of fundamental physical processes. The further development of laboratory skills and methods of data analysis are emphasized, using advanced computer-aided data acquisition techniques. Prerequisite: PHYS 142 and 142L. Normally offered in spring semesters.

PHYS 250. Mechanics.
Cr. 3. The classical mechanics of particles, systems of particles and rigid bodies, utilizing analytical techniques of vectors and differential and integral calculus. Among the topics included are Newton's laws of motion in one and three dimensions, conservation laws, harmonic oscillation, central force motion, scattering and an introduction to rigid body motion. Prerequisites: PHYS 142 and MATH 233 or 253 (may be taken concurrently).

PHYS 252. Materials Science.
2+3, Cr. 3. (Also offered as PHYS 252.) A study of structure-property-processing relationships of engineering materials related to their selection in design and manufacturing processes. Based on an understanding of atomic and crystal structure, the methods of controlling structure and mechanical properties of materials are studied with an emphasis on strengthening mechanisms. Processes studied include solidification, phase transformation, and mechanical working of metals. A field trip to an industrial facility is arranged. Prerequisite: MATH 132 or 152.

PHYS 251. Electricity and Electronics.
2+5+1, Cr. 3. (Also offered as ECE 281.) A study of the fundamental methods of electric circuit analysis with emphasis on computer-aided analysis. AC and DC circuits, operational amplifiers. Laboratory exercises emphasize measurement techniques and reinforce lecture material. Prerequisite: PHYS 142 and 142L.

PHYS 310. Data Reduction and Error Analysis.
Cr. 1. The study and application of various techniques employed in the reduction and analysis of laboratory data to include probability distribution of fit, data smoothing and the methods for determining the errors of measured and fitted parameters. Extensive use of the computer is expected. Prerequisite: MATH 263; corequisite: PHYS 245.

PHYS 320. Microprocessor Applications.
3+3, Cr. 4. (Also offered as ECE 320.) The application of microcomputers in embedded system design, emphasizing the interconnection of hardware and software design. Use of assembly language programming to interface external hardware to an 8-bit microcontroller. Prerequisite: ECE 222.

PHYS 333. Mechanical Measurements Laboratory.
3+3, Cr. 4. (Also offered as ME 333.) A study of fundamental concepts and physical principles involved in the science of measurement. Experiments involve calibration and testing (both static and dynamic) of primary elements, signal amplifiers, transducers and readout devices. Experimentation utilizes laboratory and industrial instruments. Extensive use is made of computer data acquisition and spreadsheets. Prerequisite: PHYS 142.

PHYS 342. Electronics.
3.5+1.5, Cr. 4. (Also offered as ECE 342.) An introduction to semiconductor theory and the design and analysis of electronic circuits. Topics include diodes, bipolar and field effect transistors, single-stage and multistage amplifiers, frequency response, and feedback. Computer simulation is included as an analysis and design tool. Laboratory experiments emphasize evaluation of circuit performance and measurement techniques. Prerequisite: PHYS 263.

PHYS 345. Experimental Physics IV.
0+3, Cr. 1. Experiments in radiation detection and analysis using modern modular electronics. Prerequisites: PHYS 242, 245, and 310 and MATH 233 or 253.

PHYS 360. Thermal Physics.
Cr. 3. A study of the basic principles of thermodynamics, kinetic theory and elementary statistical mechanics. Among the topics included are equations of state, laws of thermodynamics, reversibility, entropy, kinetic theory, transport phenomena and statistical description of systems of particles. Normally offered in the spring semester of odd numbered years. Prerequisite: PHYS 243.

PHYS 371. Electromagnetic Fields.
Cr. 3. A study of electric and magnetic fields, their sources and interactions in vacuum and in dielectric and magnetic media. Prerequisites: PHYS 250 and MATH 234 or 350.

Cr. 3. Proceeding from Maxwell's equations, students investigate the wave aspects of electric and magnetic fields, including propagation, reflection, refraction, polarization, interference and diffraction. Other topics include radiation systems and wave guides. Normally offered in the spring semester of odd numbered years. Prerequisite: PHYS 245.

PHYS 381. Advanced Mechanics.
Cr. 3. The application of advanced mathematical methods to physical problems. Topics may include Lagrange's method, small oscillation theory including coupled oscillators, generalized rotation, the theory of special relativity, numerical methods and perturbation theory. Normally offered in the fall semester of even numbered years. Prerequisites: PHYS 250 and MATH 350 (may be taken concurrently).

PHYS 390. Topics in Physics.
Cr. 1-4. A study of various topics of current interest in physics. Prerequisites are dependent upon the topic. Interested students are urged to contact the instructor or Chair of the Department for specific information.

PHYS 421. Quantum Mechanics I.
Cr. 3. The fundamental concepts and principles of quantum physics are developed in a mathematically rigorous way and applied to atomic, nuclear and solid state physics. Topics include the fundamental postulates of quantum mechanics, the Schrodinger equation, and selected topics such as the harmonic oscillator, orbital and spin angular momentum, the hydrogen atom, identical particles, elementary matrix mechanics, multi-electron atoms, and collision theory. Normally offered in the fall semester of odd numbered years. Prerequisites: PHYS 243 and MATH 350 (both of which may be taken concurrently), or permission of the instructor.

PHYS 422. Quantum Mechanics II.
Cr. 3. A continuation of PHYS 421, with further development of the application of quantum theory. Topics may include time independent and time dependent perturbation theory with applications, scattering theory, matrix mechanics, multi-electron and molecular systems, elementary Hartree-Fock theory, superconductivity, and elementary relativistic quantum mechanics. Normally offered in the spring semester of even numbered years. Prerequisite: PHYS 421 or the permission of the instructor.

PHYS 430. Nuclear Physics.
Cr. 3. Nuclear physics for students with physics or engineering backgrounds. Topics include nuclear models, nuclear reactions, alpha, beta, and gamma radioactivity, and fission physics. Prerequisite: PHYS 243. Normally offered in the spring semester of even numbered years.

PHYS 430L. Nuclear Physics Laboratory.
0+3, Cr. 1. An advanced laboratory to study nuclear reactions, radioactivity, and fission. Laboratory will include the use of the 300 keV particle accelerator and the subcritical fission assembly. Prerequisites: PHYS 245 and 310; corequisite: PHYS 430. Normally offered in the spring semester of even numbered years.

Cr. 3. A presentation of the basic concepts of the quantum theory of matter, with emphasis on physical models which provide a quantitative description of the solid state. Topics include crystal structure, diffraction, the reciprocal lattice, chemical bonding in molecules and solids, lattice dynamics, phonons, thermal properties, the free electron gas, electrons in a periodic lattice, band structure, semiconductors, magnetic and optical properties, and superconductivity. Normally offered in the spring semester of odd numbered years. Prerequisites: PHYS 243.

PHYS 445. Experimental Physics V.
0+3, Cr. 1-2. Each student undertakes an experimental research problem. A written report and an oral presentation at the Physics Colloquium are required. Student research problems must be approved by the Department. Prerequisite: consent of the Chair of the Department. Two credits are required for the physics major. May be taken as two credits in one semester or preferably as one credit in each of two consecutive semesters.

PHYS 461. Cooperative Education in Physics.
Cr. 0.5-3. Experience in basic or applied physics with a cooperating employer. Midterm and final written reports required. Prerequisites: PHYS 245 and approval of the Chair of the Department. S/U grade.

PHYS 482-483. Cooperative Education in Physics II-III.
Cr. 0.5-3. Continuation of PHYS 481. Midterm and final written reports required. Prerequisites: PHYS 481 and approval of the Chair of the Department. S/U grade. May be repeated beyond 483 for additional credit.

PHYS 489. The Teaching of Natural Sciences.
Cr. 3. (See ED 489.) A study of the methods of teaching natural sciences in the secondary schools. This course may not be counted toward a major or a minor in Physics. Prerequisite: admission to the Professional Semester.

PHYS 492. Research or Reading in Physics.
Cr. 1-3. Research or reading in physics, under the supervision of a faculty member. Prerequisite: consent of the Chair of the Department.

PHYS 497. Honors Work in Physics.
Cr. 3. See Honors Work, page 50.

PHYS 498. Honors Candidacy in Physics.
Cr. 3. See Honors Work, page 50.

PHYS 499. Physics Colloquium.
Cr. 0. All physics majors are expected to register for this course. S/U grade.
Political Science

Professors Baas (Chair), Balkema, Trost; Associate Professor Lin; Assistant Professor Kingsland.

Historically, political science has occupied a central position in liberal arts. The study of politics focuses on the values that humans should seek and the particular legal and structural organizations that allow us to realize our desired values. Contemporary political science combines this concern for normative issues with an emphasis on the development of scientific explanation of political matters. Hence, political science now stresses the use of sophisticated scientific procedures and empirical and quantitative methodology in seeking explanations as well as attempting a normative analysis.

A major in political science may lead to many careers including, but not limited to, law, criminal justice, business, education, government service at the state, national, local and international level, politics, policy analysis, campaign management, and work for private interest groups. Many political science graduates eventually go on to law school and other graduate programs.

The Department sponsors a regular series of "Brown Bag Lunches" where a variety of topics are discussed. The Department also recognizes outstanding student achievement through membership in the Beta Nu Chapter of Pi Sigma Alpha, the national political science honor society.

Special Programs. For information concerning the Lutheran College Washington Consortium Semester and the Washington Semester see page 12. For information concerning the Semester on the United Nations see page 12.

Community Research and Service Center. The Department of Political Science has established the Community Research and Service Center. The primary goals of the Center are the following: first, to provide research assistance and other services to government, not-for-profit organization, and in some instances, business in Northwest Indiana; second, to provide students the opportunity to learn in an applied setting. Students become integral parts of the Center by taking certain courses and in the process learn basic research methods and gain practical experience in working for and dealing with government, business and other organizations.

Concentrations in Political Science. The department has developed a number of options for the major and the minor that allow students to pursue their own interests and vocational goals. Concentrations are defined for interest in international relations, legal studies, public policy and public administration, as well as general political science.

Major. A minimum of 30 credit hours in political science constitutes a major. One of the following concentrations must be followed.

General Political Science. The following courses are required: POLS 120, 220, (130 or 230), 240, 493, and 15 additional credit hours in political science.

International Relations Concentration. The following courses are required: POLS 120 or 220, 130, 230, 240, 493 and 15 additional credit hours from the following: POLS 330, 335, and 380 and 490 when the topics are appropriate.

Legal Studies Concentration. The following courses are required: POLS 120, 130, 220, 240, 493 and 15 additional credit hours from the following: POLS 140, 340, 341, 345, and 380 and 490 when the topics are appropriate.

Credit by Examination. Credit for POLS 120 may be earned through the College Level Examination Program subject examination in American Government.

Approval of Schedules. Students taking a major or minor in political science must have their schedules approved by the appropriate adviser.

POLS 110. Introduction to Politics.

Cr. 3. An introduction to the theories, concepts and issues of politics with particular emphasis on how these apply to problems of ethnicity and diversity in the American political system. May be used to fulfill the U.S. Diversity requirement or for partial fulfillment of the Social Analysis component of the General Education Requirements.

POLS 120. The Government of the United States.

Cr. 3. An introduction to the American national government, with special emphasis on the basic structure, functions and policies of the system. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

POLS 130. Comparative Politics.

Cr. 3. Comparative study of Western and non-Western political systems. Includes examination of conceptual frameworks for comparative analysis. May be used in partial fulfillment of the Social Analysis component or for the Global Cultures and Perspectives component of the General Education Requirements.

POLS 140. The Field of Law.

Cr. 1. A course designed to help students prepare for the professional study of law. Open to all students.

POLS 220. State and Local Politics in the United States.

Cr. 3. Comparative analysis of state and local political systems in the United States. Emphasis is placed on the contemporary role of states and localities in the development and implementation of public policies. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

Note: The following courses are not open to freshmen.

POLS 230. International Relations.

Cr. 3. The fundamentals of international politics and international organization, particularly the United Nations and its specialized agencies.

POLS 240. Political Theory.

Cr. 3. An examination of the meaning and utility of theory in contemporary political science. Normative/prescriptive theories as well as analytical and empirical theories are surveyed and examined.

POLS 250. Political Philosophy.

Cr. 3. (Also offered as PHIL 250). A survey of the major formulations and problems of Western political thought as developed by political philosophers from the Greeks through the modern era.


Cr. 3. The goal is to learn basic research skills by being involved in an applied research project. The particular project will vary from semester to semester and students will work together as a team to complete the project.

POLS 270. Political Behavior.

Cr. 3. An exploration of the sources and consequences of individual and group political behavior. The course will include an extensive consideration of the methods necessary to examine political behavior, including computer-aided analysis of survey data.

POLS 320. Problems in State and Local Politics.

Cr. 3. A study in depth of important contemporary problems on the state or municipal level in the United States. Prerequisite: POLS 220 or consent of the instructor.

POLS 325. Problems in American Politics.

Cr. 3. An intensive study of topics in the process, policies and functions of the American political system (e.g., political parties). Prerequisite: POLS 120 or consent of the Chair of the Department.

POLS 326. The Presidency.

Cr. 3. An examination of the American Presidency with specific emphasis on the President's constitutional position, the process of nominating and electing a President, Presidential power and behavior, and the President's relations with the public and coordinate branches of government.
Pre-Seminary Studies

Administrative Committee: Professor Truemper (Theology, Chair); Professors Kumpf (Classics), Niedner (Theology), Sponberg (English); Associate Professors Bunge (Christ College), Kennedy (Philosophy); Assistant Professor Schaefer (History).

Pre-Seminary Studies is an interdisciplinary program that may be taken only as a complementary academic major, typically along with a first academic major in one of the humanistic disciplines.

Objectives. The complementary major in Pre-Seminary Studies is intended to assure that a student preparing for graduate studies at a seminary or divinity school will meet the standards of the ideal pre-seminary curriculum recommended by the Association of Theological Schools as well as the entrance requirements of most seminaries (in particular the seminaries of the Lutheran church bodies in North America). Accordingly, Valparaiso’s program stresses both depth in at least one area of the humanities as well as breadth in the various humanistic disciplines. In addition, it provides a solid preparation in the biblical languages of Hebrew and Koine Greek. The equivalent of a minor in Theology is an integral part of the program, and that minor may be declared by students who do not choose a first major in Theology. A Church Vocations Symposium (Theology 399) is the curricular anchor for this program, where pre-seminary students are joined by students preparing for other church vocations in considering topics of mutual interest.

Major. A total of 57 credits constitute this complementary major. A substantial number of these credits will meet a variety of requirements in General Education, and other credits will often meet requirements in the student’s first major. Students should consult with the chair of the administrative committee, who will assign an academic adviser from among the members of the administrative committee.

Program Requirements. The General Education for the Bachelor of Arts degree is required (see page 41). Careful selection of courses from the list below will meet the General Education Requirements in Theology (9 credits), Foreign Languages (6 credits), History or Philosophy (3 credits), and Global Diversity (3 credits).

A first major in one of the humanistic disciplines or human sciences (e.g. history, philosophy, theology, art, music, classics, psychology, sociology, geography, political science, economics) is also required. Depending on the student’s interests, virtually any major may be chosen; consultation with a member of the administrative committee is advised.

In addition, the following coursework is required:

**Symposium**

THEO 399 Church Vocations Symposium

**English Composition**

One of the following:

ENGL 300 Introduction to Professional Writing
ENGL 301 Introduction to Creative Writing

ENGL 321 Intermediate Composition
ENGL 431 Advanced Composition

**Literature**

One of the following:

ENGL 368 Studies in American Literature
ENGL 390 Topics in Literature
ENGL 401 American Literature I
ENGL 402 American Literature II
ENGL 405 Masterpieces of World Literature

**Western or U.S. History**

One of the following:

HIST 200 Developments in Western Culture through the Ages
HIST 328 The Age of Anxiety: United States since 1945

**Non-Western History**

One of the following:

HIST 240 Introduction to East Asian Culture
HIST 280 African History and Society
HIST 341 Revolution and Its Roots: The Making of Modern China
HIST 342 Tragedy and Triumph: The Making of Modern Japan
HIST 350 Modern African History
Pre-Seminary Studies

Logic ................................................. 3 Cr.
PHIL 150 Logic and Critical Thinking

Philosophy ........................................... 3 Cr.
One of the following:
PHIL 275 Ancient and Medieval Philosophy
PHIL 280 Early Modern Philosophy
PHIL 330 Philosophy of Religion

Greek ................................................. 16 Cr.
FLGK 101 First Semester Greek
FLGK 102 Second Semester Greek
FLGK 203 Intermediate Greek
FLGK 320 Koine Greek

Hebrew .................................................. 8 Cr.
FLH 101 First Semester Hebrew
FLH 102 Second Semester Hebrew

Theology/Bible ......................................... 6 Cr.
THEO 311 Understanding the Old Testament
THEO 312 Understanding the New Testament

Theology/Doctrine .............................. 6 Cr.
THEO 332 Luther and Lutheran Confessional Theology
Substitutions may be made for students planning to enter a seminary of another church body.

One of the following:
THEO 330 Topics in Contemporary Theology
THEO 334 Constructive Christian Theology

Theology/World Religions ............... 3 Cr.
One of the following:
THEO 260 Perspectives on the Religious Quest
THEO 361-368 An upper level course in non-Christian religions

Recommended Additional Elective Courses
MUS 473 Church Music
MUS 213 Basic Conducting
MUS 050 Kantorei
MUS 003 Lessons in piano/organ/voice

Courses which are specified as required in the Pre-Seminary Studies Major and which are from the discipline of the student’s first major may be counted toward both major concentrations.

Psychology

Professors Arkkelin, Rowland;
Associate Professors Esper (Chair), Nelson; Assistant Professors Hughes, Vernon.

Psychology is the scientific study of mental processes and behavior. The diversified interests of its faculty enable the Department to present a comprehensive view of the field. Courses in physiological, experimental, social, industrial, developmental and clinical-counseling psychology are offered. Opportunities for laboratory research in psychology and applications through field experiences are available.

A major in psychology may lead to careers in such fields as psychological counseling, recreational therapy, employment counseling, rehabilitation therapy, test consulting, demography, personnel, managing, marketing, behavior therapy, psychological research and teaching. In addition, psychology can be an excellent preparation for career in medicine and allied health professions when combined with appropriate courses in other sciences such as biology, chemistry, and physics.

In addition, psychology can be an excellent preparation for careers in medicine and allied health professions when combined with the appropriate courses in other sciences such as biology, chemistry, and physics.

Student Organizations. Psi Chi, the national honor society, was established at Valparaiso University in 1990. Psychology majors and minors who have completed at least nine credit hours in psychology and at least three semesters of undergraduate study, and who have demonstrated superior scholastic achievement may be selected for membership.

Students interested in participating in social activities with the psychology students and faculty are invited to join the Psychology Club.

Major. A minimum of 27 credit hours in psychology constitutes a major for the Bachelor of Arts degree. Courses must include PSY 110 (with or without 111), 201, and 202. One course must also be selected from each of three broad categories: Experimental Psychology (240, 245, 250, 350, 355), Personality and Social Psychology (125, 265, 330, 332, 335) and Clinical/Applied Psychology (235, 360, 445, 461, 470). One additional experimental course with a laboratory (245 and 246, 250 and 251, 345 and 346, 350 and 351, or 355 and 356) must be taken. It is recommended that students also take a minimum of one course as a capstone experience to their program.

Courses suitable for this experience include PSY 390, 485, 495, and 499.

A minimum of 32 credit hours in psychology constitutes major for the Bachelor of Science degree. In addition to meeting all of the major requirements for the B.A. degree, B.S. candidates must complete a second laboratory course in psychology (numbered above PSY 111), BIO 151 or higher, and MATH 122 or higher. At least one capstone course is also strongly recommended as part of the B.S. program, especially for those contemplating graduate study in psychology or a related field.

A minimum of 27 credit hours in psychology fulfills the minimum requirement for a Bachelor of Science degree, provided that a second major is taken in another science (e.g., biology, chemistry or mathematics). Courses must include PSY 110, 201, 202; two experimental psychology courses with laboratory (selected from PSY 245/246, 250/251, 345/346, 350/351, and 355/356), one course in personality/social psychology (selected from PSY 125, 265, 330, 332, and 335), and one course in clinical/applied psychology (selected from PSY 235, 360, 445, 461, 470). In addition, students must complete BIO 151 or higher and MATH 122 or higher.

Special Topics in Psychology (PSY 390) may be used to fulfill requirements for either degree with the consent of the Chair of the Department.

Minor. A minimum of five courses with a total of at least 15 credit hours in psychology constitutes a minor. Courses for the minor must include PSY 110 (with or without 111), 201, and one course, with or without laboratory, chosen from 240, 245, 250, 345, 350, 356, or 470.

Credit by Examination. Credit for PSY 110 may be earned through the College Level Examination Program subject examination in Introductory Psychology.
Approval of Schedules. All students taking a major or minor in psychology must have their schedules approved by the Chair of the Department or their assigned departmental adviser.

110. General Psychology.
Cr. 3. An introduction to the field of psychology with strong emphasis upon the scientific study of behavior. Topics include nervous system function, sensation and perception, learning, memory, cognition, development, motivation, emotion, social behavior, psychological dysfunction and treatment. When taken concurrently with laboratory (PSY 111), may be used to fulfill the Natural Science component of the General Education Requirements.

Note: PSY 110 (with or without 111) is a prerequisite for all other psychology courses. PSY 201 is a prerequisite for PSY 202. PSY 202 is a prerequisite for all laboratories in psychology (excluding PSY 111) and for PSY 495. PSY 245, 250, 345, 350, or 355, when taken with the corresponding laboratory, may be used in partial fulfillment of the Natural Science component of the General Education Requirements.

PSY 240. Evolutionary Psychology.
Cr. 3. Understanding of human and animal behavior and cognition based on evolutionary principles and the use of the comparative approach. Includes topics on aggression, strategies of mate selection and parenting, intelligence, and consciousness.

PSY 245. Physiological Psychology.
Cr. 3. A study of the structure and function of the nervous system in relation to motivation, emotion and cognitive function.

PSY 246. Laboratory in Physiological Psychology.
0+2.5, Cr. 1. Optional laboratory to be taken in conjunction with PSY 245. Prerequisite: PSY 201 and 202 or consent of the instructor.

PSY 250. Principles and Applications of Learning.
Cr. 3. Concepts of learning derived from research with human and nonhuman subjects with emphasis on the use of these concepts and techniques to help solve common behavioral problems.

PSY 251. Laboratory in Principles and Applications of Learning.
0+2.5, Cr. 1. Optional laboratory to be taken in conjunction with PSY 250. Prerequisite: PSY 201 and 202 or consent of the instructor.

PSY 255. Human Behavior in Organizations.
Cr. 3. Applications of psychological principles, techniques and theories to the work environment. Emphasis is placed on the issues of leadership, motivation, communication and group problem solving.

Cr. 3. Study of the maturational, cognitive, social and behavioral changes associated with the development of the child through adolescence.

PSY 332/532. Psychology of Adulthood and Aging.
Cr. 3. Examination of adult development from the end of adolescence to old age from a psychological perspective.

PSY 335/535. Psychology of Personality.
Cr. 3. An introduction to various theories of personality, with emphasis on their implications for current psychological applications and research.

PSY 345. Sensation and Perception.
Cr. 3. An introduction to the study of sensory and perceptual processes and the physiological mechanisms that underlie them.

PSY 346. Laboratory in Sensation and Perception.
0+2.5, Cr. 1. Optional laboratory to be taken in conjunction with PSY 345. Prerequisite: PSY 201 and 202 or consent of the instructor.

Cr. 3. The study of various aspects of human learning, memory, and thought, such as perception, attention, development of expertise, problem-solving, reasoning, and language.

PSY 381. Laboratory in Human Cognition.
0+2.5, Cr. 1. Laboratory to be taken in conjunction with PSY 350. Prerequisite: PSY 201 and 202 or consent of the instructor.

PSY 355. Environmental Psychology.
Cr. 3. The study of interrelationships between the physical environment and human behavior, including environmental perception, psychological effects of pollution, personal space, crowding, urbanization, architectural design, and energy consumption.

PSY 356. Laboratory in Environmental Psychology.
0+2.5, Cr. 1. Optional laboratory to be taken in conjunction with PSY 355. Prerequisite: PSY 201 and 202 or consent of the instructor.

PSY 360/560. The Exceptional Child.
Cr. 3. Analysis of the impact of various perceptual, cognitive, physical and social handicaps upon the child. Attention is also given to the study of the gifted, creative child. Prerequisite: PSY 330.

PSY 390/590. Special Topics in Psychology.
Cr. 1-3. Selected topics based on the special interest areas of students and faculty. Recent topics have included cross-cultural psychology, psychology of women, industrial psychology, psychology of religion, and altered states of consciousness. Topics and descriptions are announced in advance.

Note: The following courses are restricted to junior and senior level students.

PSY 445/545. Health Psychology.
Cr. 3. A consideration of the relationship between psychological factors and physical well-being. Topics include: stress and health, the effect of illness on psychological functioning, and psychological approaches to improving physical health.

PSY 461/561. Introduction to Counseling.
Cr. 3. A review of contemporary counseling theories and processes as they are applied to various problem areas.

Cr. 3. Principles and methods of psychological measurement and evaluation with application to specific testing situations. Course intensification option: 1 Cr. Prerequisite: PSY 201.

PSY 485. Psychology Practicum; Field Experience.
Cr. 1-3. Emphasis on, but not limited to, functions of social-service and mental-health agencies. Each student spends 4-10 hours each week in supervised work activity at an agency in Northwest Indiana and two hours every other week in a classroom-discussion meeting. A written report is required. Prerequisites: psychology major, consent of the Chair of the Department, and depending on the practicum site, PSY 461, PSY 265 or other designated courses. May be repeated for credit to a maximum of nine credit hours; only three credit hours may be applied toward a major.

PSY 495. Independent Research in Psychology.
Cr. 1-3. Individual research projects under faculty supervision involving the design of the project, data collection and analysis. A written report is required. Prerequisites: major with junior/senior standing, a 3.00 grade point average, PSY 201 and 202, and consent of the Chair of the Department. No more than six credit hours of PSY 495 and/or 496 may be applied to major requirements.

PSY 496. Independent Study in Psychology.
Cr. 1-3. Independent readings under faculty supervision on topics not covered in the standard curriculum. A written report is required. Student must submit an independent study form prior to registration. Prerequisite: major with junior/senior standing and consent of the Chair of the Department. No more than six credit hours of PSY 496 and/or 495 may be applied to major requirements.

PSY 497. Honors Work in Psychology.
Cr. 3. See Honors Work, page 50.

PSY 498. Honors Candidacy in Psychology.
Cr. 3. See Honors Work, page 50.

PSY 499. Psychology Colloquium.
Cr. 1. Faculty and student presentations of research projects, professional interests, and current topics related to psychology. Student participation is expected. Prerequisite: junior or senior major. May be repeated once for credit. S/U grade.
Social Work

Associate Professor Walton (Chair); Assistant Professors Merchant, Petties.

Social work is the profession that serves individuals, families, and communities who seek preventative and rehabilitative interventions for an improved quality of life. Focused on social and emotional development within the social environment, the scope of social work is national and international. The profession is social justice and action oriented. The primary function of this undergraduate program is to prepare the liberal arts student for entry level positions as generalist social workers. The secondary function is preparation for graduate standing in graduate social work education. The department and the professional community provide educationally directed series of internships. Students utilize the foundation curriculum to prepare for child welfare, community mental health, aging, church, urban studies, or school social services. Joint academic studies exist between the Department, the Lutheran Deaconess Program Plan 2, several minors (Ethnic Studies, Gender Studies, Human Aging), and service learning components. The Student Social Work Organization offers a unique opportunity to explore major social issues and to represent student interests at departmental meetings. Faculty, full-time and part-time, are active in community services, the Council on Social Work Education, and the National Association of Social Workers. Field instructors are selected by the Department.

Major. A minimum of 40 credit hours in social work constitutes a major. Courses must include SOCW 151, 210, 220, 240, 330, 340, 365, 410, 455, 456, and 493. Also required are BIO 125, PSY 110 and 201, SOC 110 and 220, one course in political science and one of the following courses: ECON 136, 221, 222, 233 or GEO 201. Field experience and instruction is required for social work majors enrolled in SOCW 340, 455, and 456. Field assignments are concurrently arranged with coursework and is sequential. This professional development sequence must be approved by the Department, and consists of at least four hundred hours. Students are required to maintain an overall 2.50 grade point average in the core curriculum. Liability insurance for field practice is required.

Minor. A minimum of 15 credit hours in social work constitutes a minor. These credits may be selected from SOCW 151, 210, 220, 240, 330, and 390.

Admission. A student's formal admission into the Department as a major requires approval by the Department following the successful completion of SOCW 151, the completion of admissions procedures, and a 2.5 grade point average in the major. Each social work major selects a faculty advisor. A manual is available to all majors as a guide to department standards.

Degree. The Department of Social Work is fully accredited by the Council on Social Work Education. It offers an undergraduate professional curriculum. The completion of this curriculum and the requirements of the College of Arts and Sciences, including the General Education Requirements, leads to the Bachelor of Social Work degree.

Approval of Schedules. All students who major in social work must have their schedules approved by the Chair of the Department or an assigned advisor at the beginning of each semester.

SOCW 151. Introduction to the Profession of Social Work. Cr. 3. The major objective of this course is to inform the student of the basic issues, concepts and systems encountered by the social work practitioner in the helping process in the community. This course is required for all social work majors. It can be of great benefit to students pursuing careers in fields such as corrections, education, ministry, law, nursing, medicine and church work. Community volunteer work and observational experiences are required.

SOCW 210. Social Welfare: Policy and Services. Cr. 3. The major foci of the course are historical overviews of the economics, social and political forces that shape the social welfare structure. Descriptive analyses of current social welfare programs, public and private, are examined. Professional values and ethics undergird the content that further examines macro system matters affecting human diversity and social justice. Prerequisite: SOCW 151 (may be taken concurrently by junior and seniors) or consent of the Chair of the Department.

SOCW 220. Human Behavior and Social Environment. Cr. 3. A study of bio-psycho-social variables that affect human development and behavior. The use of various theoretical, primarily developmental, frameworks are examined within the context of individual adaptation to social-cultural environmental factors. Gender, race, sexual orientation, and social class issues and life cycle stages are critically studied. Prerequisite: SOCW 151 or consent of the Chair of the Department.

SOCW 240. Strategies of Intervention. Cr. 3. A beginning study of human intervention theories, models, and methods. Ecosystems and psychosocial models are applied to methods for individual and group interactions. Case material and experiential units are examined in video laboratory exercises. Prerequisites: SOCW 151, 210, 220.

SOCW 330. Vulnerable populations: Color, Gender, and Orientation. Cr. 3. This course explores the sociopolitical factors that affect current human responses of diversity, major North American populations of African, Mexican, Asian, Native American descent, women of color, sexually-classified groups, and select international groups of oppression are central in social work's approach to group development and interventions. From a systems perspective of social change and human rights, the emerging cultural response and macro systems policy development are foundational to this study of diversity. Issues around racism, sexism, and heterosexism surface as likely factors in social change plans. Prerequisites: SOCW 151, 210, 220; junior/senior status; consent of the department. May be used to fulfill the U.S. Diversity component of the General Education Requirement.

SOCW 340. Professional Intervention and Human Services. 3+4, Cr. 4. A course that introduces the student to human systems theories and models (individual, group, community) and to the variety of social work interventions. A community field experience is required. Prerequisites: SOCW 151, 210, 220 and 240.

SOCW 395. Social Work Colloquium. Cr. 2-3. A study of selected topics of contemporary concern for the social worker, such as adulthood, women, clinical methods and techniques for helping professions, housing, ethics, substance abuse, juvenile delinquency, and poverty. Listings are announced. Prerequisite: junior standing or consent of the Chair of the Department.

SOCW 391. Advanced Seminar in Social Work. Cr. 1-3. Full or half-semester courses specializing in particular areas of social work practice or methodology such as administration, current issues in group services, family therapy, new techniques for solving community problems, supervision and child welfare. Prerequisites: junior or senior standing and consent of the Chair of the Department.

SOCW 395. Independent Study. Cr. 2-3. Prerequisite: junior standing and consent of the Chair of the Department.

SOCW 410. Analysis of Social Policy. Cr. 3. An intensive study of social welfare programs, principally in the United States, and a historical review of the contemporary factors, primarily social and economic, that have shaped their development. Areas included are housing, income maintenance and health care services. Prerequisites: senior standing, consent of the Chair of the Department, SOCW 151, 210, 220, 240, 330, 365.

SOCW 455. Social Work Practice I. Cr. 3+4, Cr. 7. The generic social methods and field instruction course is designed to establish a common base for direct service to people—individuals, family, small group, community— and institutional segments of society. The central theme is that the problems with which the social worker is involved dictate particular social work intervention. The emphasis is on the integration of theories, principles, skills and processes of the various work methods with clients. A professionally directed field practicum is offered each semester. The student works each Tuesday and Thursday in a community social service agency. Prerequisites: senior standing and all previously numbered foundation courses.

SOCW 456. Social Work Practice II. Cr. 3+4. Continuation course with primary focus on ethics. Field work is required each Tuesday and Thursday. Prerequisite: SOCW 455.

SOCW 493. Current Issues in Social Work. Cr. 1. This seminar is jointly designed by senior majors and faculty to deal with those issues of concern which currently face clients and practitioners in the social services delivery system. Prerequisite: senior standing or consent of the Chair of the Department.


Sociology

Professor Henry (Chair); Associate Professor Venturelli; Assistant Professor Hinkle.

The Department of Sociology encompasses the disciplines of sociology, anthropology, and criminology, and seeks to provide a broad-based understanding of the organization and dynamics of human society and culture. Its subject matter ranges from intimate family life to the broader issues of ethnicity, race and gender, from crime to religion, from the divisions of social class to the shared beliefs of a common culture. Its primary focus is on social relationships in a wide variety of cultural and social settings.

The department's programs seek to help students achieve an awareness of the world in which they live, and of the causes and consequences of human social behavior. Its basic objective is to aid students to understand themselves, the groups in which they participate, as well as the dynamics of everyday life. By expanding their knowledge of the field, its theories, concepts and research methods, and by acquiring insights to their work from the study of different peoples and cultures, students develop skills in social analysis, enhance their capacity for self-evaluation, and grow in their ability to make informed judgments about key social issues in a multicultural society.

To achieve these objectives, the department has developed a curriculum grounded in the liberal arts tradition that is flexible and responsive to student needs. While all majors are required to enroll in a core of basic sociology courses, the curriculum provides for a range of intellectual, professional, and occupational interests by offering concentrations in sociology and criminology.

International Honor Societies. The department encourages qualifying students to join honor societies in sociology and the social sciences. Such organizations recognize outstanding scholarship and achievement. There are two international honor societies for which majors in the department may qualify. First, the department sponsors the NU Chapter of the international honor society in sociology, Alpha Kappa Delta. Second, the department, along with other social science disciplines at Valparaiso University, supports Pi Gamma Mu, the international honor society in social science.

The Common Core. (18 credit hours)

All students who major in the department are required to enroll in the following courses which comprise the common core: SOC 110, (245 or 250), 310, 320, one of (327, 340, or 347), and 490.

The Concentration in Sociology. Intended for students interested in understanding society and social behavior. The sociology concentration can lead to careers in administration in a variety of community, government and social service agencies, market research, or other vocations that require an understanding of the dynamics of human relationships in a multicultural society. The concentration also prepares students for graduate study in sociology.

This concentration requires a minimum of 30 credit hours. In addition to the core courses, students must enroll in SOC (150 or 160), (220 or 290), (260 or 290), and 390. Students who elect a 40 credit major must complete a minimum of 4 additional credits within Level III and may take no more than 3 additional credits from Level I courses, and no more than 3 additional credits from Level II courses.

A course in statistics (PSY 201 or MATH 240) is recommended. Students planning to attend graduate school should also consider elective courses in computer science. Students who seek careers involving agency administration should consider the Liberal Arts Business Minor (page 207).

Students planning to enter careers directly upon graduation are advised to arrange internships or cooperative education courses. These are offered each semester (see Cooperative Education, College of Arts and Sciences, page 51).

The Concentration in Criminology.

This concentration is intended for students who plan to prepare for a career in law or employment in the criminal justice system (e.g., law enforcement, courts, or corrections). The concentration consists of 33 credit hours in sociology. In addition to the core courses required of all majors, students in the criminology concentration are required to enroll in SOC 130, (260 or 265), two of (350, 360, 391, or 445), and 386. A second internship is strongly advised.

Students who plan to attend law school, or who are interested in justice agency administration, are strongly encouraged to complete degree requirements by adding an individualized minor in Justice Administration or some other individualized minor relevant to one's course of study and career plans. It is recommended that students planning an individualized minor select courses from the following: PSY (110 or 111), 201 and 235; MGT 304; and POLS 120, 220, 340, 341, 345, and 360. Other programs which are suggested to complete degree requirements are the Liberal Arts Business Minor (page 207) or the Chicago Urban Semester (page 53).

A course in statistics (PSY 201 or MATH 240) as well as courses in computer science are recommended for students who intend to enter graduate school.

Minor. A minor consists of at least 18 credit hours in sociology. Courses must include SOC 110, (245 or 250), 310, 320 and six additional credits taken beyond Level I.

Degree. Completion of the degree requirements of the College of Arts and Sciences along with the concentration requirements of the Department of Sociology leads to the Bachelor of Arts degree.

Credit by Examination. Credit for SOC 110 may be earned through the College Level Examination Program in Introductory Sociology.

Approval of Plan of Study. Each student taking a major or minor in sociology must have a plan of study approved by designated departmental advisers.

Level I. Courses taught at the introductory level and without prerequisites.

SOC 110. Introduction to Sociology.

Cr. 3. The analysis of the major institutions, structures and processes of American society, as well as an introduction to the basic theoretical and methodological approaches of the discipline. Offered every semester. May be used in partial fulfillment of the Social Analysis component of the General Education Requirements.

SOC 130. The Criminal Justice System.

Cr. 3. A survey of the operations, functions and interactions of the police, the courts and correction agencies; that is, formal organizations of social control. Field trips and observation of selected agencies may be scheduled. Normally offered every fall.

SOC 150. Introduction to Anthropology.

Cr. 3. An introduction to the study of humankind, and an overview of the five major branches of anthropology: biological anthropology, archeology, linguistics, cultural anthropology, and applied anthropology. May be used in partial fulfillment of the Social Analysis component and for the Global Cultures and Perspectives component of the General Education Requirements.

SOC 160. Contemporary Social Problems.

Cr. 3. Sociological perspectives are applied to the identification, explanation, and analysis of social problems in American society and in selected world societies. Course content focuses on: 1) examining the major institutions of society—the family, economy and polity—and how they can perpetuate social problems; and 2) examining inequalities based on class, race, and gender. These topics can include poverty, homelessness, racism, sexism, drug abuse, crime, juvenile delinquency, and violence. May be used in partial fulfillment of the Social Analysis component and for the U.S. Cultural Diversity component of the General Education Requirements.

Level II. Courses which build on Level I courses, providing students with more insight into fundamental concepts and theoretical approaches. Prerequisite for all Level II courses is SOC 110, 120, or 150, or consent of the Chair of the Department.

SOC 220. The Family.

Cr. 3. A study of the family as a basic social unit and institution, with emphasis on the various forms and functions of the family. Special consideration is given to modern influences on the interaction and organization of American family life. Normally offered in the spring of even-numbered years.


Cr. 3. An introduction to the diversity of human cultures in the contemporary world, ranging from indigenous communities to subcultures of industrial societies. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

SOC 245. Social Psychology.

Cr. 3. The social psychological study of the ways society influences the behavior of the individual. Course focuses on the theoretical approaches of binding interaction, social exchange, and dramatical analysis. Normally offered every fall.


Cr. 3. An examination of the basic principles people use to structure their relationships.
Sociology

Issues may include factors such as race, gender and age, and the resulting types of social groups and structures found in contemporary societies (such as new social movements and identity-based groups). Normally offered in the spring of odd-numbered years.

SOC 260. Deviance.
Cr. 3. An examination of deviant behavior with emphasis upon theories explaining how people become deviants. Surveys the forms of deviance: crime, mental illness, drug and alcohol abuse, and sexual deviance. Field trips may be scheduled. Normally offered every fall.

Cr. 3. An examination of criminal behavior, the theories used to explain crime, and a brief analysis of societal responses to crime. Prerequisite: Sociology 130 or consent of the Chair of the Department. Normally offered every spring.

SOC 290. Topics in Sociology.
Cr. 3. Survey course including topics such as prejudice, violence, poverty, drug use and/or abuse. May be repeated for credit if topics are different.

SOC 291. Topics in Criminology.
Cr. 3. Survey course focused on gaining topical knowledge and understanding of topics such as white collar crime, sentencing, alternatives to imprisonment, capital punishment, recidivism, prison reform, drugs, and crime. May be repeated for credit if topics are different.

SOC 292. Topics in Anthropology.
Cr. 3. Survey course on specific culture areas and ethnic groups. Cultural topics may include expressive culture, ritual symbolism, and religious identity. Through ethnographic case studies, films, videos, and lectures, students are introduced to various aspects of differing cultures. May be repeated for credit if topics are different.

Level III. Courses designed to provide depth of experience and understanding in narrow subject areas. All have as a prerequisite at least SOC 110 or 150 or consent of the Chair of the Department. Some courses have additional prerequisites.

Cr. 3. Study of the historical development of sociological thought and the contributions of major theorists and their understanding of society. Required of all majors and minors. Normally offered every fall.

Cr. 3. Study of research methodologies used in both qualitative and quantitative sociological contexts. Skills are taught through small-scale projects whenever possible. Required of all majors and minors. Prerequisite: SOC 110, 245, 260, and 310 or consent of the Chair of the Department. Normally offered every spring.

SOC 325/525. Urban Sociology.
Cr. 3. An examination of the city as a social system. Emphasis placed upon the historical, demographic, and ecological development of urban areas, along with an exploration of major problems confronting American cities. Development of urban life style is also examined. Normally offered in the spring of even-numbered years.

SOC 327/527. Aging in American Society.
Cr. 3. An examination of the social aspects of aging; this course seeks to explore the demographic, historic, theoretical, and cross-cultural perspectives on aging. Specific emphasis is placed on major problems for the elderly in America, including medical care, housing, family relationships, work and leisure, and finances. Normally offered in the fall of odd-numbered years.

Cr. 3. Offered only at the Puebbla, Mexico, Study Center.

SOC 340/540. Gender.
Cr. 3. An examination of how society defines and structures gender identity and behavior for males and females. The course focuses on the biological and social constructs of gender and how these are interpreted through history, language, sexuality, race, family structure, dating patterns, religion, and work environments. Normally offered in the fall of odd-numbered years.

SOC 347/547. Race and Ethnic Relations.
Cr. 3. A survey of the social and ethnic structure of American society, with special emphasis upon ethnic stereotyping and power, plus political and economic institutionalized racism and prejudice. Examines how racial and ethnic background influence social behavior. Normally offered in the spring of odd-numbered years. May be used to fulfill the U.S. Cultural Diversity component of the General Education Requirements.

Cr. 3. An examination of policing at the local, state and federal levels, from historical and contemporary points of analysis, with emphasis on the relationship between law enforcement and other criminal justice agencies. Prerequisites: SOC 130 and 260 or 265, or consent of the Chair of the Department. Normally offered in the spring of even-numbered years.

SOC 360/560. Penology.
Cr. 3. A critical social scientific examination of prisons, jails, community corrections and parole authorities with emphasis on both historical development and current trends. Field trips may be scheduled. Prerequisites: SOC 130 and 260 or 265 or consent of the Chair of the Department. Normally offered in the fall of even-numbered years.

SOC 386. Internship in Sociology/Criminal Justice/Anthropology.
Cr. 3. Internships are organized to provide students with some measure of "hands on" experience in their field of interest. Students are required to develop a contract with both the agency to which they are assigned and a supervising instructor outlining basic expectations. A minimum of 128 internship hours and a biweekly class are required. Students planning an internship in a spring semester must complete an application for placement with the Internship Coordinator by October 1. For those students planning an internship in a fall semester, the deadline is April 1. Experience and workload vary with both the field of study and the agency assignment. Required of all criminology students, recommended for all others. Prerequisites: SOC 310, junior standing and consent of the Chair of the Department.

SOC 390/590. Issues in Sociology.
Cr. 3. An exploration of some of the issues debated by sociologists today. Issues may include sexism, racism, ageism. May be repeated for credit if the issues are different.

SOC 391/591. Issues in Criminology.
Cr. 3. An exploration of some issues debated by criminologists today. Issues may include feminist or Marxist criminology, new left realism, criminology as peace making, victimology, and cross-cultural comparative crime. May be repeated for credit if the issues are different.

SOC 392/592. Issues in Anthropology.
Cr. 3. An exploration of some of the issues debated by anthropologists today. These include globalization and sociocultural development, sickness and health, nationalism, culture and identity, science and technology, global media, and ethnography and narrative. May be repeated for credit if the issues are different.

Cr. 3. The study of the place of law in society, the relationship between law and social change, law and other social institutions. Normally offered in the fall of even-numbered years.

SOC 481. Cooperative Education in Sociology/Criminal Justice/Anthropology I.
Cr. 1-3. Work experience in a cooperating public or private service agency. Written reports required. Prerequisites: Junior standing and approval of the Chair of the Department.

SOC 482/483. Cooperative Education in Sociology/Criminal Justice/Anthropology II-III.
Cr. 1-3. Continuation of SOC 481. Prerequisites: SOC 481 and approval of the Chair of the Department. May be repeated beyond 483 for additional credit.

SOC 486. Internship in Criminal Justice II.
Cr. 3. Continuation of SOC 388. Available to students in the criminal justice concentration who do not elect to participate in the Chicago Urban Semester Program. Prerequisite: SOC 386.

SOC 493. Senior Seminar.
Cr. 3. An integrative reading, discussion, and research course that applies prior sociological knowledge to contemporary problems and concepts. Required of all concentrations. Prerequisites: senior standing or consent of the Chair of the Department. Normally offered every spring.

SOC 495. Independent Study in Sociology/Criminology.
Cr. 1-3. Independent investigation of a specialized topic in sociology. May be taken more than once for credit if the topics are different or if the topics are to be continued.

SOC 497. Honors Work in Sociology.
Cr. 3. See Honors Work, page 50.

SOC 498. Honors Candidacy in Sociology.
Cr. 3. See Honors Work, page 50.
Theatre and Television Arts

Lange, which prepares students for service to a society in which knowledge of the speech and theatre arts is increasingly important to success in a variety of professional vocations including communication, education, entertainment, the law and religion. The program is designed to engage students in studies of the rich heritage of theatre arts and dance in Western and non-Western cultures. The co-curriculum provides students with opportunities for disciplined creative expression.

The department oversees: (1) majors and minors who are preparing for careers in the theatre and television industries or in industries where knowledge of theatre and television production is required; (2) students who take the academic courses to meet the General Education Requirements or who find courses in drama and dance to be attractive components of a liberal arts education; and (3) participants in faculty-supervised co-curricular theatre, television and dance productions as a way of enriching their lives.

The department offers students a wide range of studies including acting, dance, design, directing, production, technology, and writing. The study of dramatic literature is given special prominence in the curriculum.

Major. A minimum of 30 credit hours in theatre, television, and dance. Students are advised to choose one of two majors: the Theatre and Television Arts major or the Drama major. Students may also choose a Theatre major with an emphasis in Music or Television major.

The theatre and television arts major must include TIVA 129, (134 or 136), 141, 230, 231, 235, 251, two from (238, 239, 334, 337, and 338), and one from (357, 358, and 431) . This major is recommended for students seeking careers in the commercial entertainment industry.

The drama major must include TIVA 141, 235, 252, 238, 239, 334, 337, and 390. Elective courses may be chosen from the department’s offerings and from approved electives from other humanities departments, such as ENGL 231, 410, 460; FL 250, 260, 323, 490; and CC 300. This major is recommended for liberal arts and humanities students and students seeking a second major.

**Theatre with an emphasis in music.** Students with a particular interest in musical theatre are advised to take the following electives from the Department of Music offerings: MUS 103, 108, 110, 163, 203, 210, and 211. Students may also choose to take a second major in Music (Bachelor of Arts degree program, see page 122).

**Minor.** A minor in theatre and television arts consists of 16 credit hours in courses agreed upon by the student and the department chair. The minor must include a one-credit independent project.

**SPECIALIZED MINORS**

**Acting Minor.** The minor must include TIVA 134, 136, 141, 230, (235 or 236), and 357. Toward the end of the completion of the course work, the student in Acting must do an independent project (TIVA 390) for one credit hour, preparing scenes, and monologues for public performance.

**Theatre Production Minor.** The minor must include TIVA 230, 231, 235, (431 or 433), and one course in theatre literature (238, 239, 334, 337, or 338). Toward the end of the completion of the course work, the student in Theatre Production must do an independent project (TIVA 390) for one credit hour, directing a short play or video for public exhibition.

**Theatre Design Minor.** The minor must include TIVA 230, 231, 356, and one course in theatre literature (238, 239, 334, 337, or 338). Toward the end of the completion of the course work, the student in Theatre Design must do an independent project (TIVA 390) for one credit hour, preparing designs and working drawings for costumes, scenery and lighting for a selected play or video or dance production.

**Teaching Programs.** Students who plan to teach speech, theatre, television or dance in secondary schools with a major or minor in Theatre and Television Arts should consult the Chair of the Department and the Education Department for specific requirements.

**Cooperative Education.** Qualifying students may participate in prearranged, approved professional work experiences. During their employment, students are financially compensated by the cooperating employer. Credits earned in this program apply toward the major and may substitute for other required courses with the consent of the Chair of the Department. For further information, refer to Cooperative Education, College of Arts and Sciences, page 51.

**Degree.** Completion of the degree requirements of the College of Arts and Sciences with a major in theatre and television arts leads to the Bachelor of Arts degree.

**Approval of Schedules.** All students pursuing a major or minor in Theatre and Television Arts must have their schedules approved by the Chair of the Department at the beginning of each semester.

The University Theatre, a co-curricular venue for the study and practice of theatre arts, the University Theatre is also a community of thoughtful student and faculty artists and craftspeople serving the students of Valparaiso University. By bringing to the public stage productions of classic and contemporary plays, the University Theatre offers its campus, local, and regional audiences the opportunity to explore the human condition and to celebrate the richness of life itself. The University Theatre is dedicated to excellence in play production, to the development of the skills of understanding, analysis, preparation, and performance of plays in students who are committed to vocations in the theatre, and to the enrichment of the lives of all those who participate in its activities.

The University Theatre’s programs include a season of three major productions, an experimental theatre, student-directed plays, Soul Purpose, a touring chancel drama troupe, and theatre outreach performances. Theatre work is focused in performance, production, and management. Advanced students regularly supervise in all areas. Majors in the department are expected to participate actively and frequently in the programs of the University Theatre.

**TIVA 101. Introduction to Contemporary Theatre and Television.**

Cr. 3. An introduction to the fields of theatre and television, surveying developments in the arts of performance and design, the technology, and the literature during the past twenty-five years.

**TIVA 129. Basic Stagecraft.**

2+2, Cr. 3. An introduction to the technology, terminology and practices of modern stagecraft. This course prepares students for more advanced work in theatre technology, costume construction and design, scenery construction and design, lighting design and stage management. Offered fall semester.

**TIVA 133. Theatre Practicum.**

0+2, Cr. 1 or 0+4, Cr. 2. Creative work in the production of stage plays, teleplays, or dance productions. This course may be taken more than once up to a maximum of six credit hours. Majors must take a minimum of one credit per academic year. Offered each semester.

**TIVA 134. Voice and Diction.**

Cr. 3. An introduction to voice and speech science. Enhancement and correction exercises as well as the International Phonetic Alphabet to aid in articulation improvement, dialect correction and/or acquisition. Offered fall semester.

**TIVA 136. Movement for the Theatre.**

Cr. 3. A course in developing the physical skills required for live theatrical performance emphasizing skeletal alignment and correct body placement for the purpose of developing efficient, economical movement. The physical, emotional, and psychological motivations of movement are explored. Offered in the fall semester alternate years. May be repeated once for credit.

**TIVA 137. Introduction to Acting.**

Cr. 3. An introduction to the skills and tools of acting designed as an elective course for the student not pursuing a performance major or minor. Students engage in technique exercises for development of body, voice, intellect, and emotions as well as scene and monologue study. Offered fall semester.

**TIVA 141. Oral Interpretation.**

Cr. 3. A basic course stressing the communication of thought and feeling from the printed page to the listener. Emphasis is on analysis, interpretation and reading of drama, verse and prose. Offered spring semester.

**TIVA 230. Makeup and Costume.**

2+2, Cr. 3. An introduction to the design and practice of stage and studio costumes and makeup, with discussion of materials, equipment and historical background. Offered in the fall semester. Prerequisite: TIVA 129.

**TIVA 231. Scenery and Lighting.**

2+2, Cr. 3. An introduction to the design and practice of scenery building, lighting for the stage and studio, and production management. Offered each fall semester. Prerequisite: TIVA 129.
TTVA 235. Acting I.  
2+2, Cr. 3. A first course in the theory and practice of acting through several American interpretations of the Stanislavski system as well as technique exercises for the body, voice, intellect and emotions using one open scene and one monologue. Designed for students majoring or minoring in Theatre and Television Arts. Offered spring semester.

TTVA 236. Acting II.  
2+2, Cr. 3. A continuation of work in acting theory and technique through scene study and monologues beginning with American realism and moving to Chekhov, ethnic drama, and poetic drama. Prerequisite: TTVA 235. Offered fall semester.

TTVA 238. World of Theatre I.  
Cr. 3. An introduction to the history and literature of the theatre from the ancient Athenians to 1700. Development of theatrical performance is traced through films, slide projections, live performances, recordings and lectures. Prerequisite: sophomore standing or approval of the Chair of the Department. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Offered fall semester.

TTVA 239. World of Theatre II.  
Cr. 3. An introduction to the history and literature of the Western theatre from 1700 through the modern period. Development of theatrical performance is traced through films, slide projections, live performances, recordings and lectures. Prerequisite: sophomore standing or approval of the Chair of the Department. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Offered spring semester.

TTVA 251. Television Production.  
Cr. 3. (Also offered as COMM 251.) A practical course in television production. Students produce programs and acquire experience in all facets of production, including scripting, shooting, editing and performing. Prerequisite: COMM 101.

TTVA 252. Writing for Stage and Screen.  
Cr. 3. Devoted to the study of creative writing in dramatic form, giving special attention to the particular requirements of stage, film and television. Prerequisite: ENGL 100 or consent of the instructor. Offered alternate fall semesters.

TTVA 290. Dance Topics.  
Cr. 1-3. Introductory courses in dance techniques offered on a rotating basis. Topics may include ballet, jazz, modern, and tap dance technique. May be repeated for credit when topics are different. Offered each semester.

TTVA 334. Theatre of the Non-Western World.  
Cr. 3. Survey of the traditional theatre and drama of Asia and Africa. Prerequisite: junior standing or approval of the Chair of the Department. Offered in the spring semester of even-numbered years.

Cr. 3. A survey of the American theatre and drama from the eighteenth through the twentieth centuries. The modern period, including playwrights such as O'Neill, Miller, Williams, Baraka, and Albee, and the musical theatre is given special emphasis. This course may be used to fulfill the Fine Arts/Fine Arts-Literature component of the General Education Requirements. Prerequisite: junior standing or consent of the Chair of the Department.

TTVA 338. Television Drama.  
Cr. 3. A survey of drama written for television from the early days of the medium to the present. Students will analyze television plays and their authors in their social and historical context. Areas of study will include genres, treatment of topical issues, ideological content, and the relationship of the dramatic form to the evolving production and distribution technology.

TTVA 356/556. Design for Stage and Television.  
2+2, Cr. 3. The translation of written and verbal concepts into scenic elements of line, form, space, texture and color. The actor/audience relationship is examined with regard to design for the various forms of theatre and television, and dance production.

TTVA 357. Performance for the Camera.  
2+2, Cr. 3. A practical course in relating acting and performance techniques to the special requirements of the studio and television camera. Work done one news and weather reporting, commercials, "soap operas," and situation comedy technique. Prerequisites: COMM 101, TTVA 235, and TTVA 251. Offered in the spring semester, odd-numbered years.

TTVA 358. Advanced Television Production.  
Cr. 3. (Also offered as COMM 358.) Workshop format emphasizing advanced production and program practices. Projects include preparation of television materials for possible off-campus usage. Prerequisite: TTVA 251 or consent of the Chair of the Department. Offered in the spring semester of each year.

TTVA 381. Cooperative Education in Theatre and Television Arts I.  
Cr. 0.5-3. Professional work experience with a cooperating employer. Written report required. Prerequisite: approval of the Chair of the Department.

TTVA 386. Internship.  
Cr. 3. Internships in which students may intensively study a particular area of theatre, television, or dance. May not be repeated for credit. Prerequisite: consent of the Chair of the Department.

TTVA 390. Topics and Projects.  
Cr. 1-3. Individual or group. Specific projects based on special interests of students and faculty. Example topics: Drama and the Church, Television Drama, Theatre and File, Commedia dell'Arte, Entertainment and the Law.

TTVA 431. Play Directing.  
2+2, Cr. 3. A study of the art of directing, the problems of choosing a play, methods of casting and rehearsal procedures. Prerequisites: TTVA 230 or 231, and 235 or consent of the Chair of the Department. Offered in the fall semester.

TTVA 432. Service learning in the Theatre Arts.  
Cr. 3. Students develop, rehearse, and present a play on a topic addressing the needs of a particular audience (school, church, social welfare organization, etc.) after studying with experts and researching the topic. A personal journal will encourage reflection on the topic and the process. Offered fall semester.

TTVA 433/533. Directing the Young Actor.  
2+2, Cr. 3. University students work with children in a laboratory context and survey the literature and theory of theatre for children. Prerequisites: TTVA 230 or 231, 235, and 431 or consent of the Chair of the Department. Offered in summer session only.

TTVA 497. Honors Work in Theatre and Television Arts.  
Cr. 3. See Honors Work, page 50.

TTVA 498. Honors Candidacy in Theatre and Television Arts.  
Cr. 3. See Honors Work, page 50.
Theology

Professors Albers, Harre, Ludwig, Meilaender, J. Moore, Niedner, Truemper (Chair), Wangerin; Associate Professors R. DeMaris, Pahl; Assistant Professors Megill-Cobbler, van Doorn-Harder; Instructor Weber (Visiting).

The Theology Department of Valparaiso University has as its main purpose the study, transmission, and interpretation of the Christian tradition as a part of and in relation to the wider religious heritage of humankind. It is the goal of the department to enable all graduates of Valparaiso University to be knowledgeable of the Christian faith, sensitive to religious issues in our global society, and prepared for roles in which their understanding of religion may enhance their contribution to church and society. Since this is a theology department within a university, our work is founded upon the liberal arts tradition of inquiry; competing ideas meet and are freely debated in the search for truth. The Theology Department plays an essential part in expressing and defining the University's commitment to the Christian tradition, particularly to the Lutheran perspective. The department seeks to assist its students in becoming more aware of their own religious traditions, more critical and affirming in their appropriation of them, and more respectful of other traditions.

General Education. The Theology component of the General Education Requirement at Valparaiso University is the freshman core course and two courses of three credit hours each. These courses shall be taken from each of the two levels indicated in the course listings below. A Foundational Course is ordinarily taken in the sophomore year. In either the junior or the senior year, each student must take at least one course from the Upper Level listings.

Major. A minimum of 27 credit hours in theology in addition to the freshman core constitutes a major. Courses must include a course in biblical studies (210, 310-319), a course in the history of the Church and its thought (225, 320-326, 330-334), a course in contemporary Christian religion and ethics (240, 337, 338, 340-346, 353 [when topic is appropriate]), a course in history of religions (260, 390-368), and seminar 493. Students shall also take four additional courses chosen in consultation with their departmental major adviser. Majors must take at least two courses in addition to 493 that are designated in the Schedule of Classes as courses primarily intended for theology majors (not fulfilling this stipulation are 451, 483, 480).

Minor. A minimum of 15 credit hours in theology in addition to the freshman core, chosen by the student in consultation with the Chair of the Department, constitutes a minor. At least three courses shall be taken at the Upper Level (300-400 courses).

Programs. The Department provides programs of study and advising for students who wish to prepare for professional careers in the Church:

1. Programs of study in preparation for Deaconess Ministry are structured by the Department in cooperation with the Lutheran Deaconess Association.
2. Students preparing for seminary should, with their first major, take the Complementary Major in Pre-Seminary Studies; see page 43.
3. Students interested in service as Directors of Christian Education or Youth Ministers arrange their programs with their departmental adviser.

Degree. Completion of the requirements of the College of Arts and Sciences with a major in Theology leads to the Bachelor of Arts degree.

Approvals of Schedules. All students taking a major in Theology must have their schedules approved by the Chair of the Department or by their assigned departmental advisers at the beginning of each semester.

Foundational Courses. Ordinarily sophomore year. Prerequisite for these courses is the freshman core program or consent of the department chair.

THEO 210. Understanding the Bible.
Cr. 3. A study of selected biblical writings in relation to the early Jewish and Christian communities, with attention to theological themes and literary types within these scriptures.

Cr. 3. A study of the historical foundations of Christian thought and its development in the life of the church.

Cr. 3. A study of norms for moral judgment and the dynamics for moral action in the light of Christian theology.

THEO 260. Perspectives on the Religious Quest.
Cr. 3. A study of the history, themes and structures of religious experience in various traditions of the world. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Upper Level. Prerequisite for courses in this level is one Foundational course or consent of the Chair of the Department. To fulfill General Education Requirements, students must take an Upper Level course in their junior or senior year.

BIBLICAL STUDIES

THEO 310/510. Topics in Biblical Studies
Cr. 3. A study of a specific topic such as archaeology and the religions of the ancient Near East, psalms and prayers of ancient Israel, and issues in biblical interpretation. May be repeated for credit if topics are different.

THEO 311. Understanding the Old Testament.
Cr. 3. A study of the history and theology of the Old Testament with attention to its role in Christian faith.

Cr. 3. A study of the history and theology of the New Testament with attention to its role in Christian faith.

THEO 314. The Books of Moses.
Cr. 3. A study of the Pentateuch with emphasis on Israel's understanding of the beginning, the history of the patriarchs, the exodus, the wilderness wanderings, and the preparation for entering the promised land.

THEO 316. The Prophets of Israel.
Cr. 3. A study of the role of the prophets in Israelite religion. Special attention is given to the historical origins of the prophetic movement, its impact on Israel's political, social and religious life, and the continuing significance of the prophetic message in Jewish and Christian thought.

Cr. 3. A study of the New Testament church in its social, political, and religious environment that will focus on class, gender, race, and other key issues: Jewish-Gentile relations; anti-Semitism; slave and master; wealth and poverty; the status and authority of women.

THEO 318. Jesus and the Gospels.
Cr. 3. A comparative study of the New Testament gospels with a focus on the uniqueness of each in its presentation of the story of Jesus.


FOUNDATIONS OF CHRISTIANITY

THEO 320/520. Topics in Christian History.
Cr. 3. A study of a specific topic such as representative Christian thinkers, comparative Christianity, Calvin and Calvinism, Lutherans in America, and Catholics in America. May be repeated for credit if topics are different.

THEO 322. Early and Medieval Christianity.
Cr. 3. A study of major events and developments in Christian thought from the apostolic age through the medieval period.

THEO 323. Christianity from the Reformation to the Present.
Cr. 3. A study of major developments in Christian history and thought from the Reformation period to the present.

THEO 324/524. Christianity in America.
Cr. 3. An investigation of the history of Christianity in America, with special emphasis on the interaction between religion and cultural development.

THEO 326/526. History of Women in the Church.
Cr. 3. An investigation from biblical times to the present of theological understandings of women's roles in Christian religious communities and of the cultural contexts that shape such attitudes and practices.

THEOLOGY, ETHICS, AND PRACTICE

THEO 330/530. Topics in Contemporary Theology.
Cr. 3. A study of selected topics, such as contemporary Lutheran theology, feminist theology, and liberation theology. May be repeated for credit if topics are different.

THEO 332/532. Luther and Lutheran Confessional Theology.
Cr. 3. A study of Luther's theology and the development and content of the confessions of the Lutheran Church.

THEO 334. Constructive Christian Theology.
Cr. 3. A study in the making and critiquing of an ordered and coherent structure of thought about the Christian faith, with special reference to the resources of biblical and Lutheran theology.

THEO 337. Black Theology and Black Church.
Cr. 3. A study of Black theological discourse in the United States and Africa. The course focuses on the composite causes of racial
oppression and explores the relationship between black theology and "third world" peoples, women's struggles, black families, and, most importantly, the praxis of black church ministry. May be used to fulfill the U.S. Diversity component of the General Education Requirements.

THEO 338. Holocaust Theology. 
Cr. 3. A systematic study of the many issues stemming from the events of the Nazi Holocaust and how those events have affected both Jews and Christians. The course constructs a possible religious and moral response to the evil of the Holocaust.

THEO 340. Topics in Religious Ethics. 
Cr. 3. An examination of a selected thinker or theme in religious ethics. May be repeated for credit if topics are different.

THEO 341. Introduction to Bio-Ethics. 
Cr. 3. (Also offered as PHIL 341.) A study of the moral issues raised by modern advances in medicine and biological research (e.g., abortion, euthanasia, genetic engineering and health care). Attention is given to both general ethical themes and to the analysis of particular issues.

THEO 343/543. Theology of Marriage and Sexuality. 
Cr. 3. A systematic study of the many issues stemming from contemporary views of marriage and sexuality, the course will be an opportunity to judge a variety of possible theological views, test views with concrete experiences and real issues, and begin the process of forming a personal viewpoint.

THEO 344. Theology and the Scientific World. 
Cr. 3. A study of the relationship between religion and science, looking not only at controversial issues but also at the positive dialogue between theologians and scientists. The course will focus on topics like creation and evolution, cosmology and theology, genetics and human uniqueness.

Cr. 3. An examination of selected moral issues such as warfare, abortion, and care of the environment.

THEO 351. Studies in Theology and the Arts. 
Cr. 3. An examination of a selected topic such as Christian faith and modern literature, theology and the visual arts, and religion in cinema. May be repeated for credit if topics are different.

THEO 353. Studies in Theology and Practice. 
Cr. 3. An examination of a selected topics such as Christian response to social victims, Christian faith and politics, ethics of cultural encounter, and Christian education. May be repeated for credit if topics are different.

Cr. 3. A study of the principles and language of worship with emphasis on the theology of worship, ritual, the role of tradition, and the relationship between worship and contemporary culture.

THEO 357. The Church in the World. 
Cr. 3. A study of the life and mission of the church with emphasis on movements for renewal, reform and reunion. Special attention is given to developments in Latin America and/or Africa. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirement.

Cr. 3. An examination of a selected topic such as death and dying, or spiritual needs and health care. May be repeated for credit if topics are different.

THEO 359/559. Theology of Aging. 
Cr. 3. A study of the process of aging from the perspectives of biblical, historical, and practical theology. Attention is given to the spiritual needs of older persons and their potential contribution to church and society.

THEO 451/551. Theology of Diocesan Ministry. 
Cr. 3. A study of the historical and theological foundations of diocesan ministry. Attention is given to the role of the diocesan in the church, the development of diocesan community, and the nurture of a spirituality of service. Prerequisite: junior or senior standing.

THEO 453/553. Clinical Practicum in Education. 
Cr. 3. A carefully supervised practicum in ministry to the physically ill and the elderly. Designed principally for senior Deaconess students, this course in practical theology engages student in disciplined reflection on their diocesan ministry. Usually S/U basis. Prerequisite: junior or senior standing.

HISTORY OF RELIGIONS

THEO 360/560. Topics in the History of Religions. 
Cr. 3. A study of a selected topics, such as families of Abraham, south Asian religions, Latin American religions, religions of pre-Christian Europe, and history of the study of religion. May be repeated for credit if the topics are different.

Cr. 3. Studies of selected topics in Judaism: biblical, rabbinic and contemporary. May be repeated for credit if the topics are different. These offerings are sometimes sponsored in part by the Jewish Chautauqua Society.

THEO 362. Understanding Islamic Religion and Culture. 
Cr. 3. A study of the life of Muhammad, the teachings of the Quran, traditional practices and institutions in Islamic society, and the significant contemporary developments in the Muslim world.

May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

THEO 363. Religions of China and Japan. 
Cr. 3. A study of the religious worldview of China and Japan, seen both in the traditional popular religious practices and in the organized religions of Confucianism, Taoism, Buddhism and Shinto. Special attention is given to the expressions of religion in art and to the role of religion in modern China and Japan. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

THEO 364. The Buddhist Tradition. 
Cr. 3. A study of the origins of Buddhism in India, its expansion into and influence on the cultures of Southeast Asia, its special adaptations in China and Japan, and the Buddhist presence in the United States today. Attention is given to the varieties of Buddhist teaching and practice. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

THEO 365. Religion in Africa. 
Cr. 3. A study of religion in Sub-Saharan Africa. Attention is given to the nature and function of religion in the traditional societies and to the modern developments of Christianity and Islam in Africa. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

Cr. 3. A study of religion in Japanese culture by focusing on Zen Buddhism and its influence in Japanese culture, especially in traditional arts like poetry, drama painting, calligraphy, architecture, flowers, and gardening, with special emphasis on chanoyu (the tea ceremony). May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

THEO 367/567. Religions in America. 
Cr. 3. An examination of a selected topics, such as recent religious movements in America, history of religions in the United States, etc. May be repeated for credit if topics are different.

THEO 368. Native American Religions. 
Cr. 3. A study of the most common religious features found in Native American societies north of Mexico. Attention is given both to the older traditions and to the more recent religious developments. May be used to fulfill the U.S. Diversity component of the General Education Requirements.

SPECIALIZED COURSES

THEO 399. Church Vocations Symposium. 
Cr. 0. Presentations and discussions of topics of special interest to students in pre-seminary studies or who are preparing for other church vocations. All students in these curricula are expected to register for this course each semester and to attend each session. The symposium will usually meet biweekly. S/U grade.

THEO 480. Practicum in Ministry. 
Cr. 1-3. Field experience in various local agencies, together with reflection on the work being done. This course may not be used to fulfill the Theology component of the General Education Requirement. A maximum of three credit hours may be applied to the theology major. It may be repeated for a maximum of six credits, and is offered only on an S/U basis. Arranged with the Chair of the Department. Prerequisite: junior or senior standing.

THEO 481. Basic Homily Preparation. 
Cr. 1. A basic introduction to methods of preparing and delivering biblical, liturgical homilies in a variety of worship settings. This course may not be counted toward the theology major or minor. It may be repeated for a maximum of two credits, and is offered on an S/U basis. Prerequisite: junior or senior standing.

THEO 490/590. Topics in Theology. 
Cr. 3. A study of a selected topic in theology, intended primarily for majors, minors, and advanced students. May be repeated for credit if topics are different.

THEO 493. Theology Seminar. 
Cr. 3. Advanced study of selected areas or issues in the discipline of theology. Varied listings are announced. Prerequisites: senior standing and consent of the Chair of the Department.

THEO 495. Supervised Reading and Research. 
Cr. 1-3. An opportunity for students to read a number of significant works on a given topic in theology, or to do research on a topic which is not covered in any scheduled course offerings of the Department and to write a major paper. Prerequisites: junior standing, 9 credit hours in theology, and consent of the Chair of the Department.

THEO 497. Honors Work in Theology. 
Cr. 3. See Honors Work, page 50.

THEO 498. Honors Candidacy in Theology. 
Cr. 3. See Honors Work, page 50.

Theology
CHRIST COLLEGE

THE HONORS COLLEGE

Mark R. Schwenh, Ph.D., Dean
Margaret Franson, M.A.L.S., Assistant Dean

Professors Olmsted, Piehl, Schwenh; Associate Professors Bunge, Contino; Assistant Professors French, Kerr, Mercer-Taylor, Wilson.

Christ College is the honors college of Valparaiso University. Established in 1967, Christ College celebrates more than thirty years of providing an honors-level liberal arts curriculum dedicated to the study and practice of the basic arts of inquiry and committed to educational processes that enable students to achieve a measure of intellectual independence.

Christ College students are concurrently enrolled in one of the University’s undergraduate Colleges—Arts and Sciences, Business Administration, Engineering, or Nursing—where they earn their bachelor’s degrees. Study in Christ College complements all academic programs, providing stimulating interdisciplinary study in the humanities with master teacher-scholars and academically talented students. Many Christ College courses fulfill the University’s General Education Requirements.

Completion of a program of study in Christ College leads to graduation with the honors designation Christ College Associate or Christ College Scholar. A student may also earn a complementary major or an academic minor in Christ College humanities coursework. Requirements for these programs are described in detail on pages 164-165.

Christ College takes its name from respected colleges established centuries ago. In the tradition of those colleges, Christ College is dedicated to the cultivation of intellectual, moral, and spiritual virtues. The College’s name also suggests its compatibility with Valparaiso University’s definition of itself as a university in the Christian intellectual tradition.

Christ College endeavors to develop among its members a sense of community: a community of seekers of knowledge and truth, a community within which free inquiry is encouraged and principled commitment is fostered, a community of scholars engaged in preparing themselves for active participation in the larger human community. Much of the curricular structure of Christ College and many of its co-curricular activities are devoted to developing this sense of community.

Its attractive facilities also encourage community-building. Christ College is located in Mueller Hall, a modern building in the heart of campus where students and faculty interact in seminar-sized classrooms, a 60-seat multimedia lecture hall, a comfortable lounge/art gallery, a multipurpose refectory, and faculty offices.

By developing an academic community that gathers outside as well as inside the classroom, Christ College promotes a particular set of educational virtues and ideals among its members. Among these are direct and personal relationships between students and faculty, a spirit of cooperation and mutual growth through free exchange of ideas, a willingness to challenge and scrutinize ideas and beliefs (including one’s own), and a concern for the integration of academic learning into a responsible and meaningful life.

While stressing intellectual excellence and the fullest use of one’s own mental gifts, the College also attempts to develop within its members the virtues of modesty and civility, a humble awareness of limitations and failures, and a sense that the more knowledge is gained, the more it is to be used wisely in the service of others. To the extent that these values are actually realized in its members, Christ College considers them prepared for responsible vocations in society and for leadership in the Christian community.

ADMISSION AND MEMBERSHIP IN CHRIST COLLEGE

Freshman Admission. To be considered for membership in Christ College beginning in the freshman year, students must first be admitted to Valparaiso University. Admitted students with superior academic records, strong SAT or ACT scores, proven leadership in extracurricular activities, and a measure of curiosity and creativity are invited by the Dean of Christ College to apply for the honors program. Between 75 and 85 freshmen are accepted into the Christ College Freshman Program each fall.

The Freshman Program (CC 110: Text and Contexts I and CC 115: Texts and Contexts II) includes a two-semester course in the great traditions of humankind with readings in history, literature, philosophy, and religion from the earliest recorded thought to the present day. Coursework emphasizes close reading, thoughtful discussion, and critical writing. Special Freshman Program activities include drama, music, and debate.

Upperclass Admission. Students with superior records of academic achievement may be invited to join Christ College later than the start of the freshman year at the Dean’s discretion. For example, some sophomores are admitted to Christ College each fall. These students enroll in sophomore level Christ College courses and begin the pursuit of Christ College Associate and Christ College Scholar graduation distinctions.

Still other students enroll in one or more courses offered by the College, but do not pursue honors program designations. Such enrollment is subject to the approval of the Dean and limited only by class size.

Any Valparaiso University student—whether or not he or she is a member of Christ College—may pursue a complementary major or a minor in humanities through Christ College coursework.

Membership in Christ College. A student formally admitted to Christ College, either as a freshman or upperclass student, in order to pursue a Scholar or Associate distinction, is designated a member of Christ College. Once admitted to membership, a student’s status is regularly reviewed by the dean and faculty to determine whether the student is satisfying the standards appropriate to membership in the Honors College. These requirements include contribution to the common life of the College, satisfactory academic progress toward a degree in one of the undergraduate colleges, and continuing academic achievement consonant with the mission and standards of Christ College.

Even when students are not directly registered in Christ College courses during a given semester, they are expected to contribute to the College’s common life. This includes attendance at the Christ College Symposium and regular consultation with a Christ College adviser.

Continuing academic achievement at the honors level includes a) a cumulative grade point average of 3.30 in all coursework completed at the University and b) a cumulative grade point average of 3.30 in all coursework completed in Christ College.

Students who fall below these standards at the end of a semester or academic year will...
be notified by the dean and reminded that Christ College Associate and Scholar distinctions require a 3.30 cumulative average for work in both Christ College and Valparaiso University. In some cases students will be asked to meet with their adviser and/or the dean to discuss their status, and may be counseled not to continue in Christ College.

However, membership in Christ College is never terminated by the mechanical application of particular criteria such as cumulative grade point average or the student’s academic record for a particular semester or year. The dean and faculty consider the circumstances and direction of each student’s total academic career, and retain the right to maintain a student’s membership in Christ College in light of these conditions. The final approval for those who graduate with the designations of Christ College Associate and Christ College Scholar is made by the faculty.

The dean and faculty take an interest in the total program of every member of Christ College, and seek to enhance the quality of educational experience for each individual student. Accordingly, the Dean may authorize certain variations in the normal academic requirements of a student if such variations seem desirable in the best interests of the student. For example, the Dean may permit a student to carry extra credit hours and to waive certain University requirements if such waivers are justified. Members of the College are normally expected to meet all University requirements for graduation except where such modifications have been explicitly authorized by the Dean. In general, the faculty may tailor a program to meet a student’s interests and needs within the general framework and spirit of the University’s requirements.

ACADEMIC ADVISING AND APPROVAL OF COURSE SCHEDULES

Advising of students pursuing programs in Christ College is under the general direction of the Assistant Dean. Christ College freshmen are usually advised by a member of the Christ College faculty. Sophomores, juniors, and seniors are advised by the Assistant Dean, with faculty members available to consult at any time.

Students are encouraged to confer regularly with their Christ College advisers to select courses, to meet University and College graduation requirements, to assure orderly progress in their chosen programs, and to assist in career planning and related matters.

In addition to a Christ College adviser, students have an adviser in the other college in which they are simultaneously enrolled, and are expected to confer regularly with that adviser as well. It is each student’s responsibility to know curriculum requirements, academic policies, deadlines for academic actions, and Christ College membership criteria.

PROGRAMS OF STUDY

Completion of the degree requirements of the college in which the Christ College student is concurrently enrolled leads to the bachelor’s degree appropriate to that college. In addition, a member of Christ College, by meeting the appropriate requirements, may graduate as a Christ College Scholar or Christ College Associate. The transcript carries the notation along with an explanation of its meaning.

Christ College students as well as students who are not members of Christ College may pursue a complementary major in humanities or a minor in humanities through the College.

Christ College Scholar. The requirements for this designation are:

1. Membership in Christ College for a minimum of three semesters.
2. A cumulative grade point average of 3.30 in all coursework completed at the University and in all coursework completed in Christ College for the Scholar designation.
3. A minimum of 22 credit hours beyond the Christ College Freshman Program courses CC 110 and CC 115. A student who enters the College after the freshman year and who has not taken CC 110 and CC 115 is required to take one additional 3 credit seminar (CC 300 or CC 325). Students may not choose the S/U grading option for coursework beyond CC 110 in any course used to fulfill the requirements for Associate designation.

Required coursework includes:

- **CC 110 Texts and Contexts I** 8 Cr.
- **CC 115 Texts and Contexts II** 8 Cr.
- **CC 205 Word, Image, Tone** 4 Cr.
- **CC 215 The Christian Tradition** 3 Cr.
- **CC 325 Seminar** 3 Cr.
- **CC 499 Senior Colloquium** 1 Cr.

One course selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CC 250</td>
<td>Interpretation in the Humanities</td>
<td>4 Cr.</td>
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<tr>
<td>CC 260</td>
<td>Interpretation in the Social Sciences</td>
<td>4 Cr.</td>
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<td>CC 270</td>
<td>Interpretation in the Natural Sciences</td>
<td>4 Cr.</td>
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Two courses selected from:

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<tbody>
<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
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<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
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<tr>
<td>CC 445</td>
<td>Inquiry in the Liberal Arts</td>
<td>3 Cr.</td>
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An approved off-campus study program.

Christ College Associate. The requirements for this designation are:

1. Membership in Christ College for a minimum of three semesters.
2. A cumulative grade point average of 3.30 in all coursework completed at the University and in all coursework completed in Christ College for the Associate designation.
3. A minimum of 14 credit hours beyond the Christ College Freshman Program courses CC 110 and CC 115. A student who enters the College after the freshman year and who has not taken CC 110 and CC 115 is required to take one additional 3 credit seminar (CC 300 or CC 325). Students may not choose the S/U grading option for coursework beyond CC 110 in any course used to fulfill the requirements for Associate designation.

Required coursework includes:

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<td>CC 270</td>
<td>Interpretation in the Natural Sciences</td>
<td>4 Cr.</td>
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Three CC seminars taken on campus.

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<th>Credits</th>
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<tbody>
<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CC 325</td>
<td>Seminar</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CC 499</td>
<td>Senior Colloquium</td>
<td>1 Cr.</td>
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</table>

A course used to fulfill the requirements of a complementary major in humanities may not be used to fulfill the requirements of any other major or minor.

Minor in Humanities. The minor in humanities is ordinarily pursued in conjunction with the Christ College Scholar program of studies, but may be pursued independently from the Scholar requirements. Any student, whether or not a member of Christ College, may earn a minor in humanities. The minor in humanities requires a minimum of 18 credit hours in Christ College courses.

Required coursework includes:

<table>
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<tbody>
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<td>CC 260</td>
<td>Interpretation in the Social Sciences</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>CC 270</td>
<td>Interpretation in the Natural Sciences</td>
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</tr>
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</table>

One course selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
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<tr>
<td>CC 300</td>
<td>Seminar</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>CC 325</td>
<td>Seminar</td>
<td>3 Cr.</td>
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</tbody>
</table>

An approved off-campus study program.

The Freshman Program

CC 110. Texts and Contexts I: Traditions of Human Thought.

Cr. 3. Intensive study of great works in religious, philosophical, and literary traditions. The close reading of these works is accompanied by a survey of the wider aspects of the historical epoch or milieu appropriate to each text. The course is graded S/U only, though advisory grades (A-F) are given throughout the semester. Consent of the Christ College Dean required for enrollment.
CC 115. Texts and Contexts II: Traditions of Human Thought.
Cr. 8. The first seven weeks of this course continues CC 110. In the second seven weeks students choose from seminars on topics relevant to the larger themes of the course. Each student conducts a major investigation of a problem formulated within the seminar. The course is graded A-F only. Consent of the Christ College Dean required for enrollment.

Sophomore-Junior-Senior Curriculum

CC 201. Christ College Symposium.
Cr. 0. Presentations and discussions of items and topics of special interest to members of the Christ College community. Christ College sophomores, juniors, and seniors are expected to register for the course and to attend each gathering except in cases of irresistible conflicts. Only Christ College members may register for the course, but all students are welcome to attend. S/U grade.

CC 205. Word, Image, Tone.
Cr. 4. A study of selected literary, philosophical, and religious texts, with special emphasis on the relationship of these texts to works of art and music. These classic texts are read, analyzed, and discussed in seminar settings, supplemented by plenary session devoted to lectures and discussions of visual images and musical compositions. Prerequisites: CC 115 or ENGL 100 or CORE 115 and consent of the Dean.

Cr. 3. A study of one or more major topics in the history of Christian thought, with attention to the ways that these topics have been addressed by the Scriptures, classics in theological discourse, and other significant writings. Prerequisites: CC 115 or THEO 100 or CORE 115, and consent of the Dean.

CC 220. Interpretation in the Humanities.
Cr. 4. An introductory study of interpretation through the examination of selected primary materials in the humanities. Specific questions of ahistorical intention, of the place of language, symbol, and tradition in society, of audience expectation and response, of appropriate modes of inquiry and methods of validation, and the role of participant-observer are considered in the context of recent theory and practice on a variety of topics. Prerequisite: consent of the Dean.

CC 225. Seminar.
Cr. 3-4. Same as CC 300, except course may be intensified to 4 credits with the consent of the instructor. A student who takes the course for 4 credits will prepare an honors thesis on some aspect of the seminar topic in place of one of the required assignments and the final examination. A general rule only students with junior or senior standing will be permitted to intensify this course.

CC 250. Inquiry in the Liberal Arts.
Cr. 3. A course in the theory and practice of the liberal arts. Students in this course collaborate with instructors as tutorial assistants in CC 110. Prerequisites: CC 110 or CC 115, and consent of the Dean.

CC 265. Independent Study Project.
Cr. 1-4. A special independent study project arranged with a member of the faculty. Approval of this project must be obtained from the faculty mentor and the Dean of the College prior to registration. Forms for this project are available from the Dean’s Office.

CC 270. Interpretation in the Natural Sciences.
Cr. 4. A survey of methodology and the philosophical underpinnings of the natural sciences to achieve better understandings of the scientific enterprise. Scientific projects and oral presentations complement readings, lectures, and discussions. Prerequisite: consent of the Dean.

CC 300. Seminar.
Cr. 3. Each semester Christ College offers seminars dealing with themes of social, intellectual, cultural, spiritual, or artistic importance. These courses are often interdisciplinary in nature. Seminars may be cross-listed with academic departments in other colleges of the University. Seminars may be focused on topics, historical periods, or persons, but are not limited to these designations. Recent seminar titles include: African Politics and Literature; Ethical Reflection and Modern Literature; Rock and Roll: Its Forms and Contexts; Inventing the Body; Love and Friendship; Christian Social Thought, Literature, Religion and Modernity; Health and Healing, East and West; Children, the Family, and Faith; Poe and Baudelaire: Character and Destiny; Updike, Morrison, and Contemporary America. CC 300 may be repeated with different seminar topics. Prerequisites: open to sophomores, juniors, and seniors, including students who are not members of Christ College, and consent of the Dean.

CC 325. Seminar.
Cr. 3-4. Same as CC 300, except course may be intensified to 4 credits with the consent of the instructor. A student who takes the course for 4 credits will prepare an honors thesis on some aspect of the seminar topic in place of one of the regularly assigned papers and the final examination. As a general rule only students with junior or senior standing will be permitted to intensify this course.

CC 455. In the Liberal Arts.
Cr. 3. A course in the theory and practice of the liberal arts. Students in this course collaborate with instructors as tutorial assistants in CC 110. Prerequisites: CC 110 or CC 115, and consent of the Dean.

CC 495. Independent Study Project.
Cr. 1-4. A special independent study project arranged with a member of the faculty. Approval of this project must be obtained from the faculty mentor and the Dean of the College prior to registration. Forms for this project are available from the Dean’s Office.

CC 499. Senior Colloquium.
Cr. 1. A capstone, integrative experience for seniors under the direction of a Christ College faculty in which students give shape to the substance of their lives through autobiographical narrative, and reflect upon the character and meaning of their future work. Prerequisite: senior standing and consent of the Dean.

Professor Langrehr, Mainstone, McCuddy, Miller, W. Moore, Dean Schroeder; Associate Professors Ozgur, Pirie, Reicherdt, David Schroeder, Strasser, Stikl; Assistant Professors Becker, M. Christ, Hires, Trapp; Visiting Assistant Professors L. Christ, Graham; Lecturer Gudyan.

The College of Business Administration offers two degrees: a Bachelor of Science in Accounting and a Bachelor of Science in Business Administration with majors in accounting, decision science, finance, international business, management, and marketing.

Accreditation. The college’s degree programs are fully accredited by AACSB - The International Association for Management Education. AACSB is recognized by the Commission on Recognition of Post Secondary Accreditation as the sole accrediting agency for degree programs in business administration and accounting.

William M. Moore, Ph.D., Dean

Which focus exclusively on undergraduate business education have earned AACSB’s prestigious professional accreditation.

Mission. To create an extraordinary learning environment for quality management education through a community that fosters mutual respect, engages in scholarly activities, values the University’s Christian tradition, and is based on moral integrity.

The College’s and faculty’s shared values for implementing this mission are as follows:

• We strive to function in a learning-centered environment of mutual respect that is cooperative and team-oriented.

• We view students as whole persons and strive to prepare them for personal, as well as professional success.

• We strive for quality management education that provides integration of knowledge from all business disciplines through innovative curriculum development and delivery.

• We attempt to develop analytical, problem-solving, and critical thinking skills along with a curiosity for lifelong learning.
College of Business Administration

- Our community is a partnership of faculty, students, administration, staff and business people.
- Our faculty is engaged in scholarly activities with a focus on intellectual contributions related to the application of knowledge and instructional development.
- We value the importance of ethics, integrity, and honesty.
- We value the Lutheran heritage of the University.
- We recognize the importance of giving to the community and stress enhanced social responsibility among faculty and students by encouraging community and professional service.

The general education curriculum exposes each student to a broad range of disciplines, problem solving techniques and methods of inquiry. The business curriculum introduces students to concepts, tools of analysis, and techniques of evaluation which further develop skills in problem solving and decision making. These serve as a foundation for their growth into competent and ethically responsible business persons prepared for work in the global environment. The undergraduate education in business is concerned not only with preparation for business careers but with preparation for life in general. As the shared values indicate "We view students as whole persons and strive to prepare them for personal, as well as professional success."

The Major Field. The business core provides background in the production and marketing of goods and/or services and the financing of the business enterprise; it builds on the knowledge gained in the general education component. The student becomes familiar with accounting and quantitative methods that have application to the solution of business problems. Attention is given to ethical and social issues that confront modern business organizations within an integrative, capstone, policy-determination course. In addition to taking certain prescribed courses in the core, the student must complete the requirements for the degree in accounting or the major in accounting, decision science, finance, international business, management, or marketing for the degree in business administration. The requirements for each major are set forth in the curricula described on pages 172-173.

Each of the two degrees requires that the students devote at least one-half of their time to required and elective courses outside the College of Business Administration. Students often select nonbusiness elective courses in those areas which provide support to their professional program.

Minor in Business Administration. The College offers this minor for nonbusiness students who desire a more advanced preparation in business than is provided by the Liberal Arts Business Minor. For more information and the requirements of these two minors, see page 203 for the Minor in Business Administration and page 207 for the Liberal Arts Business Minor.

Credit by Examination. Credit for ACC 205 may be earned through the College Level Examination Program subject examination in Introductory Accounting.

For nonbusiness majors only, credit for MGT 304 may be earned through the College Level Examination Program subject examination in Principles of Management. For nonbusiness majors only, credit for MKT 304 may be earned through the College Level Examination Program subject examination in Principles of Marketing.

Minors for Business Students. In addition to minors in specified nonbusiness courses, the College of Business Administration, business students may complete the requirements for an interdisciplinary minor either in International Business and Global Studies (available to business students only, see page 173), or in Manufacturing Management (available to both business and engineering students, see page 207), or in Applied Statistics (see page 202).

A business student may declare a minor in the College of Arts and Sciences. No more than two courses of specified nonbusiness courses required for a College of Business Administration degree may be used in fulfilling the requirements of a minor. Students must earn a 2.00 grade point average in a minor for it to be noted on the student's official academic record.

Honors College. The College of Business Administration encourages those students who are qualified to participate in the Christ College Honors program. Business students enrolled in Christ College also have an adviser in Christ College. A College of Business Administration student in Christ College may graduate either as a Christ College Scholar or as a Christ College Associate (see pages 164-165).

Double Major in the College of Business Administration. Students may earn a double major by completing all the requirements for two majors. No course used to fulfill the requirements for one major (including major field requirements) may be used to fulfill requirements for a second major, unless the course is required for both majors or the course fulfills the international business requirement for each major. There cannot, however, be any more than a seven credit overlap between the two majors.

Double Degree. Students may earn double degrees by earning 30 credits and 60 quality points in excess of the total number of semester credits required for the first degree and, in addition, must fulfill all the specific course requirements for the second degree. None of the additional 30 credits for the second degree may be used to fulfill requirements for the first degree.

Assessment Center. The CBA Assessment Center evaluates student performance on realistic business tasks. Assessors observe students in simulations such as role plays, oral presentations and group decision making, and offer immediate feedback to the students. Skills assessed might focus on the student's problem solving, communication, teamwork, leadership, teamwork, and interpersonal abilities. Students may use their assessment results to improve their strengths and to identify areas for improvement. The College may use the assessment results to evaluate and improve its curriculum. The increased importance of behavioral skills in the workplace emphasizes the necessity of being able to assess these skills in our students. The College of Business Administration offers the Assessment Center each academic year and requires all students to participate in the Assessment Center activities during each of their Sophomore, Junior and Senior years.

Cooperative Education. Cooperative Education in the College of Business Administration is a program in which students combine full-time professional, paid work experience with academic coursework. Employment may occur in a business, not-for-profit, or government setting. Each student is required to complete a Cooperative Education (or Internship; see following section) experience during their junior or senior year. The following policies govern Cooperative Education within the College of Business Administration:

1. A student may participate in Cooperative Education after achieving junior standing with a minimum cumulative grade point average of 2.00.
2. A student works under the advisement of a faculty member who monitors the work experience, evaluates the required written report by the student, and assigns the course grade, taking into account the employer evaluation of the co-op student and the approval of the CBA Internship and Assessment Center Coordinator.
3. Placements require prior approval of both the CBA Internship and Assessment Center Coordinator and the Director of the Career Center. Interested students should meet with the Coordinator early in their academic careers.
4. A student registers for two credits for each co-op experience.
5. Retroactive credit will not be granted.

Internships. Internships enable students to apply concepts and skills learned in their business courses to situations encountered in actual organizational settings. Each student is required to complete an Internship (or Cooperative Education; see previous section) experience during their junior or senior year. The following policies govern Internships within the College of Business Administration:

1. A student may participate in Internships after achieving junior standing with a minimum cumulative grade point average of 2.00.
2. A student works under the advisement of a faculty member who monitors the work experience, evaluates the required written report by the student and assigns the course grade, taking into account the employer evaluation of the intern student and the approval of the CBA Internship and Assessment Center Coordinator.
3. Placements require prior approval of both the CBA Internship and Assessment Center Coordinator and the Director of the Career Center. Interested students should meet with the Coordinator early in their academic careers.
4. Internships may be paid or unpaid work experiences.
5. A minimum of 100 hours of work experience during each internship placement is required to receive academic credit for the internship.
6. A student registers for two credits for each internship placement.
7. Retroactive credit will not be granted.

Small Business Institute Program.
The Small Business Institute Program (SBI) is a program in which students participate as a member of a team of student consultants on actual small business cases. Enrollment is limited by the number of cases. All consultant activities are performed by the students, under supervision of the faculty coordinator. Students receive three credits and letter grades in the SBI Program.

Admission. The general requirements for admission to the University and to the College are found on pages 213-214 of this catalog.

Transfers. Students currently enrolled at Valparaiso University and wishing to transfer into the College of Business Administration, as well as those from other universities who wish to enter, must have a minimum cumulative grade point average of 2.00. Transfer students should refer to page 214 regarding theology requirements and page 11 for the First Year Core requirement.

Transfer students who have completed business courses do not automatically receive transfer credit. Evaluation of such credit is made by the Dean. Any course work completed at other colleges or universities with a grade lower than Cdoes not transfer. At least fifty percent of the business credit hours required for the business degree must be taken at Valparaiso University.

Progression Policy. In order to enroll in courses above 304 in the College, a student must complete a minimum of 66 credit hours with an overall cumulative grade point average of at least 2.0 and a grade point average of 2.00 in all business courses.

Progression Standards. To remain in good academic standing in the College of Business Administration a student must maintain a minimum cumulative grade point average of 2.00 in all course work, 2.00 in all business courses, and 2.00 in the specified courses in the major. Students who do not maintain a minimum grade point average in these classifications of courses are academically deficient and subject to probation or suspension.

Graduation Requirements. To be eligible for the Bachelor of Science in Accounting degree or Business Administration degree, a student must complete one of the prescribed curricula found on the following pages. The student must also satisfy the grade point requirements stated above and must meet all additional requirements for graduation established by the University (see pages 223-225 in this catalog).

S/U Grading Option. Business students may not take business courses using the S/U grade option, unless the course is only graded on the S/U basis. This option is permitted in all nonbusiness courses except MATH 122 and 124, ECON 221, 222, and 223, and any nonbusiness course used in the International Business and Global Studies, Manufacturing Management, or Applied Statistics minors. See page 220 for a complete explanation of the S/U grading option.

Advisement. Advisement of students admitted to the College is under the direction of the Coordinator of Advising, who assists freshmen and sophomores in selecting courses and interpreting the requirements for an orderly progression toward a degree. In addition, faculty members assist business students for both course selection and advisement. It is each student's responsibility to know curriculum requirements, prerequisites for courses, academic policies and procedures, and deadlines dates.

STUDENT ORGANIZATIONS
Students are encouraged to join one or more of the following College of Business Administration organizations.

Kappa Phi Chapter of Delta Sigma Pi. This selective professional business fraternity of men and women worldwide has been organized to foster the study of business in universities, encourage scholarship and social activity and to promote closer affiliation between the commercial world and students of business.

Accounting Society. The Society's objectives are to promote professional excellence in the field of accounting, to inform and educate members about career options, to provide opportunities for association between members of the Society and practicing accountants, and to encourage the development of ethical, social and public responsibility. Membership in the Society is open to all students interested in pursuing careers in accounting.

Society for Human Resource Management. SHRM is a professional association organized to provide its members with assistance in their professional development, to stimulate research in the profession, and to promote leadership in establishing and supporting standards of professional excellence.

Financial Management Association-Richard H. Laube Student Chapter. The organization promotes scholarship and professionalism within the field of finance. Student and faculty sponsored programs are designed to enhance the classroom experience and to help students make the transition from college to business. Membership is open to students interested in finance.

The Financial Management Association also sponsors the Investment Club. Students interested in both corporate and personal investment topics comprise this organization. Guest speakers, field trips to Chicago exchanges, and portfolio management activities and simulations are typical activities of the club. Membership is open to all students interested in investment activities.

American Marketing Association--William E. Urschel Chapter. This organization promotes scholarship and professionalism within the field of marketing. Student and faculty sponsored programs are designed to enhance the classroom experience for students and faculty sponsored programs are designed to enhance the classroom experience for students. Students interested in marketing are invited into its membership. Membership is open to all students interested in marketing.

Honor Societies
Beta Gamma Sigma. National honor society which recognizes outstanding academic achievement of students in AACSB accredited business programs. The upper 10 percent of the senior class and the upper seven percent of the junior class are invited into its membership. Members are entitled to wear blue and gold honor cords at commencement.

Accounting Honor Society. Recognizes members of the Accounting Society who have excelled in the study of accounting.

American Marketing Association Honor Society--Alpha Mu Alpha. National marketing honorary which recognizes outstanding scholarship in the field of marketing.

Decision Science Honor Society--Alpha Iota Delta. Sponsored by the Decision Science Institute to recognize academic excellence in the field of decision science.

Financial Management Association Honor Society. Sponsored by the Financial Management Association to recognize outstanding scholarship in the field of finance.

COURSES COMMON TO BOTH DEGREE PROGRAMS IN THE COLLEGE OF BUSINESS ADMINISTRATION

The College of Business Administration offers two degree programs--the Bachelor of Science in Accounting and the Bachelor of Science in Business Administration. Courses specifically required in either degree program are listed under the degree program descriptions following the General Education and Business Core requirements. The following courses are common requirements for both the B.S. in Accounting and the B.S. in Business Administration degrees:

GENERAL EDUCATION

Freshman Core Program
CORE 110 The Human Experience ........................................... 5 Cr.
CORE 115 The Human Experience ........................................... 5 Cr.
Total ........................................................... 10 Cr.

Academic Area Studies
THEO Foundational level course ............................................. 3 Cr.
THEO Upper Level course .................................................. 3 Cr.
ENGL 200: Literacy Studies ................................................. 3 Cr.
MATH 122: Intuitive Calculus .............................................. 4 Cr.
MATH 124: Finite Mathematics ............................................. 4 Cr.
ECON 221: Microeconomics ................................................. 3 Cr.
ECON 222: Macroeconomics ................................................. 3 Cr.
ECON 223: Economics International ..................................... 3 Cr.
Global Cultures and Perspectives .......................................... 3 Cr.
Social Analysis .............................................................. 3 Cr.
Natural Science (with lab, see Note B) ................................. 4 Cr.
PSY 110: General Psychology .............................................. 3 Cr.
PSY 111: General Psychology Lab ......................................... 1 Cr.
PE 101-106 ................................................................. 1 Cr.
Total ........................................................... 48 Cr.
Nonbusiness Electives (Note 1) ............................................. 9-18 Cr.
Total General Education ................................................... 48-66 Cr.

BUSINESS CORE

Sophomore Core Courses
MGMT 205: Financial Accounting ........................................ 3 Cr.
MGMT 206: Management Accounting ................................ 3 Cr.
DS 205: Business Statistics ................................................ 3 Cr.
Total ........................................................... 12 Cr.

Junior/Senior Core Courses
MGMT 300: Assessment Center ............................................. 0 Cr.
MGMT 304: Management and Organizational Behavior .......... 3 Cr.
FIN 304: Financial Management ......................................... 3 Cr.
MKT 304: Marketing Management ........................................ 3 Cr.
DS 306: Production-Operations Management ..................... 3 Cr.
Total ........................................................... 0 Cr.

Minor in Business Administration
MGMT 300: Assessment Center ............................................. 0 Cr.
MGMT 304: Management and Organizational Behavior .......... 3 Cr.
FIN 304: Financial Management ......................................... 3 Cr.
MKT 304: Marketing Management ........................................ 3 Cr.
DS 306: Production-Operations Management ..................... 3 Cr.
Total ........................................................... 12 Cr.

Minor in Business Policy and Strategy
MGMT 300: Assessment Center ............................................. 0 Cr.
MGMT 304: Management and Organizational Behavior .......... 3 Cr.
FIN 304: Financial Management ......................................... 3 Cr.
MKT 304: Marketing Management ........................................ 3 Cr.
Total ........................................................... 12 Cr.

Total Business Core ..................................................... 32 Cr.
### BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Students who choose the Business Administration degree may select from six majors: Accounting, Decision Science, Finance, Management, Marketing, or International Business.

#### ACCOUNTING MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DS 110</td>
<td>Business Spreadsheet Applications</td>
<td>1 Cr.</td>
</tr>
<tr>
<td>ACC 210</td>
<td>Introductory Accounting Lab</td>
<td>1 Cr.</td>
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<tr>
<td>ACC 301</td>
<td>Seminar in the Accounting</td>
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<td>Profession I</td>
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<tr>
<td>ACC 302</td>
<td>Seminar in the Accounting</td>
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<tr>
<td></td>
<td>Profession II</td>
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<tr>
<td>ACC 310</td>
<td>Intermediate Financial Accounting I</td>
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<td>ACC 311</td>
<td>Intermediate Financial Accounting II</td>
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<tr>
<td>ACC 320</td>
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<tr>
<td>ACC 330</td>
<td>Accounting Information Systems</td>
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<td>ACC 350</td>
<td>Concepts of Tax Accounting</td>
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<td>ACC 490</td>
<td>Auditing</td>
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<td>MGT 410</td>
<td>Business Law</td>
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<td>FIN 430 International Finance</td>
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<td>MGT 430 International Environment of Business</td>
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<td></td>
<td>MGT 440 Cross-Cultural Management</td>
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#### DECISION SCIENCE MAJOR

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<tr>
<td>DS 110</td>
<td>Business Spreadsheet Applications</td>
<td>1 Cr.</td>
</tr>
<tr>
<td>DS 111</td>
<td>Business Applications Programming</td>
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<tr>
<td>DS 200</td>
<td>Management Science</td>
<td>3 Cr.</td>
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<tr>
<td>DS 340</td>
<td>Statistics for Decision Making</td>
<td>3 Cr.</td>
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<td>DS 420</td>
<td>Decision Support and Expert Systems</td>
<td>3 Cr.</td>
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<tr>
<td>DS 493</td>
<td>Seminar in Applied Programming</td>
<td>3 Cr.</td>
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<tr>
<td>MKT 310</td>
<td>Marketing Research</td>
<td>3 Cr.</td>
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<td>International Business Requirement</td>
<td>3 Cr.</td>
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<td>FIN 430 International Finance</td>
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<td>MGT 430 International Environment of Business</td>
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<td></td>
<td>MGT 440 Cross-Cultural Management</td>
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<td>MKT 430 International Marketing</td>
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### INTERNATIONAL BUSINESS MAJOR

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<td>International Environment of Business</td>
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<td>MGT 440</td>
<td>Cross-Cultural Management</td>
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<tr>
<td>FIN 430</td>
<td>International Finance</td>
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<tr>
<td>MKT 430</td>
<td>International Marketing</td>
<td>3 Cr.</td>
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<td>ECON 326</td>
<td>International Economics</td>
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<td>ECON 336</td>
<td>Economics of Developing Nations</td>
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<td>Free electives (Notes 2 and 3)</td>
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<td>Grand Total</td>
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### MANAGEMENT MAJOR

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<tbody>
<tr>
<td>MGT 310</td>
<td>Managing Human Resources</td>
<td>3 Cr.</td>
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<tr>
<td>MGT 315</td>
<td>Leadership and Interpersonal Skills</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MGT 325</td>
<td>Human Resource Development</td>
<td>3 Cr.</td>
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<tr>
<td>MGT 425</td>
<td>Managing Change in Contemporary Organizations</td>
<td>3 Cr.</td>
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<tr>
<td></td>
<td>MGT 440 Cross-Cultural Management</td>
<td>3 Cr.</td>
</tr>
<tr>
<td></td>
<td>MKT 470 High Performance Organizations</td>
<td>3 Cr.</td>
</tr>
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<td></td>
<td>Total</td>
<td>18 Cr.</td>
</tr>
<tr>
<td></td>
<td>Major field requirement</td>
<td>9 Cr.</td>
</tr>
<tr>
<td></td>
<td>Select three non-core business courses numbered above 300</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free electives (Notes 2 and 3)</td>
<td>6 Cr.</td>
</tr>
<tr>
<td></td>
<td>Grand Total</td>
<td>126 Cr.</td>
</tr>
</tbody>
</table>

### MARKETING MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 430</td>
<td>Marketing Research</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MKT 440</td>
<td>Sales Management</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MKT 330</td>
<td>Buyer Behavior</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MKT 430</td>
<td>International Marketing</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>MKT 470</td>
<td>Marketing Strategy and Policy</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>DS 340</td>
<td>Statistics for Decision Making</td>
<td>3 Cr.</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18 Cr.</td>
</tr>
</tbody>
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### FINANCE MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>DS 110</td>
<td>Business Spreadsheet Applications</td>
<td>1 Cr.</td>
</tr>
<tr>
<td>FIN 300</td>
<td>Management of Financial Institutions</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FIN 410</td>
<td>Financial Theory and Practice</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FIN 420</td>
<td>Investment Management</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>FIN 470</td>
<td>Financial Strategy and Policy</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>DS 340</td>
<td>Statistics for Decision Making</td>
<td>3 Cr.</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125 Cr.</td>
</tr>
</tbody>
</table>

### INTERNATIONAL BUSINESS AND GLOBAL STUDIES MINOR

**Administrative Committee:**

- Associate Professor Stuck, Assistant Professor Trapp.
- Intercollegiate Advisory Committee: Department Chairs of Economics, Foreign Languages and Literatures, Geography, History, and Political Science.

The interdisciplinary minor in International Business and Global Studies is available to business students only. However, this minor is not available to International Business majors in the Bachelor of Science in Business Administration degree. It provides the opportunity for students to focus on the interdisciplinary global environment in which business is being carried out. The rapid global changes affecting the business world can best be understood through a cross-disciplinary approach involving the study of international business and economics as well as modern languages and selected courses from the liberal arts curriculum.

A total of 23 credit hours is required to complete the minor.

#### Required Core Courses

- Complete any three from the following five areas: international business or economics course options. No more than two of these three required courses can be used to fulfill any other requirements.

#### Modern Foreign Language Requirement

- Two courses in one language sequence are required.
College of Business Administration

Latin American Region
FLS 102 and 103

General International Track
Two courses from any of the single language sequences listed above are required.

International Elective Tracks
One track is required.

East Asian Region
Choose two of the following courses: GEO 314, HIST 240, 241, 242, THEO 365

European Region
Choose two of the following courses: GEO 312, HIST 313, 315

Latin American Region
Choose two of the following courses: GEO 311, HIST 230, 231, 331

General International Track
Choose one course from two different groups:
1. GEO 101 or 102
2. HIST 210
3. POLS 130 or 230
4. POLS 330 or 356

International Study Abroad Track
Six credits of area studies approved by the Administrative Committee.

COURSE DESCRIPTIONS

ACCOUNTING

Cr. 3. A study of basic accounting theory and practice, the nature of assets and equity, income measurement, and financial statement preparation. Prerequisites: sophomore standing and MATH 110 or placement higher than MATH 110 on the math placement examination.

ACC 206. Managerial Accounting.
Cr. 3. A study of the analysis and use of accounting data to manage enterprises. Topics include cost-volume-profit relationships, decision analysis, budgeting, standard costing, segment reporting, and product costing methods. Prerequisite: ACC 205.

ACC 210. Introductory Accounting Lab.
Cr. 1. Computer-aided instruction of the procedural accounting skills required for professional accounting. Prerequisite: ACC 205 or permission of the instructor. S/U grade.

ACC 290/390/490. Topics in Accounting.
Cr. 1-3. A detailed examination of selected topics pertinent to the field of accounting to be offered when sufficient interest and staffing are available. Permission of the instructor or Dean required. Prerequisites will vary, depending on topics being covered.

ACC 301. Seminar in the Accounting Profession I.
Cr. 0.5. An exploration of important professional accounting issues that are not covered in traditional accounting courses. The course relies on case studies, presentations and discussions conducted by practicing professional accountants as well as various faculty members. Prerequisite: ACC 205. S/U grade.

ACC 302. Seminar in the Accounting Profession II.
Cr. 0.5. Continuation of ACC 301. Prerequisite: ACC 301. S/U grade.

Cr. 3. A study of generally accepted accounting principles as applied to asset measurement, liability valuation, and income determination. Prerequisites: ECON 221, ECON 222 or 223, DS 110, DS 205, MGT 206, ACC 206, ACC 210, and completion or concurrent enrollment in FIN 304.

ACC 311. Intermediate Financial Accounting II.
Cr. 3. The continuation of Accounting 310 with emphasis on generally accepted accounting principles as applied to stockholders' equity and selected financial reporting topics. Prerequisites: ECON 221, ECON 222 or 223, DS 110, DS 205, MGT 206, ACC 206, ACC 210, and completion or concurrent enrollment in FIN 304.

ACC 320. Cost Accounting.
Cr. 3. A study of the techniques used to accumulate, measure, plan, and control the costs of an organization's products and services. Prerequisites: ECON 221, ECON 222 or 223, DS 110, DS 205, MGT 206, ACC 206, ACC 210.

Cr. 3. A study of the use, evaluation, and design of accounting information systems. Prerequisites: ECON 221, ECON 222 or 223, DS 110, DS 205, MGT 206, ACC 206, ACC 210.

ACC 340. Governmental and Not-For-Profit Accounting.
Cr. 3. This course provides a focus on accounting systems and processes unique to noncommercial enterprises. Emphasis is placed on accounting, reporting, and analysis of organizations whose primary purpose is to provide services. The courses addresses the changing financial reporting environment in the non-for-profit sector of business as well as in government. Attention will be given to issues both in external financial reporting and in managerial accounting analysis. Prerequisite: ACC 205.

Cr. 3. A study of various taxation bases, methods of taxation, and the purpose of taxation. The goal of the course is to provide the student with concepts of taxation so that the effect on management decisions may be understood. Primary emphasis will focus on business entities at the federal level. Prerequisite: ACC 205.

ACC 410. Advanced Accounting.
Cr. 3. A study of generally accepted accounting principles as applied to partnerships, corporate consolidations, international operations, and governmental and non-profit entities. Prerequisite: ACC 311.

ACC 450. Tax Research.
Cr. 3. An exploration of the concepts of taxation by providing opportunities to investigate the effects of taxation on the various entities (corporations, partnerships, trusts, and individuals). The emphasis will center on the concept of complete taxation planning involving long-range and short-range effects of management decisions. Prerequisite: ACC 350 or permission of the instructor.

ACC 470. Auditing.
Cr. 3. A study of the principles, procedures, standards, and ethical responsibilities involved in conducting financial, compliance, and operational audits. Prerequisites: ACC 311 and ACC 330.

ACC 480. Special Topics in Accounting.
Cr. 3. Examination of important financial and managerial issues that are not covered or minimally covered in other courses. The course provides an opportunity to explore uniquely developed cases and to provide special research opportunities for students. Prerequisites: ACC 311 and senior standing or permission of the instructor.

ACC 495. Independent Study in Accounting.
Cr. 1-3. An independent research effort. It requires approval of a research proposal by a member of the College faculty and the Dean. May not be used as a substitute for a course which covers the topics being covered. Prerequisites: ACC 311 and senior standing or permission of the instructor.

DECISION SCIENCE

Cr. 1. An introduction to spreadsheets and macro development. Prerequisite: MATH 110 or placement higher than MATH 110 on the math placement exam.

Cr. 1. An introduction to creating business applications using spreadsheets and application development languages. Prerequisite: DS 110.

Cr. 3. A course in the elements of statistical inference and the application of statistical methods to business problems. Content includes probability theory, probability distributions, descriptive statistics, sampling distributions, parameter estimation, and tests of hypotheses. Prerequisite: MATH 124 or 131 or 151.

DS 290/390/490. Topics in Decision Science.
Cr. 1-3. A detailed examination of selected topics pertinent to the field of decision science to be offered when sufficient interest and staffing are available. Permission of the instructor or Dean required. Prerequisites will vary depending on topics being covered.

DS 300. Production-Operations Management.
Cr. 3. A study of operations, manufacturing, and service organizations and the corresponding requirements placed upon management. Content includes forecasting, regression, inventory management, MRP, capacity planning, transportation, facility location and layout, quality, reliability, project management, and scheduling. It includes the use of management science techniques and computer applications in the decision making process. Prerequisites: ECON 221, MATH 122 or 131 or 151, and completion of or concurrent enrollment in DS 205.

Cr. 3. A study of fundamentals of management science techniques in decision-making process. The emphasis is on the application of linear programming, transportation, mixed-criteria and network flow models, queuing theory, simulation, dynamic programming, and Markov processes. Prerequisites: DS 205, MATH 122 or 131 or 151.

Cr. 3. (Also offered as MATH 340.) A study of statistical concepts and methods to facilitate decision making. Content includes analysis of variance, simple and multiple regression, correlation, time-series analysis, nonparametric methods and Bayesian decision making. Prerequisites: MATH 205 or MATH 240 for nonbusiness majors.

Cr. 3. Study of the concepts and application of information systems to managerial decision making. It includes topics such as systems theory, database concepts, data analysis and management, managerial interfaces and control. Prerequisites: completion or concurrent enrollment in MGT 304, MKT 304, FIN 304 and DS 305.

Cr. 3. Student of Decision Support Systems (DSS) and Expert Systems (ES) in a computerized management support system (MSS) orientation, where DSS and ES are treated as systems that provide managerial support. It includes topics such as developing and building DSS using DSS generators and ES using ES shells; various methods of knowledge acquisition and representation; methods of inference, including forward and backward chaining, as they relate to business oriented systems; and the user interface. Prerequisites: DS 110 and completion of or concurrent enrollment in DS 410.

Cr. 3. (Also offered as ECON 493 and MATH 493.) An intensive study of selected topics, methods, techniques, and problems in applied statistics. Prerequisite: DS 340 or ECON 325.
DS 495. Independent Study in Decision Science. Cr. 1-3. An independent research effort that requires approval of a research proposal by a member of the college faculty and the Dean. May not be used as a substitute for a course which covers the proposed research area. Prerequisites: approved research proposal and permission of the Dean.

FINANCE

FIN 282. Personal Finance. Cr. 3. An overview of personal and family financial management with an emphasis on budgets, tax management, credit management, investment selection, insurance selection, retirement planning and estate planning. Business majors may take this course only as a free elective. Prerequisite: sophomore standing.

FIN 290/390/490. Topics in Finance. Cr. 1-3. A detailed examination of selected topics pertinent to the field of finance to be offered when sufficient interest and staffing are available. Permission of the instructor or Dean required. Prerequisites will vary depending on topics being covered.

FIN 304. Financial Management. Cr. 3. A survey of the field of financial management. Major topics include the financial environment, working capital management, the time value of money, financial statement analysis, capital structure, valuation of securities, capital budgeting, assessment of risk, and international finance. Consideration is given to these topics as well as to ethical relationships among the firm's contract holders. Prerequisites: junior standing, ACC 205 and ECON 221.

FIN 330. Management of Financial Institutions. Cr. 3. A study of the function and management techniques within financial institutions with an emphasis on commercial bank management. Areas covered include acquisition of funds, credit extension, liquidity management, and capital structure. Prerequisites: DS 110 and FIN 304.

FIN 410. Finance Theory and Practice. Cr. 3. This course studies theories underlying current financial techniques and analyzes contributions of major authors to finance theory. It further studies applications of these theories to contemporary situations such as risk and return measurement, capital structure, capital budgeting, and dividend policy. Prerequisites: DS 110, FIN 304, and completion of or concurrent enrollment in DS 340.

FIN 420. Investment Management. Cr. 3. A study of security markets and investment types emphasizing methods of analysis for selection of investments. Primary focus is given to the stock and bond markets. Sources of data, portfolio theory, and management of portfolios are discussed. Prerequisites: DS 110 and FIN 304.

FIN 430. International Finance. Cr. 3. Introduction to the functioning and management of the multinational firm in international markets. Coverage includes international markets, financing and management of risk exposure arising during international operations and trade. Prerequisite: FIN 304.

FIN 470. Financial Strategy and Policy. Cr. 3. An analysis of the behavioral strategy of the firm with regard to investment and financing decisions. Evaluation of the risk and return of various financial strategies is emphasized. Prerequisites: FIN 304, FIN 410, DS 340, plus senior standing.

FIN 495. Independent Study in Finance. Cr. 1-3. An independent research effort. It requires approval of a research proposal by a member of the college faculty and the Dean. May not be used as a substitute for a course which covers the proposed research area. Prerequisites: approved research proposal and permission of the Dean.

MANAGEMENT

MGT 200. Sophomore Assessment Center. Cr. 0. This course involves approximately one-half day of assessment activities. During the Assessment Center, students complete a series of exercises, aimed at evaluating their skill level on a variety of behavioral dimensions (e.g., communication, teamwork, problem-solving skills). During most exercises, trained assessors from the business community observe the students. The assessors provide immediate feedback and complete written evaluation forms, which the students receive subsequent to the completion of the assessment center. Prerequisite: junior standing. S/U grade.

MGT 206. Legal Environment of Business. Cr. 3. A study of the legal and regulatory climate that has a major impact on the operation of business entities. Attention is directed not only to legal but also to ethical issues confronting the manager in today's global economy. Prerequisite: sophomore standing. S/U grade.

MGT 290/390/490. Topics in Business. Cr. 1-3. A detailed examination of selected topics pertinent to the field of business to be offered when sufficient interest and staffing are available. Permission of the instructor or Dean required. Prerequisites will vary, depending on topics being covered.

MGT 300. Junior Assessment Center. Cr. 0. This course involves approximately one-half day of assessment activities building on the exercises in MGT 200. During this Assessment Center, students complete a series of exercises, aimed at evaluating their skill level on a variety of behavioral dimensions (e.g., communication, teamwork, problem-solving skills). During most exercises, trained assessors from the business community observe the students. The assessors provide immediate verbal feedback and complete written evaluation forms, which the students receive subsequent to the completion of the assessment center. Prerequisite: junior standing. S/U grade.

MGT 304. Management and Organizational Behavior. Cr. 3. Includes an overview of traditional functions of management but builds on elements of organizational theory and the behavioral sciences. Emphasis on developing interpersonal communication skills and leadership for the improvement of individual and group performance in the total organizational environment. Prerequisites: junior standing, ACC 205 and ECON 221.

MGT 310. Managing Human Resources. Cr. 3. An introduction to the activities common to the field of human resource management, including human resource planning, job analysis, recruitment, selection, orientation and career development, compensation and benefits, health and safety, performance appraisal and discipline, training and development, and labor-management relations.

MGT 315. Leadership and Interpersonal Skills. Cr. 3. Describes the nature, dynamics, and parameters of various leadership approaches, with emphasis being placed on contemporary models of leadership. Also examines the role of interpersonal skills in leader effectiveness. This course should assist future managers in developing the interpersonal skills they will need in different leadership roles.

MGT 320. Small Business Management and Entrepreneurship. Cr. 3. The study and the applications of the essential managerial factors of various types of small business, including organizational, environmental and personal factors. It includes exposure to sources of information and assistance for the small business person. Prerequisites: MGT 304, FIN 304 and MKT 304.

MGT 325. Human Resource Development. Cr. 3. This course focuses on enhancing individual and organizational success through human resource development (HRD) activities. Three major HRD approaches-training, employee development, and career management-are explored. Contemporary HRD issues such as cross-cultural preparation, diversity, developing high potential employees, career plateauing, work and family, and skills obsolescence are examined.

MGT 381. Cooperative Education in Business Administration I. Cr. 2. The first of two sequential full-time, paid work experiences in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires a satisfactory supervisor evaluation and submission of a final written report in approved form. Prerequisites: junior standing and approval of both the CBA Internship and Assessment Center Coordinator and the Director of the Career Center. S/U grade.

MGT 382. Cooperative Education in Business Administration II. Cr. 2. The second of two sequential full-time, paid work experiences in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires a satisfactory supervisor evaluation and submission of a final written report in approved form. Prerequisites: completion of MGT 381 and approval of both the CBA Internship and Assessment Center Coordinator and the Director of the Career Center. S/U grade.

MGT 391. Internship in Business Administration I. Cr. 2. First work experience in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires a satisfactory supervisor evaluation and submission of a final written report in approved form. Internships may be part time or full time; paid or unpaid; and taken in the fall, spring, or summer terms. Prerequisites: junior standing and approval of the CBA Internship and Assessment Center Coordinator. S/U grade.

MGT 392. Internship in Business Administration II. Cr. 2. Second work experience in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires a satisfactory supervisor evaluation and submission of a final written report in approved form. Internships may be part time or full time; paid or unpaid; and taken in the fall, spring, or summer terms. Prerequisites: completion of MGT 391 and approval of the CBA Internship and Assessment Center Coordinator. S/U grade.

MGT 393. Internship in Business Administration III. Cr. 2. Third work experience in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires a satisfactory supervisor evaluation and submission of a final written report in approved form. Internships may be part time or full time; paid or unpaid; and taken in the fall, spring, or summer terms. Prerequisites: completion of MGT 392 and approval of the CBA Internship and Assessment Center Coordinator. S/U grade.
College of Business Administration

Cr. 3. A study of various areas of the law that affect the commercial community. The scope of this course includes the law of contracts, sales, agency, business associations, and issues related to corporate social responsibility. Prerequisite: MGT 206.

MGT 420. Small Business Institute.  
Cr. 3. Practicum in which the student participates as a member of a team of student consultants on actual small business cases referred by the Small Business Administration. Enrollment is limited by the number of cases referred by the SBA. All consultant activities are performed by the students, under general supervision of the faculty coordinator. Prerequisite: approval of the SBI Coordinator.

MGT 425. Managing Change in Contemporary Organizations.  
Cr. 3. Focuses on managing change in today's highly dynamic organizational environments. The course explores approaches for managing technology, structure, work teams, and organizational culture within a sociotechnical systems theory framework. Prerequisite: MGT 304.

Cr. 3. A survey course dealing with opportunities and problems encountered in formulating global strategy and managing multinational operations. Focuses on financial, legal, and trade frameworks of international transactions and the major issues involved in managing international business operations.

MGT 440. Cross-Cultural Management.  
Cr. 3. A study of the emerging field of international management as the practice of applying management concepts and processes in a uniquely multinational environment. Emphasis will be placed on culture-based behaviors and cross-cultural comparisons along with the theories which underpin international management principles. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirement. Prerequisite: MGT 304 or permission of the instructor.

MGT 460. Ethics in Business.  
Cr. 3. An analysis of the moral bases for ethical decisions and ethical aspects of behavior in business leadership. Contemporary business conduct is examined in an ethical context. Prerequisite: senior standing.

MKT 320. Sales Management.  
Cr. 3. A study of the managerial functions of professional selling to the industrial or organizational buyer. An overview of organizational, economic, and psychological influences on the organization's buying decisions. Emphasis on field and territorial management, recruitment and training of the sales force, sales forecasting techniques, routing, and personal selling principles. Prerequisites: MKT 304 and completion or concurrent enrollment in DS 340.

Cr. 3. An analysis of the psychological, social and economic influences which affect attitude formation and decision-making processes of consumers. An overview of the research methods used for determining characteristics of buyers is included. Prerequisite: MKT 304.

MKT 361. Retailing.  
Cr. 3. A study of the contemporary environment of the retailing industry with emphasis on techniques utilized in store location, merchandising, promotion and control. Prerequisites: junior standing and MKT 304.

MKT 362. Advertising.  
Cr. 3. An introductory level course taught from a marketing perspective. The areas of market analysis, campaign planning and strategy, media selection and design of advertisements are emphasized. The legal environment of advertising and the role of the different service institutions, such as advertising agencies, also are covered. Prerequisites: junior standing and MKT 304.

MKT 430. International Marketing.  
Cr. 3. A study of managerial marketing policies and practices of organizations marketing their products and services in foreign countries. Specific stress will be placed on the relationship between marketing strategy, market structure, and environment. Prerequisite: MKT 304.

MKT 470. Marketing Strategy and Policy.  
Cr. 3. Capstone marketing course primarily for students with a concentration in Marketing. It is taught from a marketing management perspective involving case analysis of product policy, pricing, distribution and promotional mix. Prerequisites: senior standing, MKT 304 and two of the following: MKT 310, MKT 320, MKT 330.

MKT 495. Independent Study in Marketing.  
Cr. 1-3. An independent research effort. It requires approval of a research proposal by a member of the college faculty and the Dean. May not be used as a substitute for a course which covers the proposed research area. Prerequisites: approved research proposal and permission of the Dean.

MARKETING

MKT 290/390/490. Topics in Marketing.  
Cr. 1-3. A detailed examination of selected topics pertinent to the field of marketing to be offered when sufficient interest and staffing are available. Permission of the instructor or Dean required. Prerequisites will vary depending on topics being covered.

MKT 304. Marketing Management.  
Cr. 3. Emphasis is placed on the ethical application of marketing concepts, theories and principles which relate to product policy, promotional mix decisions, distribution and logistical planning and pricing. The international business environment, including social, cultural, economic, political-legal, competitive and technological variables, is studied and compared with American markets. The areas of buyer analysis, the utilization of marketing information systems, and market planning and analysis are also stressed. Prerequisites: junior standing, ACC 205 and ECON 221.

MKT 310. Marketing Research.  
Cr. 3. A course designed to introduce the marketing student to the areas of marketing research and marketing information systems. Coverage of marketing information system design and the marketing research process, including research design and sources of information, data collection methods, sampling procedures, data analysis and interpretation, and the formal research report. Prerequisites: MKT 304 and completion or concurrent enrollment in DS 340.

College of Business Administration
COLLEGE OF ENGINEERING

Objectives. Engineering is the art of applying scientific and practical knowledge to the solution of problems for the benefit of society. The College of Engineering seeks to educate leaders who are prepared for lifelong learning and the pursuit of professional excellence in using their special knowledge and skills in service to society. The curriculum integrates scientific and engineering principles, practical laboratory and computer experiences, engineering design experiences culminating in major design project, and liberal learning in the tradition of Christian church-related colleges and universities. Special emphasis is given to communication skills, the humanities, and the social sciences. Students are enriched by participation in the academic, social, cultural, and spiritual life that is central to the Christian academic tradition at Valparaiso University. Graduates are prepared both for direct entry into the practice of engineering and for graduate school.

The Academic Program. Bachelor of Science degrees may be earned in civil, electrical, and mechanical engineering. The goals of each of these programs are to build a strong foundation in mathematics, the natural and engineering sciences, and to provide introduction to engineering design during the early portion of the program. This is followed by courses with increased emphasis on engineering applications, design, teamwork, and interdisciplinary activity. Instruction in engineering design is integrated throughout the curriculum so that students advance toward higher levels of competence culminating in a senior design project which emphasizes formulation of problem statements and criteria, consideration of alternatives, and communication of results. The laboratory program provides for firsthand observation of physical phenomena, experience in data collection and analysis, verification of designs, written and oral communication, and teamwork. The use of computers in both the classroom and laboratory is fully integrated into the curriculum starting in the first semester. All engineering students are required to have a personal computer in their residence and are expected to use computer productivity tools and professional engineering software.

History. As early as 1873, civil engineering was taught at Valparaiso University. Sisters Ethel and Merle McCall were the first women engineering graduates each receiving Civil Engineering degrees in 1915. Full four-year programs were established in 1920, with offerings in Civil, Electrical and Mechanical Engineering. During World War II, with the shortage of male students, the program was temporarily reduced to two years at Valparaiso University followed by two years at Purdue University. After the war, four-year engineering programs were reinstated on campus through the initiative of students who raised funds and then designed and built a new engineering laboratory building. The first post World War II degrees were offered in 1951 in Civil, Electrical and Mechanical Engineering. The Indiana Delta Chapter of Tau Beta Pi, the national engineering honor society, was chartered in 1963.

In 1968 the College of Engineering moved to the newly-constructed Gellersen Engineering and Mathematics Center. This facility was provided through the generosity of the late William A. Gellersen of Oakland, California. The building, located on the eastern edge of the campus, contains faculty offices, classrooms and laboratories of the College of Engineering.

The optional cooperative education program was initiated in 1983 and the first group of cooperative education students graduated in 1986.

Admission Requirements. The requirements for admission of first year students to the College are listed on pages 213-214 of this catalog. Students who do not meet the mathematics and science requirements for admission to the College of Engineering may be admitted to the Pre-Engineering program in the College of Arts and Sciences as described on page 49. Upon satisfactory completion of the required mathematics and science courses, they may request admission to the College of Engineering.

Transfer Students. Academic work taken at other institutions is evaluated for advanced standing granted by the Registrar. The appropriate departmental chair then determines which credits apply toward the major and a Statement of Equivalence form is completed. Transfer students are urged to communicate with the chair of the department in which they hope to major prior to formally applying for admission to obtain a preliminary assessment of the duration of their course of study.

Accreditation. Bachelor of Science degree programs in Civil, Electrical, and Mechanical Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

The Freshman Program. First year engineering students begin their program of study with a schedule of courses that is the same for all engineering majors. Work in a selected major begins in the second semester. A Freshman Program Coordinator serves as the academic adviser for all first-semester freshmen.

The Exploring Engineering course, led by the Freshman Program Coordinator, is an integral part of the first-semester program. This course has two primary objectives. The first is to provide career guidance in selecting or confirming the student's choice of civil, electrical or mechanical engineering as a major. The second is to connect the required calculus and physics courses to real engineering issues and problems by introducing engineering applications of computers using professional engineering software tools.

Presentations by faculty from each of the engineering programs are designed to provide information about the practice of engineering and the career opportunities in each of the engineering disciplines. Class assignments provide introductory experiences with the theory and applications of each of the majors. To help each student confirm the choice of major, the course concludes with a three week workshop experience in the selected engineering major. Participation in selected professional extracurricular activities is required. Introductions to time management and study skills are provided by the Student Counseling and Development Center staff.

Mentors chosen from upper-division engineering students assist the faculty and offer peer instruction in the computer labs. Students who are not prepared to take both calculus and physics in their first semester may begin the freshman program by enrolling in GE 101. This course will achieve the first objective of career guidance. When students are ready for calculus and physics, they can complete the
freshman requirement by taking GE 102. Completion of GE 101 and GE 102 is equivalent to completion of GE 100.

Placement. The Career Center arranges on-campus interviews with a variety of employers who are interested in hiring graduates. Comprehensive services are also available to assist students seeking employment opportunities with organizations which do not interview on campus. Assistance is also available within and outside of the College of Engineering for students wishing to find graduate study opportunities, cooperative education positions, summer employment, or part-time employment during the school year. Resource libraries provide information on employment and graduate school opportunities throughout the United States.

Professional Registration. Registration of those who wish to practice professional engineering is required by law in each of the states in the District of Columbia. The purpose of the law is to assure the general public that those professing to practice engineering have been examined and accepted by a State Board of Examiners. College graduates will be able to more fully practice engineering if they are registered as a Professional Engineer (PE). Registration requires passing the Fundamentals of Engineering Examination typically followed by four years of engineering experience, after which the candidate can sit for the PE Examination. Senior engineering students are provided with information about the licensing process and an invitation, which they are urged to accept, to take the Fundamentals of Engineering Examination at Valparaiso University during the spring semester of their senior year.

Computers. Computers are very important tools for the professional practice of engineering. For engineering students, having their own computer is as important as having their own textbooks and calculator. All engineering students are required to have an approved personal computer available for use in their residence. An interest-free loan program is available to aid students who purchase a computer through Valparaiso University at the time that they enroll. Information about this program and the range of approved computers is supplied as part of the admissions process.

In addition to their own computer, students have direct access to a wide variety of computing environments, e-mail, and the Internet on the rapidly growing campus computer network. Networked computers for general student use are located in Gellersen Hall, Schnabel Hall, and most residence halls. In addition, work stations and personal computers with applications software and engineering design, analysis, and simulation are located in the Gellersen Computer Center and various engineering laboratories. Residence halls have direct Ethernet local area network access from individual rooms. Modern access is available from any location.

Senior Project. All students in their senior year are required to complete a major design project. Students are organized into teams to plan, organize and execute multidisciplinary design projects under the supervision of a faculty advisor.

Student Professional Organizations. To heighten student interest in the profession of engineering and in activities of the student body of the College of Engineering, the College provides general interest programs for all engineering students and sponsors social and recreational activities. Upon selecting a major, students are encouraged to join the student chapter of the respective professional society. The American Society of Civil Engineers, the Institute of Electrical and Electronic Engineers, the American Society of Mechanical Engineers, and the Society of Women Engineers all have active student chapters on campus. Junior and senior students who have distinguished themselves by high scholarship, exemplary character, unselfish activity, and breadth of interest in their profession may be elected to membership in Tau Beta Pi, the national engineering honor society.

Student Advisement. The Freshman Program Coordinator is the academic advisor for first-semester students. When a major is declared, the student is assigned to an academic advisor from that department's faculty. Majors are usually declared in the second semester of the freshman year.

College Organization. Administratively, the College is an instructional unit under the direction of the Dean of Engineering. The individual programs in Civil Engineering, Electrical Engineering, and Mechanical Engineering are directed by the faculties of the three engineering departments under the leadership of Department chairs. The Freshman Program Coordinator and the Coordinator of Cooperative Engineering Education report to the Dean.

Special Programs of the College of Engineering

Cooperation. The ABET accredited cooperative education program provides a special five-year program for personal and career development which integrates classroom theory with career-related work experience. Employment in a salaried position allows students to gain valuable experience, to test career interests and to apply classroom knowledge in an environment related to their professional degree areas. The cooperative education student acquires engineering experience through a planned and supervised program which provides alternating periods of full-time campus study and full-time off-campus employment with one of over 100 co-op partners throughout the United States. The initial work assignment normally starts during the summer after the sophomore year. Academic credit is earned for each work period. Students typically complete four or five summer and semester work sessions with the same employer, which results in an annuity. A new official transcript "ABET Co-op Ed Criteria Met". The Cooperative Education Program enhances the graduating engineer's placement status and some employers count the time served as a cooperative education student toward fringe benefits provided to employees.

Interdisciplinary Studies. Programs can be arranged to meet special needs or interests of students studying engineering at Valparaiso University. Students interested in career fields such as electromechanical, biomedical or chemical engineering or medicine can enrich their engineering programs by careful selection of technical and free electives. These programs involve replacing technical and free electives with courses from other disciplines. Each student plans a program of studies in consultation with a faculty advisor and must secure approval of the Dean of the College. Upon graduation the student receives a Bachelor of Science degree in Civil, Electrical, or Mechanical Engineering.

Manufacturing Management Minor. A minor in Manufacturing Management is offered jointly by the College of Engineering and the College of Business Administration (see page 207 for requirements).

Double Degree Program. Some students wish to obtain a Bachelor of Arts or Bachelor of Science degree in the College of Arts and Sciences or the College of Business Administration in addition to their degree in engineering. In general, this will require an additional year or more of study. To earn two degrees, students must earn 162 credit hours and attain a grade point average of at least 2.0 as well as complete all other graduation requirements for each degree. Students desiring double degrees must have their schedules approved by the Deans of both colleges involved. Further information may be obtained from the Deans.

Majors and Minors. A student may earn a major or minor in other colleges of the university by satisfying catalog course and credit requirements for the major or minor. Each major or minor will require at least one course of at least three credits above any and all course work presented for the engineering degree. The use of engineering courses that are cross-listed or have equivalent course content with courses required for the major or minor is established by official action of the other college. The major or minor will be noted on the student's official academic record.

Honors College. Students invited to participate in the program of Christ College take all required engineering courses as well as courses required in the honors program. Because Christ College courses replace certain non-engineering courses, the College of Engineering-Christ College combination normally requires only four years for completion. Christ College programs provide an enriched program in the humanities and satisfy General Education Requirements for the engineering program. Academic advisers are assigned for both the College of Engineering and Christ College. Engineering students invited to join Christ College are strongly urged to accept the invitation. Additional information is available from the Dean of Engineering.

International Experiences. Various optional programs are available through which engineering students may obtain improved understanding of and appreciation for the history, geography, language, culture and engineering practices of other nations. In addition to the study opportunities described on pages 12-13 and 18-24 of this
catalog, engineering students are permitted to arrange an international cooperative education assignment.

**ACADEMIC POLICIES Graduation Requirements.** Students must complete all of the prescribed engineering curricula as described in the departmental listings. These prescribed courses satisfy the curriculum requirements of the Accreditation Board for Engineering and Technology. The evaluation of advanced standing of transfer students in the Statement of Equivalence is based on meeting these requirements. The Department Chair or Freshman Program Coordinator may waive the requirement for GE 100. The requirement will be replaced with a free elective. For the Civil Engineering program, students who have 75 or more hours of advanced standing may substitute a course satisfying the Academic Area Studies elective for the Upper Level Theology course.

In addition to other requirements set forth on pages 223-224 of this catalog, the student’s grade point average must meet the following minimums for all work taken at Valparaiso University:

1. A cumulative GPA of 2.00 in all work.
2. A cumulative GPA of 2.00 in the engineering major.
3. A cumulative GPA of 2.00 in General Education courses applicable to the desired degree.
4. A cumulative GPA of 2.00 in mathematics, science, general engineering, and other engineering courses outside the major that are applicable to the desired degree.

**Academic Deficiency.** Students whose cumulative resident Grade Point Average in any of the four categories listed above under Graduation Requirements falls below 2.00 are considered academically deficient. Such students may be denied the privilege of continuing their studies by being suspended from College of Engineering unless they succeed in improving the quality of their work to the satisfaction of the faculty during the following semester. These students are considered to be on probation and may be required by their department to take certain prescribed courses and meet specific standards in order to continue their enrollment in the college. It is the policy of the College of Engineering that suspended students may not request reinstatement for one calendar year.

**Guest Policy.** A student not enrolled in the College of Engineering may take one engineering course per semester or summer session on the written recommendation of the Freshman Coordinator or a department chair and with the approval of the Dean of Engineering. Students who have been suspended from the College of Engineering and are presently enrolled in one of the other colleges may not enroll in an engineering course unless they have completed the course at an earlier date with an unsatisfactory grade (C– or lower). Courses that are cross-listed with departments in the other colleges and taken while on academic suspension may not be used to satisfy College of Engineering degree requirements.

**Other Academic Policies.** University academic policies are described on pages 219-2123 of this general catalog. The College of Engineering has established additional academic policies and procedures consistent with University Policies and tailored to the needs of the engineering program. Policy and procedure statements are available in the Dean’s office and are included in the student academic guide.

**GENERAL ENGINEERING**

See page 46 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

**GE 100. Exploring Engineering.**

Cr. 3. An introductory course emphasizing the engineering profession, academic success skills and computer literacy. Topics include productivity tools, an intensive survey of the various engineering professions, and academic survival skills. Applications of physics and calculus to engineering problems. Corequisites: MATH 131, PHYS 141.

**GE 101. Exploring Engineering—The Profession.**

Cr. 1.5. An introductory course emphasizing the engineering profession and academic success skills. This course is offered in conjunction with GE 100 for students without the necessary corequisites for that course. Completion of GE 101 and GE 102 is equivalent to completion of GE 100.

**GE 102. Exploring Engineering—Computer Skills.**

Cr. 1.5. Computer applications of physics and calculus to engineering problems. Completion of
be life-long learners; and the need to hold paramount the safety, health, and welfare of the public.

Design is an important component of the civil engineering program. This includes distinguishing difference between analysis and design, exposing students to various design methodologies, requiring students to develop and evaluate (using economical, social, safety, and engineering criteria) alternative solutions to realistic engineering problems. The design experience (individually and in teams) is spread throughout the program and is incorporated into both classroom and laboratory exercises. In the sophomore year, students are introduced to fundamental aspects of the design process in courses in materials and transportation engineering. In the junior year, additional aspects of the design process and use of building codes are introduced in courses in structural design, soil and foundation engineering, and the sequence in environmental engineering. In the senior year, students are exposed to the design process in courses in structural design and electives. The design experience culminates with a major comprehensive design project in which students, working in teams, bring together their accumulated knowledge of design and analysis to solve a realistic engineering problem. Laboratory work is designed to develop written communication skills, ability to analyze and interpret experimental data, self-confidence, and to aid in the interpretation and application of classroom theory. The majority of introductory courses in the five branches of civil engineering require a laboratory component. In addition, field exercises in surveying are an essential component of a student’s education. The civil engineering department has modern, well-equipped laboratories in materials engineering, fluid mechanics, soil mechanics, and environmental engineering.

College of Engineering

CIVIL ENGINEERING

See page 46 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

CE 151. Construction Surveying.

2+3, Cr. 3. A study of the science and art of relative spatial measurements for engineering purposes. Special emphasis is placed on the theory of error, use of surveying instruments, and field practice in transit-tape traversing, leveling and route surveying.

CE 202. Statistical Applications in Civil Engineering.

Cr. 3. An introduction to the planned procurement, property description, analysis, and presentation of engineering data. A study of the continuous and discrete distributions most commonly encountered in engineering quality control, experimentation, and design. Emphasis is given to the Central Limit Theorem and its applicability in many areas of Civil Engineering, to the estimation of the sample size required to achieve desired levels of confidence in the conclusions reached by the engineer, to probabilistic methods used in experimental design and quality control, and to a variety of applications of probabilistic theories in engineering practice and research. Prerequisite: MATH 132 or 152.

CE 212. Materials Engineering.

2+3, Cr. 3. Study of the mechanical and physical properties of construction materials. Introduction to concrete mix design and non-destructive testing techniques. Laboratory experiments include the measurement of strength using mechanical gages and electrical resistance strain gages; testing of ductile and brittle materials subjected to axial, bending, torsional forces; introduction to creep, impact and hardness testing; stability of columns. A design project is required, as well as written reports. Prerequisite: CE 215 (may be taken concurrently).


Cr. 3. Also offered as ME 215 and PHYS 215. Concepts of stress and strain, stress-strain relationships, states of plane stress and strain at a point; elementary analysis of stress distributions and deformations for axial loading of prismatic members, torsional loading of circular shafts and bending of beams, combined loading; plastic elastic action, and an introduction to statically indeterminate problems. Prerequisites: GE 109.

CE 253. Transportation.

Cr. 3. Introduction to transportation engineering from a multimodal perspective. Topics include transportation systems, survey of various transportation modes, and planning and design of highways, railroads, air facilities, waterways, and pipelines. Prerequisite: CE 151 or consent of instructor.

Cooperative Education. Students may request to substitute up to six credits of GE 481 through GE 483 for the career enhancement electives.

Career Enhancement Electives. These six credits must be consistent with the student's written statement of career goals. Approval by the student's adviser and department chair is required.

Academic Area Studies Elective. At least six credits from among the list of Academic Area Studies 2 through 29 (see page 41), an upper-level Christ College course, or an International Studies Program course. Other courses not included in this list may be proposed for approval by the Dean of Engineering.

Mathematics/Science Elective. These four credits will be satisfied by MATH 253, PHYS 142, BIO 210, CHEM 221, GEO 104, MET 372 or other selections approved by the student's adviser and department chair.

Civil Engineering Electives. These nine credits must be selected from the list of Civil Engineering electives provided.

Electives. Courses which fulfill civil engineering elective requirements are indicated with a superscript.

Engineering Science Elective. The engineering science elective requirement may be met by taking one of the following courses: ECE 221, ECE 281, ME 370, ME 462, ME 463, ME 468.
CE 364. Environmental Engineering I.
2+3, Cr. 3. Introductory study of water treatment and supply, wastewater collection and treatment common to rural and metropolitan areas. Laboratory principles and methods related to safety, sampling, data analysis, and measurement of selected physical, chemical, and biological characteristics of water and wastewater are introduced. Field trips are required. Prerequisites: CE 334 and CHEM 230.

CE 365. Environmental Engineering II.
Cr. 3. Introductory study of solid and hazardous waste management and air pollution control. Study of solid and hazardous waste properties, sources, composition, magnitude, and regulations. Engineered solid waste management, functional elements will be introduced. Landfilling methods including siting and modern landfill designs will be studied. Introduction to air pollution sources, quality, meteorology, atmospheric dispersion modeling, and control methods. Field trips are required.

CE 399. Junior Honor Studies in Civil Engineering.
Cr. 1-3. Independent study of an advanced topic in Civil Engineering. Available by invitation only. Prerequisite: approval by the Civil Engineering Department.

CE 415. Structural Analysis II.*
Cr. 3. Analysis of statically indeterminate structures using matrix methods. An introduction to the dynamics of structures. Prerequisite: CE 315.

CE 417. Structural Design II.
Cr. 3. Principles of the design of reinforced concrete structures. Design includes flexural members, compression members, one-way slabs and footings, ACI Strength Design Method. Prerequisite: CE 315.

CE 418. Structural Design III.*
Cr. 3. Analysis and design of masonry structural system components. The use of appropriate specifications in design. Design projects may be required. Taught in alternate years. Prerequisite: CE 315.

CE 436. Water Resources Engineering.*
Cr. 3. Application of the principles of fluid mechanics to analysis and design of water resources projects. Topics include open channel hydraulics, hydroelectric power, economic analysis, dams, spillways, river navigation, flood control, and water law. Prerequisite: CE 334 or ME 373.

CE 457. Traffic Engineering.*
Cr. 3. Fundamental traits and behavior of road users and their vehicles. Characteristics of a free-flowing traffic stream; capacity and level of service of urban and rural highways, signals and signalized intersection capacity; traffic speeds, volumes, signing and marking; accidents and safety. Taught in alternate years. Prerequisite: CE 253 or consent of instructor.

CE 466. Environmental Engineering Design.
Cr. 3. A basic overview of remediation of contaminated soil and groundwater at hazardous waste sites and implications of design investigations, management of field investigations, environmental risk assessments, probabilistic applications, feasibility studies, innovative remedial design techniques, and case studies. Advanced air pollution control techniques. Oral and written reports and field trips are required. Prerequisites: CE 320 and CE 332.

CE 490. Topics in Civil Engineering
Cr. 2-4. Seven weeks or semester. The investigation of civil engineering topics of special interest. Prerequisite: consent of the Chair of the Department. Offered upon sufficient demand.

CE 494. Senior Design Project.
Cr. 2+2, Cr. 3. Student teams participate in the planning, analysis and design of integrated and realistic civil engineering projects. Knowledge gained in previous courses is used to incorporate the ethical, legal, societal, multicultural, economical, financial, aesthetic, and environmental aspects in the solution. In addition, the elements of management and communications are involved. The course may include field trips and lectures by practicing professionals. Oral and written reports are required.

CE 499. Senior Honor Studies in Civil Engineering.
Cr. 1-3. Independent study of an advanced topic in civil Engineering. Available by invitation only. Prerequisite: approval by the Civil Engineering Department.

Note: The following course description is included for students who matriculated prior to the fall of 1987. This courses will not be offered after academic year 1999-2000.

CE 496. Independent Study Project II.
1-3, Cr. 2. (1 cr. Design) A continuation of the project selected in CE 495.

Note: The following course description is included for students who matriculated before the fall of 1999. This course will not be offered after academic year 2001-2002.

Cr. 3. Presentation of management concepts, knowledge, and skills to help the technically prepared engineer to be immediately productive as a practitioner. Self management, forms of communication, management of others, organizational management, project management, total quality management, engineering economics, business accounting methods, legal issues, ethics, design, the role and selection of consultants, construction management, and marketing. Prerequisite: senior standing in the College of Engineering.

Electrical and Computer Engineering

Professors Gelopulos (Chair), Hart, Kraft, Luecke; Associate Professor Goodman; Assistant Professors E. Johnson, Tougaw.

The Electrical Engineering program is designed to provide a variety of career opportunities in areas as diverse as aerospace, communications, computers, manufacturing and power. These are challenging careers that require an understanding of mathematics, basic science, engineering science and modern computer tools. Electrical engineers must exhibit the ability to use this knowledge to design systems and components to meet specific needs. In addition, they must communicate effectively and function on multidisciplinary teams often involving non-technical people and issues. Engineers must understand their ethical and professional responsibilities and must be prepared for lifelong study in a dynamic profession in which their role will continuously evolve.

Design is introduced in the sophomore year. Digital design courses introduce the formulation of design problems and the use of computer aided design tools. During the junior year, students refine these design elements while studying digital filter design, electronics, and the design of hardware to interface with imbedded microprocessors. Students also participate in modest group design projects. During the senior year, students begin a systematic study of the design process and apply the design skills developed in earlier courses to an interdisciplinary capstone project which requires the consideration of realistic constraints, formal project management, the building and testing of a design prototype and thorough documentation.

Significant emphasis is placed on the testing of circuits and systems in the laboratory. The following laboratory facilities are supported by the department. The electric circuits laboratory serves for basic instruction in electrical circuits concepts and the use of instruments. The electronics and power laboratory supports intermediate level work in digital and analog systems. This large facility also includes equipment for rotating machines, power electronics and power systems. The digital signal processing laboratory is used to study digital filtering systems. The computer laboratories contain a network of workstations, PCs, peripherals, and embedded microprocessor software and hardware development systems. Design teams use the project laboratory to build and test their prototypes.

ELECTRICAL ENGINEERING

Graduation Requirements. The following courses and electives are required to earn the Bachelor of Science in Electrical Engineering degree. Either the Electrical Emphasis or the Computer Emphasis must be completed in its entirety. A typical plan of study for each semester is published in the Student Guide to University Life.

CORE 110 The Human Experience .................. 5 Cr.
CORE 115 The Human Experience .................. 5 Cr.
ENGL 200 Literary Studies .................. 3 Cr.
MATH 131 Analytic Geometry and Calculus I ........ 4 Cr.
MATH 132 Analytic Geometry and Calculus II ........ 4 Cr.
MATH 234 Differential Equations and Linear Algebra .................. 4 Cr.
MATH 235 Calculus III .................. 4 Cr.
PE 101-105 Physical Education .................. 1 Cr.
PHYS 141 Mechanics and Heat .................. 3 Cr.
PHYS 141L Experimental Physics I .................. 1 Cr.
PHYS 142 Electricity, Magnetism, Waves .................. 3 Cr.
PHYS 243 Atoms and Nuclei .................. 3 Cr.
Theology Foundational Level Elective .................. 3 Cr.
Academic Area Studies Elective .................. 3 Cr.
Socila Analytic Elective .................. 3 Cr.
Free Elective .................. 3 Cr.
GE 100 Exploring Engineering .................. 3 Cr.
GE 301 Principles of Engineering Practice .................. 3 Cr.
GE 497 Senior Design Project I .................. 1 Cr.
GE 498 Senior Design Project II .................. 3 Cr.
ECE 110 Exploring Electrical Engineering Laboratory .................. 2 Cr.
ECE 111 Exploring Electrical Engineering Laboratory .................. 1 Cr.
ECE 155 Algorithms and Programming I .................. 3 Cr.
ECE 202 Computational Techniques for Electrical Engineers .................. 3 Cr.
ECE 221 Digital System Design .................. 3 Cr.
ECE 222 Advanced Logic Design .................. 3 Cr.
ECE 263 Linear Circuit Theory .................. 4 Cr.
ECE 264 Linear Circuit Theory II .................. 4 Cr.
ECE 315 Electrical and Computer Junior Laboratory .................. 1 Cr.
ELECTRICAL AND COMPUTER ENGINEERING

See page 46 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.


ECE 111. Exploring Electrical Engineering Laboratory. 0-3 Cr. A complement to ECE 110, with emphasis on laboratory technique and the characteristics of electrical devices. Co-requisite: ECE 110.

ECE 155. Algorithms and Programming. Cr. 3. (1 Cr. Design) Introduction to the design of sequential and concurrent algorithms. Software engineering principles and practices relating to program design and implementation. Concurrent issues and practices for parallel algorithm design. Students cannot receive credit for both CS 157 and ECE 155.

ECE 202. Computational Techniques for Electrical Engineers. Cr. 3. Introduction to the solution of electrical and computer engineering problems using computers. In addition to structured languages, important software packages such as MATLAB and Pspice are used. The course is designed to complement ECE 283 and MATH 234.

ECE 221. Digital Logic Design. 2.5-1.5, Cr. 3. (Also offered as Computer Science. 220.) An introduction to digital logic concepts, including the analysis and design of combinational and sequential digital circuits.

ECE 222. Advanced Logic Design. 2.5-1.5, Cr. 3. A continuation of ECE 221 that includes the design of MSI and LSI digital circuits using high-level description languages. Implementation of designs in programmable logic devices (PLA, PLD, FPGA). Co-requisites: ECE 222 with a minimum grade of C.

ECE 258. Algorithms and Abstract Data Types. 2-2, Cr. 3. (Also offered as CS 161.) A continuation of ECE 155 with emphasis on developing more skills in complex program development and data structures. Topics include stacks, queues and linked lists. Students design and write intermediate sized programs. Co-requisite: ECE 258 or CS 157.

ECE 263. Linear Circuit Theory I. 3.5-1.5, Cr. 4. A study of the fundamental methods and the elements of circuit analysis with emphasis on analytical and computer-aided methods. AC and DC analysis, transients and complete response. Instantaneous and average power. Introduction to instrumentation and measurement in electrical circuits. Co-requisite: MATH 131.

ECE 264. Linear Circuit Theory II. 3.5-1.5, Cr. 4. A continuation of ECE 263. The complex frequency plane; resonance, coupled circuits, two-port parameters. A study of polyphase analysis; Fourier series; Fourier transform; Laplace transform. Laboratory methods of circuit measurement. Co-requisite: ECE 263 with a minimum grade of C.

ECE 281. Fundamentals of Electrical Engineering. 2.5-1.5, Cr. 3. (Also offered as PHYS 281.) A study of the fundamental methods of electrical circuit analysis with emphasis on computer-aided analysis. AC and DC circuits, operational amplifiers. Laboratory exercises emphasize measurement techniques and reinforce lecture material. Not applicable to a degree in electrical engineering. Co-requisite: MATH 131.

ECE 290. Sophomore Project. Cr. 1.3. An independent research, development, or design project done under the supervision of a faculty member. Co-requisite: sophomore standing.

ECE 299. Sophomore Honor Studies in Electrical and Computer Engineering. Cr. 1.3. Independent study of an advanced topic in electrical engineering. Available by invitation only. Prerequisite: approval by the Electrical and Computer Engineering Department.

ECE 315. Electrical and Computer Junior Laboratory. 0-3, Cr. 1. The study of computer topics such as UNIX operating systems, HTML, CGI, PERL and JAVA. Co-requisite: ECE 155.

ECE 320. Microprocessor Applications. 3-3, Cr. 4. (Also offered as PHYS 320.) The application of microprocessors to embedded system design, emphasizing the interaction of hardware and software design. Use of assembly language programming to interface external hardware to an 8-bit microcontroller. Co-requisite: ECE 221.

ECE 333. Abstractions and Paradigms in Programming. Cr. 3. (Also offered as CS 233.) A detailed study of data structures and programming paradigms. Special attention will be given to pertinent methodologies such as object-oriented design and generic programming. Students design and write complex programs. Prerequisites: MATH 132 and ECE 263.

ECE 352. Electronics. 3-3, Cr. 4. (Also offered as PHYS 342.) An introduction to semiconductor theory and the design and analysis of electronic circuits. Topics include diodes, bipolar and field effect transistors, single-stage and multistage amplifiers, frequency response, and feedback. Computer simulation is included as an analysis and design tool. Laboratory experiments emphasize evaluation of circuit performance and measurement techniques. Co-requisite: ECE 264.

ECE 355. Organization of Programming Languages. Cr. 3. (Also offered as CS 255.) Formal language constructs as exhibited in a variety of programming languages. Topics include syntax and basic characteristics of grammars, parsing, data types and structure run-time consideration. Corequisites: ECE 333.

ECE 357. Algebraic and Discrete Structures I. Cr. 3. (Also offered as MATH 267.) An introduction to mathematical reasoning, algorithm analysis and the concepts that provide a mathematical foundation for computer science. Topics include a review of sets, relations, functions and matrices; proof techniques, including mathematical induction; counting techniques; difference equations; applications and elementary analysis of iterative and recursive algorithms. Prerequisite: ECE 155.


ECE 372. Energy Conversion and Transmission. 2.5-1.5, Cr. 3. A study of electromagnetic devices with emphasis on the principles and operating characteristics of transformers and rotating electrical machines. Fundamentals of electric power transmission and protection systems. Prerequisite: ECE 263.

ECE 390. Junior Project. Cr. 1.3. An independent research, development, or design project done under the supervision of a faculty member. Prerequisite: junior standing.

ECE 399. Junior Honor Studies in Electrical and Computer Engineering. Cr. 1.3. Independent study of an advanced topic in electrical engineering. Available by invitation only. Prerequisite: approval by the Electrical and Computer Engineering Department.

ECE 424. Computer Architecture. Cr. 3. The description, organization, and design of computer hardware to perform effectively. Instruction set design, caches, pipelining, and microprogramming. Prerequisite: ECE 222.

ECE 429. VLSI Design Principles and Tools. Cr. 3. An introduction to the fundamental principles of CMOS digital integrated circuit design. Extensive use of CAD tools for layout and simulation. Techniques for speed and size trade-off are studied. Prerequisites: ECE 222 and 342.
ECE 430. Electromagnetic Field Theory.  
Cr. 3. The study of fundamental laws of static and dynamic electric and magnetic fields using vector methods. Topics include transmission lines, Maxwell's equations and electromagnetic radiation. Prerequisite: MATH 253.

Cr. 3. Theory of interconnected digital systems including information flow control by packet and circuit-switching techniques and standards for communication between network nodes. Prerequisite: ECE 250.

ECE 452. Digital Signal Processing.  
2.7+1, Cr. 3. The study of digital signal processing techniques using computer methods. Topics include digital signal processing techniques, the introduction to control systems design. Prerequisite: ECE 360.

ECE 463. Communication Theory.  
Cr. 3. Methods of transmission of information by electrical signals through channels limited by bandwidth and additive noise. The characteristics of standard analog and digital modulation schemes such as AM, FM, PAM, PCM are investigated and related to their channel requirements. Prerequisites: ECE 465 and ECE 360.

ECE 468. Probability for Electrical Engineers.  
Cr. 3. Basic discrete and continuous probability theory with applications, sampling, correlations and regression, multiple random variables and introduction to stochastic process. Prerequisites: ECE 264 and MATH 253.

ECE 471. Power Electronics.  
2.7+1, Cr. 3. A course in the application and design of power semiconductor circuits. Topics include rectifiers, AC controllers, inverters and switched-mode power supplies. Prerequisites: ECE 264 and ECE 342.

ECE 490. Topics in Electrical and Computer Engineering.  
Cr. 1-3. The investigation of electrical engineering or computer engineering topics of special interest. Prerequisite: consent of the Chair of the Department.

ECE 499. Senior Honor Studies in Electrical and Computer Engineering.  
Cr. 1-3. Independent study of an advanced topic in electrical engineering. Available by invitation only. Prerequisite: approval by the Electrical and Computer Engineering Department. 

Note: The courses listed below will be offered during the 1999-2000 academic year to accommodate students who are finishing their degree programs under 1998-1999 and older catalogs.

ECE 394. Design Project Planning.  
0.5+1.5, Cr. 1. Students form design teams in which they study, propose, plan, organize, discuss and document an engineering design project with the advice of a faculty member. Oral and written reports are required. Corequisite: ECE 390.

ECE 497. Design Project.  
1+3, Cr. 2. Student design teams carry out a design, document and review their work, and construct a prototype. A continuation of ECE 394.

ECE 498. Design Project Reporting.  
0.5+1.5, Cr. 1. Testing, evaluation, reporting and documentation of design projects are carried out by students. A continuation of ECE 497.

Mechanical Engineering

Professors Schoech, Steffen  
(Chair); Associate Professors Doria, Palumbo; Assistant Professors Barrett, Malicky; Visiting Professor Bhonsle.

The practice of mechanical engineering includes a wide range of technical activities in the areas of energy conversion, automatic control of engineering processes, and the design, development and manufacture of mechanical components and systems. Mechanical engineering contributes to almost every aspect of our society.

The Mechanical Engineering program prepares the individual for leadership roles on multidisciplinary teams that will tackle both technical and non-technical issues. A curriculum solidly comprised of fundamental engineering course work and rich also in the humanities and social sciences is an essential element in the preparation process. Studies in humanities and social sciences provide the elements of a broad liberal arts education and serve to foster the overall welfare of the engineering profession. As such, selection of liberal arts courses must reflect a rationale or fulfill an objective appropriate to the engineering profession and the University's educational objectives.

Consistent with this plan, one foundation level Theology elective is required above the first year, integrated core program.

Courses within the Mechanical Engineering program are sequenced to first build a firm foundation in mathematics and the basic sciences. Advanced courses follow in the engineering sciences and culminate in a major design experience during the final year of study. Engineering science courses encourage the creative application of mathematical and scientific principles to the solution of practical engineering problems. A thorough understanding of engineering science topics allows the engineer to solve problems involving mechanical, thermal and electrical systems. Engineering science topics are presented in courses such as material science, mechatronics, electric circuits, manufacturing, mechanical measurements, fluid mechanics, thermodynamics, heat transfer and many others.

The Mechanical Engineering program seeks to involve the student in engineering design activities throughout the curriculum. Simple design problems are presented in lower-level courses. As the student develops more advanced analytical skills, rigorous design methodologies are discussed and progressively comprehensive problems are solved. Small-group design projects sharpen creative problem-solving skills and advocate teamwork by emphasizing both individual and collective responsibilities. Project presentations and reports require proficiency in oral and written communication. Alongside technical issues, design activities address economic, safety, environmental and social factors.

The program is structured so students may select any combination of mechanical engineering electives and be assured that ABET degree requirements are satisfied. A graduate of the Mechanical Engineering program at Valparaiso University is fully qualified to enter industry as a practicing engineer or to pursue an advanced degree in graduate school.

Mechanical Engineering Laboratories. The Mechanical Engineering program contains a significant laboratory component which is closely correlated with lecture courses. There are eight primary laboratory facilities within the Department. Laboratory facilities are also used in senior design projects. Personal computers with appropriate hardware and software are available in the laboratories for mechanical design, to acquire and analyze data, to control hardware, and to report results in graphic and tabular form.

The Mechanical Measurements and Mechatronics Laboratory complements instruction in the use of standard measurement equipment, calibration techniques, computer data acquisition and the study of mechanical and electrical systems. The Energetics Laboratory provides the opportunity to study systems such as spark ignition and compression ignition engines. Investigations into the laws governing the conversion and transfer of energy are conducted in the Heat Transfer and Gas Dynamics Laboratory which includes many unique pieces of laboratory equipment. The Automatic Control Laboratory is used to conduct experiments with simulated process systems and the associated instrumentation to control these processes.

The Manufacturing Process and Systems Laboratory supports instruction in methods and theory of metal working, automation, product design and development, and the design, operation, and control of production systems. In addition to metal cutting, forming, welding, grinding and inspection equipment, this laboratory contains the Integrated Manufacturing and Design Facility with Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) software, Computer Numerically Controlled (CNC) machine tools, robots, vision systems, and a student designed and implemented Flexible Manufacturing System (FMS). The Material Science Laboratory contains equipment for conducting a variety of materials experiments including impact, tension, creep, cold working, hardness and non-destructive testing. Special emphasis is placed upon modification of material properties by heat treatment. Metallurgical specimens are prepared and examined. The Experimental Stress Laboratory provides primary equipment for strain/stress analysis including electrical resistance strain gages and photoelasticity. The Vibrations Laboratory contains mechanical and electrical vibration excitation and measuring devices along with equipment to perform modal analysis and sound measurement.

The following courses and electives are required to earn the Bachelor of Science in Mechanical Engineering degree. A typical plan of study for each semester is published in the Student Guide to University Life.

CORE 110 The Human Experience 5 Cr.
CORE 115 The Human Experience 5 Cr.
CHEM 115 Essentials of Chemistry 4 Cr.
ENG 200 Literary Studies 3 Cr.
MATH 131 Analytic Geometry and Calculus I 4 Cr.
MATH 132 Analytic Geometry and Calculus II 4 Cr.

College of Engineering
Manufacturing Management Minor.
This interdisciplinary minor is described on page 207.

Mechanical Engineering Electives.
Twelve credits of mechanical engineering courses are to be selected to provide areas of individual study emphasis. Up to three credits may be substituted for students taking an approved technical concentration outside the College of Engineering. Only three hours of ME 499 course credits may be applied as an ME elective. Courses which fulfill mechanical engineering elective requirements are indicated with a superscript 3.

MECHANICAL ENGINEERING
See page 46 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

ME 104. Computer-Aided Design........ 3 Cr.
ME 209. Mechanics-Dynamics............ 3 Cr.
ME 225. Computer Languages and Applications........... 3 Cr.
ME 252. Materials Science.............. 3 Cr.
ME 253. Manufacturing Processes........ 3+3 Cr. 
ME 254. Computer-Aided Design........ 3 Cr.
ME 255. Manufacturing Processes........ 3+3 Cr.
ME 256. Computer-Aided Design........ 3 Cr.
ME 257. Manufacturing Processes........ 3+3 Cr.
ME 258. Computer-Aided Design........ 3 Cr.
ME 259. Manufacturing Processes........ 3+3 Cr.
ME 260. Computer-Aided Design........ 3 Cr.
ME 261. Manufacturing Processes........ 3+3 Cr.
ME 262. Computer-Aided Design........ 3 Cr.
ME 263. Manufacturing Processes........ 3+3 Cr.
ME 264. Computer-Aided Design........ 3 Cr.
ME 265. Manufacturing Processes........ 3+3 Cr.
ME 266. Computer-Aided Design........ 3 Cr.
ME 267. Manufacturing Processes........ 3+3 Cr.
ME 268. Computer-Aided Design........ 3 Cr.
ME 269. Manufacturing Processes........ 3+3 Cr.
ME 270. Manufacturing Processes........ 3+3 Cr.
ME 271. Computer-Aided Design........ 3 Cr.
ME 272. Manufacturing Processes........ 3+3 Cr.
ME 273. Computer-Aided Design........ 3 Cr.
ME 274. Manufacturing Processes........ 3+3 Cr.
ME 275. Computer-Aided Design........ 3 Cr.
ME 276. Manufacturing Processes........ 3+3 Cr.
ME 277. Computer-Aided Design........ 3 Cr.
ME 278. Manufacturing Processes........ 3+3 Cr.
ME 279. Computer-Aided Design........ 3 Cr.
ME 280. Manufacturing Processes........ 3+3 Cr.
ME 281. Computer-Aided Design........ 3 Cr.
ME 282. Manufacturing Processes........ 3+3 Cr.
ME 283. Computer-Aided Design........ 3 Cr.
ME 284. Manufacturing Processes........ 3+3 Cr.
ME 286. Manufacturing Processes........ 3+3 Cr.
ME 287. Computer-Aided Design........ 3 Cr.
ME 288. Manufacturing Processes........ 3+3 Cr.
ME 289. Computer-Aided Design........ 3 Cr.
ME 290. Manufacturing Processes........ 3+3 Cr.
ME 291. Computer-Aided Design........ 3 Cr.
ME 292. Manufacturing Processes........ 3+3 Cr.
ME 293. Computer-Aided Design........ 3 Cr.
ME 294. Manufacturing Processes........ 3+3 Cr.
ME 295. Computer-Aided Design........ 3 Cr.
ME 296. Manufacturing Processes........ 3+3 Cr.
ME 297. Computer-Aided Design........ 3 Cr.
ME 298. Manufacturing Processes........ 3+3 Cr.
ME 299. Computer-Aided Design........ 3 Cr.
ME 300. Manufacturing Processes........ 3+3 Cr.
ME 301. Computer-Aided Design........ 3 Cr.
ME 302. Manufacturing Processes........ 3+3 Cr.
ME 303. Computer-Aided Design........ 3 Cr.
ME 304. Manufacturing Processes........ 3+3 Cr.
ME 305. Computer-Aided Design........ 3 Cr.
ME 306. Manufacturing Processes........ 3+3 Cr.
ME 307. Computer-Aided Design........ 3 Cr.
ME 308. Manufacturing Processes........ 3+3 Cr.
ME 309. Computer-Aided Design........ 3 Cr.
ME 310. Manufacturing Processes........ 3+3 Cr.
ME 311. Computer-Aided Design........ 3 Cr.
ME 312. Manufacturing Processes........ 3+3 Cr.
ME 313. Computer-Aided Design........ 3 Cr.
ME 314. Manufacturing Processes........ 3+3 Cr.
ME 315. Computer-Aided Design........ 3 Cr.
ME 316. Manufacturing Processes........ 3+3 Cr.
ME 317. Computer-Aided Design........ 3 Cr.
ME 318. Manufacturing Processes........ 3+3 Cr.
ME 319. Computer-Aided Design........ 3 Cr.
ME 320. Manufacturing Processes........ 3+3 Cr.
ME 321. Computer-Aided Design........ 3 Cr.
ME 322. Manufacturing Processes........ 3+3 Cr.
ME 323. Computer-Aided Design........ 3 Cr.
ME 324. Manufacturing Processes........ 3+3 Cr.
ME 325. Computer-Aided Design........ 3 Cr.
ME 326. Manufacturing Processes........ 3+3 Cr.
ME 327. Computer-Aided Design........ 3 Cr.
ME 328. Manufacturing Processes........ 3+3 Cr.
ME 329. Computer-Aided Design........ 3 Cr.
ME 330. Manufacturing Processes........ 3+3 Cr.
ME 331. Computer-Aided Design........ 3 Cr.
ME 332. Manufacturing Processes........ 3+3 Cr.
ME 333. Computer-Aided Design........ 3 Cr.
ME 334. Manufacturing Processes........ 3+3 Cr.
ME 335. Computer-Aided Design........ 3 Cr.
ME 336. Manufacturing Processes........ 3+3 Cr.
ME 337. Computer-Aided Design........ 3 Cr.
ME 338. Manufacturing Processes........ 3+3 Cr.
ME 339. Computer-Aided Design........ 3 Cr.
ME 340. Manufacturing Processes........ 3+3 Cr.
ME 341. Computer-Aided Design........ 3 Cr.
ME 342. Manufacturing Processes........ 3+3 Cr.
ME 343. Computer-Aided Design........ 3 Cr.
ME 344. Manufacturing Processes........ 3+3 Cr.
ME 345. Computer-Aided Design........ 3 Cr.
ME 346. Manufacturing Processes........ 3+3 Cr.
ME 347. Computer-Aided Design........ 3 Cr.
ME 348. Manufacturing Processes........ 3+3 Cr.
ME 349. Computer-Aided Design........ 3 Cr.
ME 350. Manufacturing Processes........ 3+3 Cr.
ME 351. Computer-Aided Design........ 3 Cr.
ME 352. Manufacturing Processes........ 3+3 Cr.
ME 353. Computer-Aided Design........ 3 Cr.
ME 354. Manufacturing Processes........ 3+3 Cr.
ME 355. Computer-Aided Design........ 3 Cr.
ME 356. Manufacturing Processes........ 3+3 Cr.
ME 357. Computer-Aided Design........ 3 Cr.
ME 358. Manufacturing Processes........ 3+3 Cr.
ME 359. Computer-Aided Design........ 3 Cr.
ME 360. Manufacturing Processes........ 3+3 Cr.
2.5+1.5, Cr. 3. (Also offered as ME 458.) Product design/development and production system design are the focus of lectures and a semester-long laboratory experience in which a simple product and its production system are designed and produced. The design, operation, and control of production systems are studied with emphasis on manned and robotic manufacturing system. Open only to business majors in the Manufacturing Management Minor program. Prerequisite: ME 354.

ME 458. Product and Production System Design.**
2.5+1.5, Cr. 3. (Also offered as ME 457.) Product design/development and production system design are the focus of lectures and a semester-long laboratory experience in which a simple product and its production system are designed and produced. The design, operation, and control of production systems are studied with emphasis on manned and robotic manufacturing system. Prerequisite: ME 253.

ME 462. Vibrations.**
2.5+1.5, Cr. 3. Single and multiple degree of freedom systems and continuous media are analyzed with regard to natural frequencies, free, forced and damped vibrations. Practical aspects of vibration isolation, absorption, damping and noise measurement and reduction are considered. Frequency analysis and modal analysis techniques are presented. Prerequisites: Mathematics 234, ME 225, and ME 209.

ME 463. Machine Design I.
2.5+1.5, Cr. 3. The application of specialized topics in mechanics of materials to the design and analysis of machine elements. Topics considered include combined stress, contact stress, stress concentration, fatigue, deflection and theories of failure. Stress principles are applied to springs, bolts, joints and general mechanical elements. Prerequisite: ME 315.

ME 464. Machine Design II.**
2.5+1.5, Cr. 3. A comprehensive study in the design and analysis of belt and chain drives, gearing, gear trains, antifriction and journal bearings. Shaft critical speeds, dynamic balancing and machine dynamics are considered. Prerequisite: senior standing in Mechanical Engineering.

ME 468. Experimental Stress Analysis.**
2.5+1.5, Cr. 3. An introduction to experimental, theoretical, and computational methods for determining stress distributions in structures and machine components. Topics include photomechanics techniques, electrical resistance strain gages, finite element analysis with a review of stress and strain at a point, and biaxial stress-strain relations. Prerequisite: ME 315.

ME 470. Thermodynamics II.
Cr. 3. Continuation of ME 270. Topics include combustion principles and cycle optimization using the second law of thermodynamics. Prerequisites: ME 270 and CHEM 115.

ME 475. Advanced Thermodynamics.**
Cr. 3. The study of advanced topical matter in thermal sciences. Topics to be determined by instructor prior to course offering. Topics may include compressible fluid flow, computational fluid dynamics, or the design of heating, ventilating, and air conditioning systems. Prerequisites: ME 270, ME 373, and ME 376.

ME 478. Heat Power Design.**
2+2, Cr. 3. A design-oriented course using a team approach. Open-ended problems are assigned which involve the synthesis of heat transfer, flow, and energy conversion components. Presentation of oral and written reports is an important part of the course. Prerequisites: ME 270, 373 and 376.

ME 490. Topics in Mechanical Engineering.**
Cr. 2-3. Seven weeks or semester. The investigation of mechanical engineering topics of special interest. Prerequisite: consent of the Chair of the Department. Offered upon sufficient demand.

ME 499. Undergraduate Research in Mechanical Engineering.
Cr. 1-3. Independent study of an advanced topic in Mechanical Engineering. This course may be repeated for additional credit. Available by invitation only. Prerequisite: Approval by the Mechanical Engineering Department.

Note: The following course descriptions are included for students who matriculated prior to Fall 1999. These courses are not expected to be offered after academic year 2001-2002.

ME 495. Senior Design Project I.
1+3, Cr. 2. The application of theoretical and experimental engineering concepts and mathematical principles in the analysis, design or investigation of engineering systems. Design problems in the field of mechanical engineering to be selected by students with the approval of the Mechanical Engineering faculty. Prerequisite: senior classification in Mechanical Engineering.

ME 496. Senior Design Project II.
1+3, Cr. 2. A continuation of ME 495.
College of Nursing

the curriculum is cultivation of the spirit of the University's Christian tradition in the student's quest for excellence in all areas of personal and professional life.

**Graduation Requirements.** In order to realize its objectives, the College holds the students to the following requirements:

**A. Nursing.** A minimum of 57 credit hours in nursing. Courses in which the student is required to earn a grade of C (2.0) or better are marked with an asterisk *. The specific requirements are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 205</td>
<td>Professional Role in Nursing</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 206</td>
<td>Health Assessment</td>
<td>2 Cr.</td>
</tr>
<tr>
<td>NUR 215</td>
<td>Clinical Application of the Professional Role</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>NUR 216</td>
<td>Primary Prevention for Individual, Family and Community Health</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 310</td>
<td>U.S. Health Care System (Social Analysis and U.S. Cultural Diversity)</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 320</td>
<td>Secondary Prevention for the Parent, Child and Adolescent</td>
<td>5 Cr.</td>
</tr>
<tr>
<td>NUR 330</td>
<td>Secondary Prevention for Adult Health I</td>
<td>5 Cr.</td>
</tr>
<tr>
<td>NUR 340</td>
<td>Secondary Prevention in Psychiatric/Mental Health Nursing</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>NUR 410</td>
<td>Tertiary Prevention in the Community</td>
<td>5 Cr.</td>
</tr>
<tr>
<td>NUR 415</td>
<td>Introduction to Nursing Research</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 420</td>
<td>Tertiary Prevention for the Parent, Child and Adolescent</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 430</td>
<td>Secondary Prevention for Adult Health II</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>NUR 435</td>
<td>Tertiary Prevention for Adult Long Lived Adult</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>NUR 440</td>
<td>Tertiary Prevention in Psychiatric/Mental Health Nursing</td>
<td>2 Cr.</td>
</tr>
<tr>
<td>NUR 480</td>
<td>Nursing Management in a Health Care System</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>NUR 480</td>
<td>Final Practicum</td>
<td>4 Cr.</td>
</tr>
</tbody>
</table>

**Total** | 67 Cr.

**B. Arts and Sciences.** A minimum of 57 credit hours from the College of Arts and Sciences. Courses in which the student is required to earn a grade of C (2.0) or better are marked with an asterisk *. The specific requirements are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE 110</td>
<td>The Human Experience I</td>
<td>5 Cr.</td>
</tr>
<tr>
<td>CORE 118</td>
<td>The Human Experience II</td>
<td>5 Cr.</td>
</tr>
<tr>
<td>ENGL 200</td>
<td>Literary Studies</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>THEO</td>
<td>Theological Level Course</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>THEO</td>
<td>Upper Level Course</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**Academic Area Studies Option** (defined on pages 41-42) | 3 Cr. |

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 101-105</td>
<td></td>
<td>1 Cr.</td>
</tr>
<tr>
<td>Global Cultures and Perspectives</td>
<td>3 Cr.</td>
<td></td>
</tr>
<tr>
<td>CHEM 111, 121, or 131</td>
<td>General Chemistry</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>BIO 151 and 152</td>
<td>Human Biology</td>
<td>8 Cr.</td>
</tr>
<tr>
<td>BIO 210</td>
<td>Microbiology *</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>BIO 260</td>
<td>Human Nutrition *</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>PSY 110</td>
<td>General Psychology *</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>PSY 201</td>
<td>Statistical Methods *</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>PSY 330</td>
<td>Child and Adolescent Development *</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

**Total** | 66 Cr.

**C. Electives.** In addition to meeting the requirements in Nursing and Arts and Sciences listed above, the student must present for graduation a sufficient number of electives to bring the total number of credit hours to 126. No more than 6 credits may be baccalaureate nursing credits.

One elective must meet the Academic Area Studies requirement of a three credit course hour in one of the areas listed below:

- Fine Arts or Fine Arts-Literature Foreign Language 102 or 103
- Global Cultures and Perspectives Philosophical and Historical Studies
- Social Analysis

**Note:** No more than four credit hours in applied music, including ensemble, and no more than four credit hours of PE 101-149 may be applied toward a Bachelor of Science in Nursing degree.

**D. Requirements for Admission to Nursing Courses.** For admission to the first nursing course, students must attain a minimum cumulative grade point average of 2.50 and no grade lower than C (2.0) in the courses designated in section B (*) of graduation requirements.

Students are required to present annually evidence of a recent (within the year) physical examination, current immunization (rubella and HBV included), current communicable disease screening (rubella titer, Mantoux test) and current CPR certification or recertification. The College of Nursing does not make arrangements for meeting these requirements.

**E. Progression.** Students must maintain a minimum cumulative grade point average of 2.50 in all course work and 2.50 in the required nursing courses in the nursing major to remain in the College of Nursing. Students must earn a grade of C (2.0) or better in courses designated in sections A and B (*) of Graduation Requirements.

Dismissal from the College of Nursing occurs when a student earns a grade of less than 2.0 in any two of the following courses: required courses with a nursing number, BIO 151, BIO 152, BIO 210, and CHEM 111.

**Note:** Students are responsible for transportation to and from all clinical agencies and for transportation associated with home visits. The College of Nursing uses a variety of accredited health facilities to provide broad clinical experience for students; consequently, access to a car is necessary in most clinical courses.

**Note:** Prerequisites for the following courses are those listed under Requirements for Admission to Nursing Courses and at least sophomore standing, which includes completion of BIO 151, BIO 152, and CHEM 111.

**NUR 205. Professional Role in Nursing.**

Cr. 3. Introduction of person, health, nursing and environment and their interrelationship as the basis for nursing practice. Examines the role of the nurse including caregiver, teacher, researcher, manager, and lifelong learner. Explores the interpersonal skills used in the provision of health care.

**NUR 206. Health Assessment.**

1+3, Cr. 2. Clinical practice in assessment skills of inspection, palpation, percussion and auscultation of the healthy adult. Emphasis is placed on utilizing techniques that assist in an organized and comprehensive health assessment and relating it to the nursing process.

**NUR 215. Clinical Application of the Professional Role.**

2+6, Cr. 4. Clinical application of concepts relevant to professional nursing. Focus is on the use of the nursing process and its framework for assessment, planning, implementing, and evaluating clinical phenomena and the nurses' role as caregiver, manager, teacher, researcher, and lifelong learner. Prerequisite: NUR 205, NUR 206, MATH 110 or placement higher than MATH 110.

**NUR 216. Primary Prevention for Individual, Family, and Community Health.**

2.5+1.5, Cr. 3. Concepts of health promotion and illness prevention are emphasized as they relate to individuals, families, and communities. Prerequisite: NUR 205, NUR 206, MATH 110 or placement higher than MATH 110.

**NUR 260. Transition to Professional Nursing I.**

Cr. 4. Concepts relevant to professional nursing are discussed. Nursing process, interpersonal communication skills, research process, teaching-learning theory, and leadership theories are included. Prerequisite: Registered Nurse Status.

**NUR 261. Transition to Professional Nursing II.**

0+9, Cr. 3. Clinical application of concepts relevant to professional nursing. Prerequisite: concurrent enrollment in NUR 260.

**Note:** Prerequisites for the following courses are NUR 205, 206, 215, and 216 (260 and 261), and at least junior standing, which includes completion of BIO 210.

**NUR 310. U.S. Health Care Systems.**

Cr. 3. Presents an overview of the health care delivery system in the United States and the professional role within that system. The impact of social and political events on the health care system is examined including health policy.
Cr. 3. Provides the student with an opportunity to explore health issues in a global perspective. Health issues that may be discussed are basic needs for health, nutrition, preventing diseases, health care delivery, and preparation of health care workers. No prerequisite. May be used to fulfill the Global Cultures and Perspectives component of the General Education Requirements.

3+6, Cr. 5. Study and practice of the nursing care of families in a secondary care setting. Emphasis is placed on responses to childbirth, pediatric illness, and treatment.

NUR 322. Women and Their Health.  
Cr. 3. A study of women's health with a scope beyond childbearing and childrearing that promotes a comprehensive view of the health care needs of women. Health concerns of women are examined both within the medical model and a self-help framework. Emphasis is placed on the promotion and support of women's involvement in decision making and responsibilities for their health. No prerequisite. May be used for the Gender Studies Minor.

NUR 330. Secondary Prevention for Adult Health I.  
3+6, Cr. 5. Study and practice of the nursing care of young, middle and long-lived adults. The course examines the responses of adults of all ages and their families to health problems and treatment.

3+3, Cr. 4. Study and practice in the nursing care of clients experiencing psychiatric disturbance with an emphasis on early diagnosis and treatment.

Cr. 3. An introduction to dimensions of aging with special emphasis on biologic aging and the developmental, functional, and environmental factors that influence adaptability to age-related changes. Open to all students with advanced standing. May be used for the Human Aging Minor.

NUR 381. Cooperative Education in Nursing.  
Cr. 1-3. Application of the concepts of professional nursing in a health care setting. Requires satisfactory work performance for a preselected employer and submission of a final project. Prerequisite: NUR 215. May be taken on S/U basis.

NUR 390/490. Topics in Nursing and Health Care.  
Cr. 1-3. An open topic course which may cover specialized areas of nursing, current concepts, nursing concerns of delivery of health services. The course may be taken more than once for a maximum of six credit hours provided there is not duplication of topics. Prerequisites: junior or senior standing, consent of the instructor and the adviser.

NUR 395/495. Independent Study in Nursing.  
Cr. 1-6. Independent study to be approved by the adviser and the guiding nursing professor. Prerequisite: junior or senior standing in the Nursing major. May be taken on S/U basis.

Note: Prerequisites for the following courses are NUR 310, 320, 330, 340 and at least senior standing.

NUR 410. Tertiary Prevention in the Community.  
3.5+4.5, Cr. 5. Current issues and trends in home care, public health, school health, and occupational health are examined as they relate to community health nursing. Community assessment and epidemiological concepts provide the basis for identifying populations at risk. Comprehensive health care is provided to clients/families/groups in a variety of community settings with an emphasis on tertiary prevention.

NUR 415. Introduction to Nursing Research.  
Cr. 3. A study of scientific research as applied to nursing. An overview of the scientific method, the purpose of research, research problems, and approaches to solving research problems are examined.

Cr. 3. Study of the family at risk. The course focuses on the care of children with long term health problems, special needs, or life-threatening illnesses, legal and ethical issues of reproductive health care, and psychosocial problems of women and families.

NUR 430. Secondary Prevention for Adult Health II.  
3+3, Cr. 4. A continuation of the study and practice of nursing care for young, middle, and long-lived adults and their families experiencing complex health problems.

NUR 435. Tertiary Prevention for the Adult/Long Lived Adult.  
3+3, Cr. 4. Study and practice of rehabilitation and gerontological nursing. Emphasis is on tertiary prevention for adults who have long-term health alterations. Field Trip.

NUR 440. Tertiary Prevention in Psychiatric/Mental Health Nursing.  
Cr. 2. Study of the nursing care of clients experiencing severe and persistent psychiatric disturbances. Emphasis is placed on promoting the optimal level of function.

NUR 450. Nursing Management in a Health Care System.  
Cr. 3. An overview of management theories and roles as applied by a nurse manager in a health care setting. Issues relevant to socialization of the student into the professional role of the nurse are discussed.

Cr. 3. Explores theories, metaphors, and structures which can be used to analyze and understand health care organizations. The potential influence of various environments on health care organizations is addressed.

NUR 470/570. Finance and Marketing for Health Care Delivery.  
Cr. 3. An analysis of financial and marketing concepts as they relate to issues of health care delivery. Application of these concepts to real-world situations is emphasized.

Cr. 3. An analysis of the ethical, legal, and professional issues involved in managing licensed and unlicensed health care personnel. Issues of motivation, conflict resolution, performance appraisal, and collective bargaining are analyzed.

NUR 480. Professional Role Practicum.  
0+12, Cr. 4. Focuses on role transition from student to professional nurse facilitating synthesis of knowledge and experience in a clinical setting. Students are required to take the NLN Comprehensive Nursing Achievement Test (minimum satisfactory score is 136) and the NLN Comprehensive Nursing Achievement Test for Baccalaureate Nursing Students at the College of Nursing before graduation. Fee $75.00 (includes DRT). Prerequisite: satisfactory completion of all required nursing courses. Corequisite NUR 450. Only offered on S/U basis.
INTERDISCIPLINARY PROGRAMS

The University encourages cooperation among the various branches of learning and is pleased to announce these programs which are designed to enhance the student’s major area of study. These interdisciplinary minors may be presented in partial fulfillment of the Major Field Requirements for the Bachelor of Arts degree (see page 42), with the exception of the Manufacturing Management Minor which is intended for business and engineering students only.

Restrictions. No more than two courses for these minors may overlap with other requirements whether within general education or within courses in any majors or other minors, except for the College of Engineering.

Applied Statistics Minor

Administrative Committee: Associate Professors Hull (Mathematics and Computer Science, Chair); Ozgur (Decision Science), Shingleton (Economics), Strasser (Decision Science).

Objectives. The applied statistics minor utilizes an interdisciplinary perspective to develop the student’s ability to perform statistical analysis. The impact of statistics profoundly affects society today. Statistical tables, survey results, and the language of probability are used with increasing frequency by the media. Statistics also has a strong influence on physical sciences, social sciences, engineering, business, and industry. The improvements in computer technology make it easier than ever to use statistical methods and to manipulate massive amounts of data. This minor will prepare students to analyze data in their professional work. In addition, it will also provide background for those students who intend to pursue work in applied disciplines.

Administration. This minor is jointly administered by the College of Arts and Sciences and the College of Business Administration.

Requirements. A total of 15 credit hours is required to complete this minor.

Students who intend to complete this minor are strongly encouraged to consult their academic adviser before they begin their junior year. Depending on their major, students are advised to include specific courses as electives in their plans of study. Students should consult their academic advisers to determine which requirements these other courses fulfill. There may not be more than a total of two course overlap with other requirements whether within general education or within a major or a minor.

Students in the minor must complete the requirements for a degree program and the following courses:

- DS 205 Business Statistics
- MATH 240 Statistical Analysis
- DS/MATH 340 Statistics for Decision Making or ECON 325 Econometrics 3 Cr.
- MATH 320 Mathematical Models in the Life and Social Sciences 3 Cr.
- MATH 344 Applied Probability and Statistical Decision Theory 3 Cr.
- ECON/DMS/MATH 493 Seminar in Applied Statistics 3 Cr.

Decision Science majors may not use DS/MATH 340 to fulfill the minor requirements.

Bioethics Minor

Administrative Committee: Professors Bachman (Philosophy), Meilaender (Theology); Associate Professors Hicks (Biology) and Kennedy (Philosophy, Chair).

Objective. This minor is intended for students who plan to complete a Master in Business Administration degree in the future or who desire a more advanced preparation in a business minor than is provided by the Liberal Arts Business Minor. This is a comprehensive business minor covering all the major areas of course work to prepare one for entering a masters program.

Students intending to transfer into the College of Business Administration need a course in calculus in addition to these courses.

Requirements. A total of 34 credit hours is required to complete this minor.

Required Courses

- PHIL 125 The Good Life
- or THEO 240 Christian Theology and the Moral Life
- or BIO 151 Biomedical Ethics
- or BIO 152 Biomedical Ethics
- or MATH 124 Biotechnology
- or BIO 157 Human Biology
- or THEO 341 Biomedical Ethics
- BETH 490 Bioethics Seminar
- MATH 124
- or MATH 131
- or MATH 151

Electives

- BIO 270 Genetics
- PHIL 150 Logic and Critical Thinking
- PHIL 230 Environmental Philosophy and Ethics
- PHIL 250 Political Philosophy
- PHIL 290 Philosophical Topics (when relevant)
- PHIL 335 Ethical Theory
- THEO 344 Theology and the Scientific World
- THEO 346 Contemporary Moral Issues
- THEO 490 Topics in Theology (when relevant)

BETH 490. Selected Topics in Bioethics. Cr. 3. A seminar course in which a current issue in bioethics or a major thinker in bioethics will be examined. Prerequisite: completion of at least 15 credit hours of coursework in courses approved for the minor including PHIL 341 or THEO 341.

Business Administration Minor

Administration. This program is administered by the College of Business Administration.

Objective. This minor is intended for students who plan to complete a Master in Business Administration degree in the future or who desire a more advanced preparation in a business minor than is provided by the Liberal Arts Business Minor. This is a comprehensive business minor covering all the major areas of course work to prepare one for entering a masters program.

Requirements. A total of 15 credit hours is required to complete this minor.

Required Courses

- ACC 205 Financial Accounting
- ACC 206 Managerial Accounting
- ECON 241 Principles of Economics - Micro
- ECON 222 Principles of Economics - Macro
- DS 205 Business Statistics
- FIN 304 Financial Management
- MGT 206 Legal Environment of Business
- MGT 304 Management and Organizational Behavior
- MKT 304 Marketing Management

MATH 124 is a prerequisite for DS 205, but MATH 131 or 151 can be substituted for the requirement for this minor only.

The prerequisite for MGT 304 is PSY 110.
Environmental Studies Minor

Administrative Committee: Professors Arkkelin (Psychology), Janke (Geography and Meteorology); Associate Professors Al-Jobeh (Civil Engineering), Bradley (Chemistry), Singleton (Economics); Assistant Professors Eberhardt (Biological, Chair), J. Knox (Geography and Meteorology), Luther (Mathematics and Computer Science), Morris (Physics and Astronomy).

Objective. This minor will broaden the experiences of students with traditional majors in the College of Arts and Sciences by exposing them to approaches used by various disciplines and sectors of society that are attempting to solve complex environmental problems.

Requirements. A total of 16 credit hours is required to complete this minor.

General Education
For non-science majors the General Education requirements for a natural science should be fulfilled with at least:

BIO 172 Diversity of Life 4 Cr.
CHEM 111 Introduction to Chemistry 4 Cr.
GEO 104 Geomorphology 4 Cr.

Required Courses
BIO 370 Human Environmental Biology or GEO 260 Environmental Conservation 3 Cr.
ECN 210 Environmental Economics and Policy 3 Cr.
PHIL 230 Environmental Philosophy and Ethics 3 Cr.
One of the following 3 Cr.
ENGL 390 Topics: Environmental Literature GEO 210 Topics: Human Impacts on the Environment

Elective Courses
HIST 225 Alternative Perspectives of United States History: Racial Minorities and Mainstream America or ENGL 365 American Ethnic Literature 3 Cr.

Film Studies Minor

Administrative Committee: Professors Byrne (English), Falkenstein (Foreign Languages and Literatures), J. Knox (Geography and Meteorology); Associate Professors Venturrelli (Sociology), Walton (Social Work, Chair).

Objectives. The Film Studies minor offers an interdisciplinary perspective on race, ethnicity, and culture, especially on the nature of historical and social constructs that define group and individual experiences, attitudes, and identities. The focus of the minor will be on the following North American ethnic groups: African-American, Chicano/Latino, Native American, and Asian American. The objectives of the minor have two complementary components. One, more narrowly academic, aims at helping students develop critical thinking using a multicultural perspective with reference to their own backgrounds and those of others, and with materials from within and without the traditional canon. The other, more social and experiential, involves becoming familiar with and appreciating diversity among students and the larger community. Both aim at providing knowledge and understanding which will help students reach across racial and cultural barriers and equip them to function effectively, both professionally and personally, in a multicultural and multiracial world.

Requirements. A minimum of 15 credit hours constitutes the minor.

Program Core

HIST 225 Alternative Perspectives of United States History: Racial Minorities and Mainstream America or ENGL 365 American Ethnic Literature 3 Cr.

Elective Courses
ECN 233 Economics of Race and Gender 3 Cr.
ENGL 365 Fiction by American Women (designated sections) 3 Cr.
GEO 200 American Ethnic Geography 3 Cr.
GEO 274 North American Indian on Film 3 Cr.
HIST 322 Slavery, Abolitionism, and Secessionism 3 Cr.
HIST 323 Civil War and Reconstruction 3 Cr.
MUS 101 Introduction to Music 3 Cr.
SOCW 210 Social Welfare: Policy and Services 3 Cr.

A second course from one of these three areas may be counted toward the minor. Other options include a special topics course (e.g., Film and Religion) approved by the Chair of the Committee.

Film and Literature Area. Offered by the Department of English and the Department of Foreign Languages and Literatures: ENGL 390, FLF 250, FLFR 250, FLS 250. These are special topics courses which from time to time offer appropriate topics, such as Shakespeare on Film, The Novel and Film, Storytelling in Film and Literature. These courses scrutinize both similarities and differences in the handling of a theme and show how literary analysis may be used in understanding the cinema.

Film and Society Area. Offered by the Department of History and the Department of Political Science: HIST 393, POLS 490 (Film and Politics). These courses consider film from the viewpoint of the historian and the social scientist, emphasizing the use of social-historical themes in film and the effect of film on society and history.

History of Film Area. Offered by the Department of Foreign Languages and Literatures, the Department of History and Christ College: FLGR 260, HIST 390, CC 300. Topics such as History of the German Film, History of the American Film and Film in Asia are offered. These courses consider the historical development of film art and the film industry in the context of one or more national traditions of cinema.

Gender Studies Minor

Administrative Committee: Professors J. Moore (Economics), J. Moore (Theology); Associate Professors Bhattacharya (English, Chair), Corazzio (Art), Esmer (Psychology), Logothetis (Nursing), Rubchak (History), Sandock (English); Assistant Professor Merchant (Social Work).

Objectives. The Gender Studies minor offers an interdisciplinary perspective on the lives of women and men, especially on the nature of social and cultural constructs that give meaning to the biological difference of sex.
The fact that persons are male and female takes on a complex of meaning that can be explored through study of literature and the arts, religion, history, society and social institutions, the professions, human psychology and demographics, and life sciences. This program, by including courses that study women in culture, society, and history, and that include the best of a growing body of feminist theory and research, also intends to help correct a tradition of scholarship and teaching that has ignored the contributions and concerns of women. Overall, the program will give both men and women a better sense of identity and possibility, and will foster greater understanding of the complex ways in which we, for good and for ill, are influenced by culture and society.

**Requirements.** A minimum of 15 credit hours (normally five courses) constitutes a minor. Each student must take GNST 201, Introduction to Gender Studies, plus one course in social or life sciences and one course in the humanities or fine arts. The remainder of the program (normally two courses) are elective. All courses should be chosen from a list of courses approved each year by the committee. Regularly offered courses approved by the committee include:

**Core Requirement**

- GNST 201 Introduction to Gender Studies  3 Cr.

**Social and Life Sciences**

- ECON 233 Economics of Race and Gender  3 Cr.
- PSY 390 Topics: Psychology of Women  3 Cr.
- SOCW 390 Women: Social Support and Developmental States  3 Cr.
- SOC 220 The Family  3 Cr.
- NUR 322 Women and Their Health  3 Cr.

**Humanities and Fine Arts**

- ART 311 Art History and Feminism  3 Cr.
- ART 318 Nineteenth Century European Art  3 Cr.
- ENGL 390 Women's Writing/Women's Lives  3 Cr.
- HIST 390 Topics: The Great Witchcraft Delusion  3 Cr.
- THEO 317 The New Testament in its Cultural Environment  3 Cr.
- THEO 326 History of Women in the Church  3 Cr.
- THEO 343 Theology of Marriage and Sexuality  3 Cr.
- CC 300 Love and Friendship  3 Cr.
- CC 300 Inventing the Body  3 Cr.

- GNST 201, Introduction to Gender Studies. Cr. 3. An introductory course exploring the issues in gender construction within our society together with the ways that gender issues have affected the various disciplines within the university. This course is intended to introduce the student to the courses in the gender studies minor as a foundation for studying the issues related to gender in the other courses included in the minor.

Many additional courses for the minor will be offered as topics courses and departmental seminars, each of which must be approved and will be publicized by the administrative committee each year. Students wishing to use a course not listed above must have the course approved by the administrative committee prior to enrolling in the course.

### Human Aging Minor

**Administrative Committee:**

Associate Professors G. Evans (Biology), Nelson (Psychology), Pepa (Nursing, Chair); additional faculty from Sociology, Social Work, and Theology.

**Objectives.** The Human Aging minor offers an interdisciplinary perspective on the nature of the aging process and the needs of older adults. Aging involves a complex set of changes that involve biological and psychological processes, as well as the role of the older individual in society. The premise of the program is that these changes are best understood and explored in an interdisciplinary context. As the average human lifespan grows longer and the proportion of elderly people in our country increases, study in human aging will become very important to those seeking to understand and render service to our society. Individuals interested in careers in the biomedical or social sciences who are interested in working with older adults will find this minor to be an essential part of their preparation.

**Requirements.** A minimum of 18 credit hours constitutes a minor. In addition to the core program courses, at least two elective classes (6 credit hours) must also be taken. Acceptable elective classes include the courses listed on the Elective Courses list. Other University courses such as experiential learning and special topical courses may also be allowed as elective classes if they are deemed by the Administrative Committee to have a primary focus on issues related to human aging.

Students wishing to use a course not listed on the Elective Courses list to meet elective requirements for the minor must have the course approved by the Administrative Committee prior to enrolling in the course. Examples of classes which may qualify include: PSY 485 (Psychology Practicum), SOCW 390 (Social Work Colloquium), and SOC 386 (Internship in Sociology).

**Program Core**

- PSY 332 Psychology of Adulthood and Aging  3 Cr.
- SOC 327 Aging in American Society  3 Cr.
- THEO 359 Theology of Aging  3 Cr.
- NUR 361 The Aging Process  3 Cr.

**Elective Courses**

- BIO 260 Human Nutrition  3 Cr.
- SOCW 410 Analysis of Social Policy  3 Cr.
- THEO 354 Understanding Death and Dying  3 Cr.
- THEO 353 Studies in Theology and Practice (when topic is appropriate)  3 Cr.
- NUR 310 U.S. Health Care Systems  3 Cr.

### Liberal Arts Business Minor

**Administrative Committee:**

Associate Professors Reichardt (Accounting, Co-Chair), David Schroeder (Decision Science, Co-Chair), Steiger (Physical Education, Co-Chair).

**Objective.** The objective of the Liberal Arts Business Minor is to introduce nonbusiness majors to the functional areas of business administration. This program is especially appropriate for students who plan to enter the job market after graduation with a traditional major from the College of Arts and Sciences.

**Required Courses**

- ECON 221 Economics - Micro  3 Cr.
- ACC 205 Financial Accounting  3 Cr.
- ENGL 300 Introduction to Professional Writing  3 Cr.
- ACC 206 Managerial Accounting  3 Cr.
- ECON 222 Economics - Macro  3 Cr.
- MGT 206 Legal Environment of Business  3 Cr.
- MGT 304 Management and Organizational Behavior  3 Cr.
- MKT 304 Marketing Management  3 Cr.
- FIN 304 Financial Management  3 Cr.

### Manufacturing Management Minor

**Administrative Committee:**

Professor Schoech (Mechanical Engineering, Co-Chair), Associate Professors Ozgur (Decision Science, Co-Chair), Strasser (Decision Science).

**Objectives.** This interdisciplinary minor program is designed to provide the opportunity for students to focus their study in manufacturing planning and control. It will prepare students for entry level positions in manufacturing and the related areas of quality control, product design and development, production system design, and production scheduling and control. It complements a major area of study in either engineering or business.

**Administration.** This minor is jointly administered by the College of Engineering and the College of Business Administration. It is limited to students in either of these two colleges.

**Requirements.** A total of 16 credit hours is required to complete this minor. Students who intend to complete this minor are strongly encouraged to consult their academic adviser and a member of the minor administrative committee before they
Interdisciplinary Programs

begin their junior year. A cumulative grade point average of 2.00 or better in the minor is required to earn this minor.

Students are advised to include specific courses as electives in their plans of study. Students should consult their academic advisers to determine which requirements these other courses fulfill.

Business students must complete these courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS 305</td>
<td>Production/Operations Management</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>DS 320</td>
<td>Management Science</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>DS 340</td>
<td>Statistics for Decision Making</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ACC 320</td>
<td>Cost Accounting</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ME 354</td>
<td>Manufacturing Processes</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>ME 457</td>
<td>Product and Production System Design</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

The 16 credits earned for the minor by business students may be applied toward the 125 credits required for graduation.

Decision Science majors may not use DS/MATH 340 to fulfill the minor requirements.

Engineering students must complete these courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS 305</td>
<td>Production/Operations Management</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>DS 320</td>
<td>Management Science</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ME 253</td>
<td>Manufacturing Processes</td>
<td>4 Cr.</td>
</tr>
<tr>
<td>ME 456</td>
<td>Manufacturing System Design</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>ME 458</td>
<td>Product and Production Systems Design</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

Three credits of these courses may not be used to satisfy any of the minimum credit hours required for the completion of an engineering degree and may not be used to satisfy any other major or minor requirements. For mechanical engineering majors, ME 253 is required and both ME 456 and ME 458 may also be used to satisfy the mechanical engineering electives requirement.

Political Communication Minor

Administrative Committee:
Professor Baas (Political Science, Chair); Professor Balkema (Political Science); Associate Professor Kocher (Communication); Assistant Professor Neff (Communication).

The Political Communication Minor is a joint program offered through the Departments of Communication and Political Science. The focus is on the electoral process and the role of media in political life. It is intended to address the interests and needs of students considering a career as political reporters, or a career in political life, either as candidates or employees in political organizations. Additionally, it would facilitate the development of skills necessary for effective political action by citizen participants.

Students electing this minor will have access to the Pentium workstation in the Department of Communication, which is available for student projects involving the Internet, as well as access to general campus computing facilities. The global Internet provides excellent resources in political science, communication, and journalism.

Program requirements. A total of 18 credit hours is required for this minor. The required courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 110</td>
<td>Introduction to Internet Communication</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 386</td>
<td>Internship</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>COMM 389</td>
<td>Mass Media Law and Ethics</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>POLS 220</td>
<td>State and Local Politics in the United States</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>POLS 270</td>
<td>Political Behavior</td>
<td>3 Cr.</td>
</tr>
<tr>
<td>POLS 361</td>
<td>Public Policy</td>
<td>3 Cr.</td>
</tr>
</tbody>
</table>

Kretzmann Hall

David L. Rowland, Ph.D., Dean

The program of graduate studies was initiated by Valparaiso University in 1963 to serve a variety of educational needs, including those of residents of Northwest Indiana. The schedule of courses is structured to meet the needs of part-time and most full-time students.

More than 1600 students have received a master's degree since the inception of this program. Since many of these alumni reside and work in Northern Indiana, the University has, through this program, made a major contribution to the life of the larger community in which it lives.

The following degrees are offered: Master of Arts with concentrations in Counseling, Clinical Mental Health Counseling, and School Psychology; Master of Education and Master of Science in Special Education; Master of Music; Master of Science in Nursing; and Master of Arts in Liberal Studies with concentrations in English, History, Human Behavior and Society, Theology, and Theology and Ministry. Details concerning these and other postgraduate non-degree programs may be found in the Graduate Division Bulletin, which may be obtained by contacting the Graduate Division, Valparaiso University.

The graduate programs are under the general supervision of the Provost and the Faculty of the University. Its policies are defined by the Graduate Council and are administered by the Dean of the Graduate Division.
SCHOOL OF LAW

Jay Conison, J.D., Dean
David E. Vandercoy, LL.M., Associate Dean for Academics
Curtis W. Cichowski, J.D., Associate Dean for Administration

Professors Berner, Blomquist, Bodensteiner, Brietzke, Conison, Dooley, Gaffney, Hatcher, Levinson, Lind, Moskowitz, D. Myers, Potts, Stith, Vance, Vandercoy, Whitten, Yonover; Associate Professors Adams, Carter, Geisinger, A. Myers, Persyn, Straubel; Assistant Professors Huss, Vetne (Visiting); Clinical Faculty Gienapp, Schmidt, Tegarden, Welter.

In the late 1870s, Valparaiso attorney and Civil War Colonel Mark L. DeMotte decided that the importance of formalized legal education warranted a new department for the study of law at the local college. Convincing the college president that such training was crucial to the quality of legal representation throughout the country, Colonel DeMotte founded in 1879 a program for legal study that would become the Valparaiso University School of Law.

From the beginning, the School of Law graduated new lawyers able to effectively practice law as soon as they joined the bar. This remains true today. By immersing its students in a rigorous program, Valparaiso Law School produces graduates that are successful, respected, and prepared.

The School of Law provides a range of course offerings recognized for its breadth, depth and blend of legal theory and practice. The required curriculum provides a comprehensive and intensive study in the foundations of law, and a wealth of elective courses covering many substantive areas. Course concentrations, clinical programs, externships, and co-curricular organizations introduce students to advanced study in various areas of law and offer meaningful opportunities for innovation and specialization.

By limiting enrollment, the School provides a learning environment where the rigor of legal education can be experienced with the help of careful guidance and support by the extraordinarily accessible faculty. From the classroom to the courtroom to the boardroom, our graduates thrive on the ongoing support of faculty, staff, students and alumni.

Continuously accredited by the American Bar Association since 1929, and the Association of American Law Schools since 1930, the School offers both the Juris Doctor (J.D.) and Masters in Law (LL.M.) degrees. The J.D. degree options include the traditional three-year, full-time program; a part-time, five-year program; and an accelerated two and one-half-year program. Unique to the School of Law is the Honors Program, designed to offer a special academic challenge to highly talented students.

The LL.M. degree is offered through a one-year, full-time program and a two-year part-time program. This particular program is designed primarily for international lawyers who have a law degree from their home country and wish to enhance their understanding of the American legal system.

Detailed program information about the School of Law and its admissions policies are available from Heike Spahn, Director of Admissions (1-888-VALPOLAW, Heike.Spahn@valpo.edu, or <www.valpo.edu/law/>.

The University offers two six-week sessions. Although most courses are six weeks, within each six-week term there are usually a number of specialized courses which are offered in shorter periods of time. These sessions are an integral part of the year-round program of course offerings for both graduate and undergraduate students. They are specifically designed to serve a variety of publics: regular Valparaiso University students accelerating their study, in-service teachers desiring further professional education, visiting students from other colleges earning credit while on summer vacation, high school graduates beginning their college careers early and other interested persons who would like to take course work toward degree objectives or simply for personal enrichment. Students may earn a maximum of seven credit hours in each six-week term, or 14 for the entire summer, which is nearly the equivalent of one semester's work. Students enrolled in a two or four-week intensive course may not be simultaneously enrolled for any other course, except by petition.

Courses on the undergraduate and graduate levels are offered in each session in virtually all areas of the College of Arts and Sciences, together with selected undergraduate courses in the College of Business Administration, the College of Engineering, and the College of Nursing. Each session features a variety of courses in the morning and in the evening to accommodate the student who wishes to take course work while employed full- or part-time. Also offered in the summer for academic credit are several one-week workshops and other abbreviated format courses.

Educational tours, both domestic and international, are regularly offered during the summer. Information regarding tours is normally included in the Summer Session bulletin, as well as in special descriptive brochures.

Valparaiso University features the three-year baccalaureate program which offers students in selected programs the opportunity to complete their degree in three years by careful planning and the utilization of summer sessions. To complete their program as planned, students must apply for participation in the spring of their freshman year to make certain that they have the proper advising. Students should contact their academic adviser or the Office of the Dean of the College of Arts and Sciences for more information.

FEES FOR 1999 SUMMER SESSIONS

<table>
<thead>
<tr>
<th>Tuition per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
</tr>
<tr>
<td>Undergraduate Nursing</td>
</tr>
<tr>
<td>Graduate</td>
</tr>
<tr>
<td>Graduate Nursing</td>
</tr>
<tr>
<td>Private Music Lessons</td>
</tr>
</tbody>
</table>

Private lessons in applied music
COLLEGE OF
ADULT SCHOLARS

The College of Adult Scholars is a special program for highly motivated non-traditional (adult) students starting or returning to college to seek their first degree, or returning to college for further professional training by seeking a second degree or certificate of specialization. The College has its own mission, students, and tuition structure, and although the admission criteria are intended to recognize the special needs and experiences of adult learners, admission to the College is selective. Students in the College may select from nearly all the majors and programs as full-time students, and they may take courses in the evening, daytime, or both. Because of the special tuition rate offered through the College of Adult Scholars, enrollment in certain programs and daytime courses may be restricted. To qualify for the special tuition rate, a student's credit load may not exceed eleven hours during the spring and fall semesters.

Admission and Registration.

Application to the College of Adult Scholars is made through the Office of Continuing Education. Students who meet any one of the four following criteria are eligible to apply for admission: twenty-four years or older; have interrupted their formal education for more than three years; have a baccalaureate degree; or plan to take a Valparaiso University course approved and offered by the College at an offsite location. Applicants who have completed an undergraduate degree or prior college course work (minimum of sixteen credits) with a grade point average of 2.0 or higher may be admitted unconditionally. Applicants not meeting these criteria but who show ability and promise for success may be admitted on a conditional basis. College board scores are not required, but students admitted on a conditional basis may be required to take a placement test to establish their qualification for entry into the College. The final decision for admission rests with the Dean of Continuing Education, whose judgement is based on the student's ability to benefit from the program.

Advising and registration of students in the College of Adult Scholars must be done through the Office of Continuing Education. Students interested in enrolling in the College should call 219.464.5313 or visit the office in Kretzmann Hall, Suite 116.

SAGE PROGRAM

The College of Adult Scholars also enrolls students in the SAGE (Senior Adult Growth through Education) program which allows seniors sixty and older, or retired, to audit courses for a fraction of the regular tuition cost.

ADMISSION
REGISTRATION
ACADEMIC POLICIES

Admission

Application for admission on a form provided by the Admissions Office may be filed at any time, but should be filed well in advance of the semester for which admission is desired. Each application must be accompanied by an Application Fee of $30.00. Applications for admission to undergraduate programs are sent to the Admissions Office.

For admission to the School of Law, consult the catalog of the School of Law. For admission to the Graduate Division, consult the catalog of the Graduate Division.

General Requirements

Valparaiso University admits those students who demonstrate potential for success in rigorous academic work. Qualified applicants are admitted regardless of gender, disability, race, color, age, veteran status, or national origin or ancestry. The credentials of each applicant are individually evaluated, with consideration given to academic record, entrance examination scores, character, and evidence of motivation for college studies. The University reserves the right to deny admission to any applicant.

A student who wishes to be considered for admission into the freshman class must have the following items on file: 1) a completed application; 2) an official high school transcript; and 3) an official report of scores on the College Board's SAT I or the American College of Testing Program Assessment (ACT).

Most Valparaiso University applicants will have successfully completed the most challenging program of studies available in their high schools. We require a curriculum including four years of English, three years of mathematics (algebra and geometry), two years of social studies, and two years of laboratory sciences. Two years of a foreign language are strongly recommended.
TRANSFER REQUIREMENTS

A student who wishes to be considered for admission as a transfer student must submit the following items:
1) a completed admission application;
2) official copies of ALL college transcripts, and if a student has earned less than 24 semester hours of college credit, a high school transcript (including SAT I and/or ACT scores).

SPECIAL REQUIREMENTS

Entrance requirements differ for students planning to pursue studies in the following colleges.

College of Business Administration. Students should have a minimum of two complete years of high school algebra and one year of geometry. A fourth year of mathematics, precalculus or calculus, and enrollment in a mathematics class during the senior year of high school are strongly recommended.

College of Engineering. At least three and one-half years of mathematics including one and one-half years of algebra, one year of geometry and one-year of trigonometry. Business or shop mathematics may not be counted; and one year of either chemistry or physics with regular laboratory work. These requirements are the minimum; applicants are urged to take four years of formal mathematics and both chemistry and physics.

College of Nursing. Three years of laboratory sciences are required and should include chemistry and biology; a second year of biology is strongly recommended.

Christ College, the Honors College. An academically talented student who is admitted to the University may be invited to apply for admission to Christ College by the Christ College Dean. Qualifications include superior academic performance, demonstrated leadership ability, and interest in pursuing stimulating interdisciplinary study. Students enrolled in Christ College are concurrently enrolled in one of the University's four other colleges.

SPECIAL STUDENT STATUS

An undergraduate applicant who is not admitted as a regularly classified student, but who is working toward a baccalaureate degree, may be admitted as a special student. Registered nurse students and international transfer students are generally admitted with special student status until appropriate classification is determined.

Students admitted to take classes for credit, but not admitted to degree-seeking status, are special, non-matriculated students. High school students concurrently enrolled at Valparaiso University, students who are taking classes for certification, personal enrichment, or as a precondition to admission as degree-seeking, and international intensive English language students are generally admitted as "special, non-matriculated students."

Students admitted through the Office of Continuing Education are admitted as special, non-matriculated students. For a change from this status to classified, degree-seeking student status, an application for admission through the Office of (Undergraduate) Admissions is required.

This status is not available to a student dismissed from the University.

INTERNATIONAL STUDENTS

Valparaiso University welcomes applications from qualified international students. At present, over forty nations are represented in the University's international student population.

Application and Fee. The completed international undergraduate application, together with a check for $50.00 payable to Valparaiso University, should be returned to the Admissions (undergraduate) Office at least three months before the term for which the student is applying. The following items must be received before the Admissions Committee acts on the application:

1. Academic records. Certified, official transcripts (original and English translation) of all secondary and university courses that have been completed or attempted;

2. Proof of English proficiency. Successful completion of the INTERLINK program, the Test of English as a Foreign Language (TOEFL) score of at least 213 (computerized) or 550 (paper-based), or the equivalent is generally required for admission. For information about the INTERLINK Program, write to INTERLINK, Valparaiso University, Valparaiso, IN 46383-6493, U.S.A.; FAX number 219-464-6846. For information on the TOEFL, write to TOEFL, Box 899, Princeton, NJ 08540, U.S.A.;

3. Affidavit of Financial Support. The University is required by the Immigration and Naturalization Service to determine that international applicants have sufficient financial resources to cover all their expenses while in the United States. A notarized statement of this financial support must be submitted;

4. Health Statement. A statement from a physician that the applicant is in good health is required.

Transfer Students. To request credit for university-level work successfully completed outside the United States, the applicant must submit a completed international application and the $50.00 application fee. The applicant is required to include a syllabus or detailed description of the previous coursework.

Intensive English Language Program. The INTERLINK program on the campus of Valparaiso University provides intensive English language training, cultural orientation, and academic preparation for qualified international students, scholars, and professionals preparing to study and work in the United States. The program emphasizes cultural awareness and interpersonal skills needed for successful academic and social adjustment to life in a university in the United States. Its curriculum focuses on reading, writing, grammar, listening, conversation, pronunciation, and study skills.

Admission to the program is open to adults who have completed secondary school in good standing and are able to meet their educational and living expenses. For information, write to the INTERLINK Program, Valparaiso University, Valparaiso, IN, 46383-6493, U.S.A.

Full-Time Enrollment. All international students who are studying on F-1 visas are required by the Immigration and Naturalization Service to successfully complete at least 12 credit hours per semester; otherwise, the continuation of study on the F-1 visa is jeopardized and the visa may be revoked. All decisions to withdraw from a course, to take a leave of absence, or to transfer to another school should first be discussed with the International Student Advisor.

Tuition. See page 226 in this catalog.

Financial Aid. A limited number of international merit scholarships are available, ranging from $1,500 to half tuition per academic year. Valparaiso University offers no need-based financial aid to international students.

Employment. A limited number of on-campus jobs are available for international students each year, but these jobs are usually for no more than 5 or 6 hours per week. The Immigration and Naturalization Service does not allow off-campus employment during the first academic year in the United States; it is possible in special cases to obtain approval to work off campus. International students should not plan on paying for educational costs in this way.

Health Insurance. All full-time students are automatically covered for medical treatment up to $500.00, but this is not sufficient coverage for international students; therefore Valparaiso University requires that all international students enroll in a special insurance policy (limit $250,000.00) in case there are major medical expenses. However, if international students can document that they have comparable insurance coverage provided by their parents or sponsor, they need not enroll in the University policy.

For further information regarding admission of international students, please write to: Coordinator of International Admissions, Valparaiso University, Valparaiso, IN 46383-6493, U.S.A.

Housing Application

An application for University housing ("New Student Enrollment Agreement") is mailed to each newly admitted student. This application and a deposit of $200.00 (tuition and housing) should be returned to the Admissions Office as soon as possible. All checks should be made payable to Valparaiso University. A student who occupies a room in a University residence will have $150.00 of the deposit credited toward the housing and the remaining $50.00 toward tuition and fees.

Advanced Standing By Examination

By incorporating four examination programs within its credit-granting structure, Valparaiso University enables students to earn credit and advanced standing for college-level knowledge obtained before enrolling.

Such credit may be earned through satisfactory scores on the Advanced Placement Examination, the College Level
Examination Program of the College Entrance Examination Board, the International Baccalaureate Program, or through the University's own Placement Program. Credit earned by examination may achieve advanced standing, meet General Education Requirements, and accelerate progress into advanced areas of study in an intended major or interdisciplinary program. Credit by examination may reduce the time required to earn an undergraduate degree.

ADVANCED PLACEMENT PROGRAM (AP) OF THE CEEB

Applicants for admission who take one or more of the Advanced Placement (AP) Examinations in May will receive credit toward a degree for scores of 5 and 4; in some departments scores of 3 earn credit. AP examinations must be taken before enrollment as a full-time student at Valparaiso University. For more information, contact the Admissions Office.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) OF THE CEEB

The CLEP program provides an opportunity to gain college credit for those individuals who, through experience, independent study or enriched high school courses, have attained college-level knowledge in a particular field. It is not recommended that these examinations be taken only on the basis of normal high school courses. Information and test center locations can be obtained from College Entrance Examination Board, Box 1822, Princeton, NJ 08541.

Valparaiso University awards credit for CLEP Subject Area examinations as indicated in the separate departmental listings. Credit for Subject Area examinations is awarded only if the examination is taken before the student enrolls in the specific college-level course for which credit by examination is sought.

INTERNATIONAL BACCALAUREATE

In addition to recognizing the International Baccalaureate Diploma as a basis for admission to the University, the University will award college credit or advanced placement or both based on scores earned on the Higher Level Examinations.

UNIVERSITY PLACEMENT TESTING

During the orientation period that precedes each semester, placement tests are offered to incoming students (freshmen and transfers) in the areas listed below. These tests provide an opportunity for students to attain advanced placement, receive credit, or meet certain General Education Requirements at Valparaiso University.

Advanced placement and/or credit are awarded in biology, foreign languages and mathematics, as explained in the listings for those departments. Full information on AP, CLEP and Valparaiso University Placement can be obtained from the Office of the Dean of the College of Arts and Sciences.

Advanced Standing—Transfer Students

The University welcomes transfer students from junior colleges, community colleges and other accredited institutions of higher education. Students planning to transfer to Valparaiso University must apply for admission through the Office of Admissions at least three weeks before the official registration day of the term for which they are applying and must present evidence of honorable dismissal from the institution last attended. Transfer students will not be admitted to Valparaiso University until official transcript(s) and other required credentials are on file in the Office of Admissions. After their records are evaluated, applicants will be notified regarding the courses which are found acceptable for transfer. Courses with grades of C- or above are accepted as transfer credit for graduation. Grades are not transferable; only credit transfers. For students in the College of Business Administration, see page 170. For registered nurses in the degree completion program of the College of Nursing, see page 197.

Students more than fifteen years before application for admission are accepted toward graduation on a provisional basis, subject to validation by the first thirty semester hours completed in residence at Valparaiso University with a 2.00 (C) average. Advanced standing is the record of courses and credits accepted by Valparaiso University from another institution.

The maximum number of advanced standing credits that may be transferred to this University is 94 credits (College of Arts and Sciences, Business Administration or Nursing) or 102 credits (College of Engineering). Credit for workshops, institutes or travel-study ordinarily will be granted only for work taken at Valparaiso University. In cases of exception to this restriction, transfer credit for institutes or workshops usually will not exceed one credit per calendar week of instruction. Transfer credit for travel-study programs usually will not exceed two credits per calendar week.

General Education. A Statement of Equivalence is prepared by the dean of the college in regard to the General Education Requirements for the respective degree. Transfer students with more than 75 credits of advanced standing need to complete one course (three credits) of theology at Valparaiso University. One course in theology must be taken in residence at Valparaiso University.

Concentration Requirements.

Statements of equivalence for academic majors, interdisciplinary programs or professional block schedules are prepared by the colleges or departments concerned.

Registration

All students are expected to register on the official registration days of each semester. For students currently enrolled, a registration period is announced during each semester to file a schedule for the next semester with the Registrar’s Office. For freshmen, transfer students and students who have been off campus for at least a semester, a registration period is provided at the beginning of each semester as listed in the University Calendar. (For the registration days and the calendar of the School of Law, consult that School’s bulletin.)

HEALTH REQUIREMENT

All students entering the University for the first time and all students who have not been registered at this University during the previous sixteen month period must submit to the University Medical Center a report of their medical history, physical examination and required immunizations from a licensed physician.

MAXIMUM AND MINIMUM CREDIT HOURS

A full-time student is one who is registered for at least twelve semester credit hours. Maximum credit hours allowed per semester without petition are given in the following table:

<table>
<thead>
<tr>
<th>Program</th>
<th>Maximum Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>17 Cr. (except as required in special authorized curricula, e.g., the B.M.E. program and students preparing for licensure in elementary and secondary school teaching)</td>
</tr>
<tr>
<td>College of Business Administration</td>
<td>17 Cr.</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>19 Cr. (except in approved programs)</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>17 Cr.</td>
</tr>
</tbody>
</table>

Students who maintain a grade point average of 3.00 (B) or better during the previous semester may register for extra
hours, provided that their formal petitions for such work are granted. Such a petition must bear the signature of the academic adviser and be addressed to the Dean of the appropriate College. Forms are available from the Registrar’s Office. Freshmen are not allowed to carry extra hours during the first semester.

COURSE PREREQUISITES
Students are held responsible for meeting the prerequisites of all courses for which they enroll. In unusual cases, a student may petition to waive a prerequisite. Such a petition must bear the signature of the instructor of the course, the student’s academic adviser and the Chair of the Department in which the course is offered, and be addressed to the Dean of the student’s College. Forms are available from the Registrar’s Office.

CHANGE OF SCHEDULE
Students may change the status of their registration in courses up to the time of the calendar deadlines published in the University catalog. Such changes are matters of serious consideration. Before deciding on such an action, students should obtain the counsel of their course instructor, academic adviser and the Chair of the Department in which the course is offered. Forms are available in the Registrar’s Office.

Any student-athlete who wishes to drop below 12 semester credit hours (full-time status) must obtain the signature of the Athletics Compliance Coordinator or her designee in addition to the other signatures required on the appropriate form from the Registrar’s Office.

Deadlines for course addition, course withdrawal, filing for S/U grade and withdrawal from the University are published in the University Calendar. Once these deadlines have passed, students are held responsible for completion of courses under the terms of the registration they have selected. Changes in registration after these deadlines are allowed only in exceptional cases where students demonstrate that extreme contributory circumstances have rendered their registration in a course invalid. Serious physical disability, prolonged illness or the death of a loved one; documented occurrences of this kind can be considered reasonable grounds for requesting an exception to the regular calendar deadlines. A petition for exception to a deadline may be addressed to the Dean of the appropriate College; such a petition must be accompanied by supporting reasons for its presentation. Petition blanks are provided by the Office of the Registrar. The integrity of the Valparaiso University transcript and ultimately of the University itself demand that special exceptions be permitted only when special circumstances prevail.

Neither unsatisfactory academic performance, whether caused by inability or lack of application, nor lack of adequate evaluation of a student’s performance in a course before the deadline are, in and of themselves, sufficient reason for petition.

Students may officially cancel enrollment in a course during the first six class days without reflection on their permanent record. All requests for adding a course during the first six class days remain at the discretion of the appropriate academic dean or department chair. From then until the published deadline, a student may officially withdraw from a course with a grade of W (withdrawal) on the student’s permanent record. Students are not permitted, without an approved petition, to cancel enrollment in courses after the end of the ninth week of a semester. Not attending class does not constitute formal withdrawal from a course.

After the drop/add period and until the seventh week of a semester, the tuition fee is prorated according to a schedule which can be viewed in the Office of the Registrar. These rules apply only if students change from full-time to part-time or the reverse, or if part-time students adjust their academic class loads.

APPEALS
Denial of a petition by a student’s Dean may be appealed to the Committee on Academic and Professional Standards. The appealing student should append reasons for submitting his appeal to the Committee.

Academic Policies

GRADING SYSTEM AND QUALITY POINTS

For the School of Law and the Graduate Division, refer to the appropriate bulletin. The course grades reported and recorded in the Registrar’s Office are as follows. The corresponding number of quality points per credit hour are also indicated.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points/CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>A+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B+</td>
<td>2.7</td>
</tr>
<tr>
<td>C</td>
<td>2.3</td>
</tr>
<tr>
<td>C+</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D</td>
<td>1.3</td>
</tr>
<tr>
<td>D+</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0.7</td>
</tr>
<tr>
<td>F+</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>authorized withdrawal</td>
</tr>
<tr>
<td>W</td>
<td>satisfactory</td>
</tr>
<tr>
<td>U</td>
<td>unsatisfactory</td>
</tr>
</tbody>
</table>

Grades A through D- give credit toward graduation. A student who receives a grade of D- in a course is advised not to enroll in other courses for which the given course is a prerequisite. Candidates for graduation must have a cumulative grade point average of 2.00 or better in all their work at Valparaiso University.

The grade I (incomplete) may, at the discretion of the instructor, be given to a student under the following conditions:

1. The work completed in the course so far is passing (average D- or better).
2. The student has been unable to complete the remaining work in the course because of circumstances beyond his or her control.

An I (incomplete) received in one semester or summer session must be removed by the beginning of the official examination period of the next succeeding semester or it automatically becomes a grade of F. The student’s deadline for submitting the outstanding work to the instructor shall be one week before that date. No Semester Honors will be given if the student received a grade of Incomplete at the official end of the semester concerned.

Authorized withdrawal from a course or from the University within the published deadlines gives the grade of W to each course withdrawn. This mark carries no credit.

The satisfactory grade, S, is given under the following conditions:

1. The course is designated in this catalog to be graded S/U or the student officially opts or petitions to have the S/U grade in the course.
2. The student’s work in the course is satisfactory, of a quality which is comparable to a grade of C- (1.7 quality points per credit hour) or better.

Course credit hours with grades of S count toward graduation but are not counted in computing the student’s grade point average.

The unsatisfactory grade, U, is given under the S/U grade option (condition 1 above) when the student’s work does not meet the course objectives (condition 2 above). Course credit hours with grades of U do not count toward graduation and are not counted in computing the student’s grade point average.

The failing grade, F, is given under any of the following circumstances:

1. Work done in a course is below a minimum standard required for passing.
2. A student fails to complete work and remove a grade of I (incomplete) before the deadline stated above.
3. A student withdraws from a course without filing the necessary form and obtaining the necessary approval.
4. A student withdraws from a course after the published deadline.
5. A student withdraws from the university without giving official notification. F grades are given in all courses thus dropped.

Only in exceptional cases, such as prolonged or serious illness, does the appropriate committee permit a student to withdraw from a course without a grade of F after the deadline for withdrawing from a course with a grade of W. To withdraw from a course requires the filing of the appropriate form with the signatures of the student’s academic adviser, the instructor and the Chair of the department of the course.
dropped and the Dean of the student's College. Withdrawal from the University requires notification of the Office of the Assistant Provost for Student Affairs. The appropriate form is obtainable from that office.

**ADMISSION TO COURSES ON A SATISFACTORY/UNSATISFACTORY BASIS**

Undergraduate students are encouraged to venture outside the areas of their concentration, investigate new disciplines, and discover new, perhaps unsuspected, interests. If a student chooses, the Satisfactory/Unsatisfactory grading option may reduce the anxiety about electing a course in an area in which the student has had little or no prior experience. Students who are interested in conveying maximum information on their transcripts to professional and graduate school should speak to their advisers and the dean of their college prior to electing this option.

Certain courses normally result in S/U grades, as noted in the catalog descriptions. Physical Education courses 101-105 have the S/U option which the student may elect by declaring this choice in the usual way. In addition to any of these courses, the student may take one course, normally letter graded (i.e., A to F), each semester on a satisfactory/unsatisfactory basis subject to the following conditions:

1. Such courses must not be selected from:
   a. The student’s major or minor field or fields;
   b. The required courses for any professional degree or preprofessional program, except for liberal arts electives or other courses approved by the Dean of the student's College;
   c. A repeated course, if not originally taken on the S/U basis;
2. Such registration must be signed by the student’s academic adviser;
3. A decision to elect a course on S/U basis must be made by the end of the fourth full week of the semester for courses of usual length. **After this deadline, the S/U grading basis may not be changed.** This deadline applies proportionately to Summer Session or seven-week half-term courses.

**NOTE:** In selection of the S/U option, students are strongly advised to discuss the implications of that option with their adviser concerning entrance into professional schools.

**ADMISSION TO THE COURSE INTENSIFICATION PLAN**

Students may propose a special project for earning one extra credit in one liberal arts course in which they are enrolled in a given semester. This opportunity is part of the University's Course Intensification Plan. The following regulations pertain to this option for a student:

1. The course must be offered in the College of Arts and Sciences.
2. The course must be offered in the Schedule of Classes for three or more credits.
3. The initiative and responsibility for developing a satisfactory proposal lie with the student.
4. The proposal is subject to the approval of the instructor of the course.
5. Approved proposals must be filed in the Registrar's Office during the period specified in the academic calendar.

The Course Intensification Plan is a type of honors work, and under no circumstances should be considered a substitute for regular course work.

**ADMISSION TO COURSES AS AN AUDITOR**

A regularly classified student may register in a course as an auditor only with the permission of his adviser and the chair of the department which offers the course. An auditor may not be admitted to the final examination and is never granted credit for the course audited. No additional fee is charged when the student pays full tuition. Once in a course as an auditor, the student cannot change the status of his enrollment to get any kind of grade in the course.

**CREDIT HOURS**

A credit hour (abbreviated Cr. in lists of courses) represents one hour of recitation or lecture, or two or more hours of laboratory, each week for one semester. If time outside the laboratory is required to prepare laboratory notes or reports, two hours may be equivalent to one period of class work. Drawing, shop work and other courses demanding no outside preparation require a minimum of three hours for one credit hour. See specific course descriptions for the exact number of hours required.

For **short (seven weeks) courses**, the time per week per credit hour is twice that for the semester.

**REPETITION OF RESIDENT COURSES FOR CREDIT**

Unless repetition of a course for credit is permitted as shown in its catalog description, only the credits, grade and quality points received the last time the course is taken by a student at Valparaiso University shall be used in determining credit for graduation and the cumulative grade point average. A grade of W shall be excluded from this policy. The student’s transcript shall record all grades, original and repeat.

A student who elects to repeat a course must secure the appropriate signature on the form provided for this purpose before repeating the course. The form is available in the Registrar’s Office.

**ACADEMIC STANDING OF A STUDENT**

A student's standing is determined by the ratio of the total number of quality points to the total number of credit hours attempted in all work at Valparaiso University except courses graded S/U. Thus, a student who makes an average mark of C (2.0) quality points per credit hour throughout the course of 124 semester hours will have 248 quality points, 124 credit hours and a standing of 2.00. The standing for a semester’s work is understood to be the ratio of the number of quality points gained to the number of credit hours scheduled. Standing is also referred to as the grade point average.

Note the above exception regarding repetition of a course.

**ACADEMIC DEFICIENCY**

In the College of Arts and Sciences, College of Business Administration, College of Engineering and College of Nursing, students whose cumulative resident grade point average falls below 2.00 are considered academically deficient. Such students may be denied the privilege of continuing their studies at the University unless they succeed in improving the quality of their academic work to the satisfaction of the faculty during the following semester. The Dean of each College establishes procedures to give students who are academically deficient timely warning of their being denied continuation of their studies.

Deficiency warnings are sent to parents and guardians of all undergraduate students in the day program who are less than twenty-one years of age, unless the students who are not a dependent of their parents or guardians notifies their academic dean to the contrary. For regulations concerning academic deficiency in the School of Law, see that School’s bulletin.

**Dropped for Low Scholarship.**

Whenever, in the judgment of an academic dean, students who are academically deficient would benefit from an interruption of their work in a particular college of the University, the dean will notify the students in writing that they have been dropped and will specify the period of time for which they have been dropped and the conditions which they must satisfy in order to be readmitted.

**CLASS STANDING OF A STUDENT**

An undergraduate student must have 24 semester credits to be classified as a sophomore; 56 semester credits to be classified as a junior; and 88 semester credits to be classified as a senior.

A student in the School of Law should consult that School's bulletin.

**SEMESTER GRADE REPORT**

Such a report is sent only to the student and only to the address indicated by the student on the official biographical form. This report is considered by the University to be a progress report maintained by the University.

**CLASSIFICATION OF COURSES**

The courses offered by the University are classified as follows:

- Lower division courses, numbered 100-299;
- Upper division courses, numbered 300-499;
- Graduate-undergraduate courses, numbered 500-599;
- Graduate only courses, numbered 600 and above.

**LEAVE OF ABSENCE-UNDERGRADUATE STUDENTS**

At the end of a semester, a student who has completed at least one full semester of work in residence and who is in good academic standing may apply for a leave of
absence. This absence requires approval of the academic adviser and the academic dean. The necessary form may be obtained from the Registrar's Office. This student may return to Valparaiso University without formally applying for readmission within a period of two years following the start of the leave of absence. However, the student must notify the Registrar's Office if the return date as originally stated is changed within the two year period. Leaves are not given to students who withdraw from the University during a semester.

All leaves must be requested before the beginning of the semester in which they are to take effect.

READMISSION OF FORMER STUDENTS TO UNDERGRADUATE AND PROFESSIONAL PROGRAMS

Students who have fully matriculated at Valparaiso University and who have interrupted their studies for whatever reason must apply for readmission to the University through the Readmissions Committee. The request for readmission is to be sent to the Registrar. Exceptions are students who took a formal leave of absence under the conditions specified above, and students enrolled in the Deaconess Training Program, who usually spend one year in in-service training. (Cooperative Program work semesters and off-campus special semesters are considered to be continuation of study, for which students have officially registered.)

Application for readmission must be made at least one week before the registration date of the term in which the student wishes to enroll. Applications will not be accepted after this date.

The student being readmitted must present the necessary information such as records of attendance and grades at other institutions previously attended, a statement of the reason for any discrepancy or difference in the student's records and an explanation of the student's position in the case of any special circumstances.

Transfer of credit is subject to approval by the Registrar's Office and the Readmissions Committee. Credit earned at another institution must be evaluated for transfer. A student who has been approved by the Registrar's Office and the Readmissions Committee may return to Valparaiso University and continue his or her studies.

EXAMINATIONS

Written tests and quizzes are given from time to time during the semester at the discretion of the instructor. A final examination is required in all courses of 3 credit hours or more. Exceptions may be made for such courses as independent study, practica and internships, performance, studio and activity courses. Final examinations are held at the close of each semester and, for courses of 3 credit hours or more, must be conducted according to a schedule published by the Registrar.

Final examinations in courses of less than three credits are conducted during regularly scheduled class periods.

In order to give students adequate opportunity to prepare for final examinations, no tests may be given in courses of 3 credit hours or more within seven days before the beginning of the examination period.

Exceptions to these policies require the written approval of the Dean of the College in which the course is offered. Exceptions to the schedule are usually approved when a student has three or more examinations scheduled on the same day.

TRANSFER TO ANOTHER PROGRAM

If a student transfers from one major or interdisciplinary program to another, all requirements of the new specialization must be met. Such a transfer subjects credits previously earned to a reevaluation. In certain cases the change of program may result in some loss of credit (e.g., if a course taken as a General Education Requirement is superseded by another course required for the new major). Therefore, such transfers may not be made without the written approval of the advisers and deans concerned. Necessary forms may be obtained from the Registrar's Office.

In the case of transfer from one college to another, note well in the requirements for the degree of the new college any restrictions on credit hours which may be transferred from the former college.

GRADUATION

RESPONSIBILITY OF THE STUDENT

Every candidate for a degree is personally responsible for meeting all requirements for graduation. No University official or adviser can relieve the student of this responsibility.

Students in the undergraduate program of the University may fulfill the requirements for graduation under any catalog issued during their years of attendance, beginning with the year they first entered the University, provided there is no absence of five or more years between periods of attendance. (For the School of Law, consult that School's bulletin.) All requirements in one catalog issue must be met.

Students who return to the University after an absence of five or more years may no longer be a candidate for a degree on the basis of the catalog requirements covered by their previous years of attendance, but must fulfill for graduation all the requirements and provisions beginning with the catalog of the year in which they reenter the University. In addition, credits earned at Valparaiso University before the deadline date for a permit to withdraw (see calendar at front of catalog) will not be accepted. The registration and University authorization to withdraw are not permitted to the student. If a student who is less than twenty-one years of age, the parent or guardian is notified of the withdrawal by University Registrar. If students withdraw after the seventh week of the semester, they are ordinarily not granted readmission for the following semester, unless extreme contributory circumstances such as severe illness caused the withdrawal.

The term "honorable dismissal" refers to conduct and character only, not to class standing and grades. It is not granted unless the students' conduct and character are such as would entitle them to continue in the University.

A student who withdraws from the University without authorization, or after the published deadline, is not entitled to refunds of any kind and the instructor of each course in which the student is enrolled is required to report a final grade of F to the registrar. For the School of Law, consult that School's bulletin.
University more than fifteen years before reentry are subject to reevaluation and shall not be accepted toward graduation requirements unless approved by the appropriate Faculty or University Senate Standing Committee.

SECOND DEGREES
In order to receive a second degree, a student must earn at least thirty semester credits and sixty quality points in excess of the total number of semester credits required for the first degree and, in addition, the student must fulfill all the specific course requirements for the second degree. No course used to fulfill a major or minor requirement for one degree may be used to fulfill any major or minor requirement for a second degree. A student who selects an individualized major or minor for any degree may not use the designated courses to fulfill any other graduation requirement. Approval of applications for dual degrees must be given by the appropriate advisers, deans, and the Committee on Academic and Professional Standards. No student may graduate at one commencement with more than one degree of the same notation.

Students in the Graduate Division should refer to that Division's bulletin for specific information.

CREDIT AND QUALITY POINT REQUIREMENTS
Candidates for graduation with the Associate in Science degree or a bachelor's degree must have a grade point average of 2.00 or more in all their work at Valparaiso University. In addition, candidates for a bachelor's degree must have a grade point average of 2.00 or more in any major, minor, or interdisciplinary program, based on their work at Valparaiso University. Also, candidates for the Associate in Science degree must have a grade point average of 2.00 in all of their science courses at Valparaiso University. In the computation of the students' standings, grades of D+, D, D- and F are included. Grades of S, U and W are not included.

Candidates for a master's degree or the Juris Doctor degree should consult the appropriate bulletin for the corresponding requirements.

RESIDENCE REQUIREMENTS
Regardless of other degree requirements, candidates for all bachelor's degrees must meet the following requirements in residence at Valparaiso University:
1. At least one-half the number of credit hours required for any major, minor or interdisciplinary program (a minimum of 15 credit hours in the area of foreign languages);
2. At least three credits in theology;
3. At least thirty of the last forty credits presented for the degree.

Residence requirements for master's degrees and the Juris Doctor degree may be found in the appropriate bulletins.

Ordinarily, credit is not given for courses taken concurrently at other approved schools or for correspondence courses taken during a student's enrollment at this University. Any exception to this policy must have the approval of the student's academic adviser, the Dean of the appropriate College and the Committee on Academic and Professional Standards. Note that credit for courses taken under one of the International Study Semesters or Special Semester programs described on pages 12-13 and 18-24 apply as taken in residence at this University.

APPLICATION FOR A DEGREE
A student who wishes to receive a degree at the end of a Fall Semester must formally apply for the degree on a form provided for this purpose by the Registrar's Office no later than the preceding April fifteenth. A student who wishes to receive a degree at the end of a Spring Semester or a Summer Session must formally apply for the degree on a form provided for this purpose by the Registrar's Office no later than the preceding October first. A summer session student, not enrolled in the previous academic year, who expects to receive a degree at the end of a Summer Session must formally apply for the degree at the beginning of that Summer Session. If, for any reason, students (except a graduate student) do not meet the requirements for graduation after filing their application, the students must file a new formal application by the beginning of the session in which they then expect to receive a degree.

Candidates for degrees in August or December, who expect to complete requirements in absentia, must be sure that ended by the deadline date set for candidates who are registered on campus. Official transcripts must be on file in the Registrar's Office no later than ten days after the close of a semester or session. This does not apply to May candidates, as these candidates must be certified before the May Commencement. Further information will be furnished upon request from those candidates completing degree requirements in absentia.

PRESENCE AT COMMENCEMENT
A candidate for graduation at the end of the Spring Semester must be present at commencement in order to receive a degree. Degrees are not conferred in absentia, except on special permission from the President of the University.

Students who complete their work toward a degree at the end of a Fall Semester or of a Summer Session may be granted the degree at that time.

BACHELOR'S DEGREES WITH HONORS
Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a grade point average of 3.80 in their work at this institution will be graduated Summa Cum Laude.

Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a grade point average of 3.60 in their work at this institution will be graduated Magna Cum Laude.

Students who have been in attendance at Valparaiso University at least two years (a minimum of sixty credit hours) and who have maintained a grade point average of 3.40 in their work at this institution will be graduated Cum Laude.

See the bulletin of the School of Law for the Juris Doctor degree with honors.

SEMESTER HONORS
An undergraduate student (freshman through senior) who achieves a grade point average of 3.50 in any semester except the last semester before graduation will be awarded honors under the following restrictions:
1. The student received no grades of I or U at the official end of the semester concerned.
2. The student was registered for at least fourteen credit hours of work for that semester on campus or at least twelve credit hours in an International Studies Semester, Special Off-Campus Semester or any other approved cooperating program (pages 12-13 and 18-24).

Graduating senior honors are announced at Commencement and are based on the work of the last two semesters. The grade point average must be 3.50 cumulatively for the two semesters; restriction 1 above applies, and the total credit hours for both semesters must be at least the cumulative total from restriction two above (for example, in the College of Arts and Sciences, a total of twenty-eight credit hours for two semesters on campus or a total of twenty-six hours for one semester on campus and one semester special off-campus program, e.g., the Washington Semester).

For honors in scholarship in the School of Law, consult that School's bulletin.

TRANSCRIPTS OF ACADEMIC RECORDS
The Family Educational Rights and Privacy Act of 1974 (Buckley Amendment) provides, in part, that the institution will maintain the confidentiality of student academic records. The University's entire policy may be found in the Student Guide to University Life.

No one outside the University shall have access to, nor will the University disclose any information from, student academic records without the written consent of students, except to persons, organizations or agencies which are permitted to receive such information under the Act.

Official transcripts of academic records are released only upon the written request of the student.
TUITION AND FEES
EXPENSES
HOUSING REGULATIONS
REFUNDS

Tuition and Fees

Undergraduate and Professional Tuition, Full-Time Students

VU COLLEGE OR SCHOOL ACADEMIC YEAR (TWO SEMESTERS)
College of Arts $8,140.00 $16,280.00
College of Business $8,140.00 $16,280.00
College of Nursing $8,140.00 $16,280.00
College of Engineering $8,975.00 $17,950.00
School of Law $8,975.00 $17,950.00

FEES

The general fee for each semester amounts to $263.00 for all full-time undergraduate students and $244.00 for all full-time law students. The fee is paid by all full-time undergraduate students registered for at least 12 credit hours per semester. The fee is used to defray the cost of the following services: health and hospitalization program, co-curricular activities, and Student Senate. Laboratory fees are not charged for regular courses. Students enrolling in laboratory courses are financially responsible for breakage or damage to equipment.

Performance Music Fees. The University encourages students to continue performance music instruction by charging modest fees for private lessons. Students pay a fee of $200.00 per semester, per course for instruction in private or class lessons in performance music. There is no additional charge for use of an instrument or practice room.

Students taking private lessons are held responsible for making arrangements with the instructor to complete all lessons during the semester. If the student is unable to complete within the semester the series of lessons for which he was assessed, a report should be made immediately to the Chairman of the Department of Music by the student. The performance music fee is not refundable after the tenth class day of a semester.

Tuition and Fees For Part-Time Undergraduate Students and Professional Programs

Undergraduate students who register for less than 12 credit hours are classified as part-time students. Such undergraduate students pay tuition charges as follows:

Enrolled in 6 or less credit hours per semester $360 per credit hour
Enrolled in more than 6 but less than 12 credit hours per semester $715 per credit hour
Enrolled in College of Adult Scholars, no credit hour requirement $220 per credit hour

The general fee for part-time students is $25.00 per semester. These charges do not include the use of the facilities, of the health service nor participation in the student insurance plan. Auditors pay $715.00 per credit hour equivalent.

Part-time rates for the School of Law are published in the Law Catalog. Tuition charges for special programs for registered nurses sponsored by the College of Nursing may be obtained by contacting the Dean of Nursing or the Office of Admissions.

Special Fees

Application-$30.00. This fee is payable at the time of application for admission to the University. It is not refundable.

Readmission-$20.00. This fee is payable at the time of application for readmission to the University. It is not refundable.

Tuition Deposit-$50.00. This fee is required of all new students, both resident and commuter. For the School of Law, see the appropriate bulletin. A refund of $25.00 is given if a written notice of cancellation is received before July 15 for the fall semester or before December 1 for the spring semester.

Housing Deposit-$200.00 ($100.00 for returning students). This fee is required of all students requesting University housing. In case of cancellation, see Refund Policy on page 231.

Nursing Liability Insurance--$20.00 (Family Nurse Practitioner $77.00). In connection with the clinical practice component of the nursing program, all students in the College of Nursing, beginning with the sophomore year, must secure and provide proof of professional and personal liability insurance.

Vehicle Registration--$30.00 per year.

Study Abroad, Cambridge, England--$860.00. Each participant pays this fee.

Study Abroad, Reutlingen, Germany--$725.00. Each participant pays this fee.

Study Abroad, Puebla, Mexico--$600.00. Each participant pays this fee.

Study Abroad, Hangzhou, China--$630.00. Each participant pays this fee.

Transcript--No charge is made for any transcript issued. No transcript of a student's record is released until the student has met in full all obligations, financial or otherwise, to the University.

Late Registration or Confirmation--$40.00. This fee becomes effective on the first day of classes for fall and spring semesters only. In no case are students who register or confirm late exempted from this fee, unless for valid reasons they have been given written authorization for exemption by the Registrar.

International Student Transfer Credit Evaluation--$125.00. This fee is payable by each international student who transfers college level work for credit. The fee is used for the professional evaluation of the work to be transferred. This fee must accompany the transcript or certified copy sent to the Office of Admissions.

Engineering Fee. The engineering fee is assigned to students enrolled in the College of Engineering after they have completed the first year of the engineering program. For purposes of assessing the fee, engineering students who have completed 24 or more university credits at Valparaiso University or elsewhere (but excluding advanced placement credits) are considered to have completed the first year of the program. Engineering courses numbered above 200 or cross-listed in other colleges and taken by a student who is enrolled in one of the other colleges at Valparaiso University may not subsequently be used to satisfy engineering degree requirements.
Tuition and Fees, Expenses, Housing Regulations, Refunds

Estimated expenses for room and board are based upon a minimum meal plan buy-in of $805.00 per semester (freshmen), $765.00 per semester (sophomore-junior) and double occupancy room rent of $1,375.00 per semester; Guild, Memorial and Wehrenberg Halls are $1,570.00 per semester. A limited number of single rooms may be made available at an additional cost.

The expenses for each academic year (two semesters) are approximately twice the above semester figures.

Camping, traveling, incidental expenses, fees for performance music lessons and special fees (page 227) are not included in these estimates.

**Amounts due the University are payable in full at the time of registration for each semester.**

Parents and students are billed approximately three weeks before registration with an invoice containing the estimated charges for the coming semester. Either payment or evidence of participating in a deferred payment plan as outlined below must be received in the Student Accounts Office one week before registration. The minor adjustments in the billing required by additional course fees, for example, are detailed in a statement from the Office of Student Accounts. Credits for scholarships, loans, grants, etc., may be deducted in arriving at the balance due before registration.

Amounts to be earned through campus employment may not be deducted, as these are paid during the course of the semester directly to the student through the University’s regular payroll procedure.

Students who withdraw from the University must make arrangements to meet all outstanding financial obligations to the University. Examples of such obligations are tuition and fees, room and board, library fines, health fees, etc. The student’s transcript is not released until payment of all obligations has been made.

Each student registering at Valparaiso University assumes responsibility to pay all college-related expenses not covered by financial aid.

The University reserves the right to make arrangements to meet all outstanding financial obligations to the University. Examples of such obligations are tuition and fees, room and board, library fines, health fees, etc. The student’s transcript is not released until payment of all obligations has been made.

Each graduating student must pay any remaining financial obligations to the University before graduation.

No degree is conferred upon and no transcript is given for a student whose account with the University or the Student Senate has not been settled in full.

Loans such as the Federal Perkins Program or Valparaiso University Student Loans become due as stated in the promissory note signed by the student. Transcripts are not released to students who are in arrears on these loans.

**EDUCATIONAL EXPENSE PAYMENT PLANS**

Valparaiso University participates in a deferred payment plan for the convenience of those students and parents who may wish to spread out payment over the school year or beyond. Under this plan, monthly payments may be arranged for the payment of tuition, fees, room and board.

Listed below, along with a brief description, is the plan approved for use by the University. Detailed information is normally sent directly to each admitted applicant by the plan sponsor. Should a student not receive this information or should a student have further questions, the address and phone number of the plan is also provided.

Academic Management Services, One AMS Place, P.O. Box 100, Swansea, MA 02777. Phone: 1-800-635-0120. This plan is a monthly payment plan designed to relieve the pressure of "lump sum" payments by allowing participants to spread the cost over a period of months without borrowing or paying interest charges. The plan does require payment of an application fee.

**Housing Regulations**

The University requires first-year students, sophomores and juniors to live in residence halls. Class standing is determined by student classification policy, page 221. Exceptions are made for veterans, those who will be 22 before September 1 of the academic year in question, those living with parents or spouse, and sophomore and junior fraternity men who live in approved fraternity houses. All sophomore and junior students who return from their fall semester of International Studies or other cooperative off-campus programs are required to live in University operated residence halls during the spring semester.

Senior, graduate and law students may apply to live in University residence halls. The Housing Office also maintains a listing of rooms in private homes, apartments and homes for sale or rent. Students desiring such accommodations should plan to visit the campus at least six weeks before the semester of enrollment to inspect the available listings and make arrangements with the individual landlords. Every landlord whose property is listed has signed a nondiscrimination statement. The University is not involved in arrangements between students and landlords, except in the event of racial discrimination. The University provides a listing service only and does not inspect, approve, recommend, or authorize any off-campus living units.

**Application.** An application form for University housing is mailed to each new student with the New Student Enrollment Agreement. This application and the $200.00 deposit (tuition and housing) should be returned to the Office of Admissions as soon as possible. All checks should be made payable to Valparaiso University. A student who occupies a room in a University residence hall will have $150.00 of the deposit credited toward housing costs and the remaining $50.00 toward tuition and fees.

All returning students who are required to live in University residence halls according to University housing regulations must complete an Upperclass Housing Agreement form and make an advance room deposit of $50.00 at the Finance Office on or before the housing deadline date indicated by the Housing Office.

**Assignment Policy.** New freshman and transfer student assignments are made by the Housing Office in the order in which their New Student Enrollment Agreements and deposits are received according to space availability.

Returning upperclass student assignments are made according to the guidelines established by the Housing Office. Assignments are made with the goal of establishing and developing positive residence hall communities. In those halls where the number of applicants exceeds the number of spaces available, assignment is made by class standing and/or lottery. All Upperclass Housing Agreements received before the deadline indicated by the Housing Office will be given equal consideration for the assignment process.

The University will endeavor, but cannot guarantee, to assign accommodations according to the preferences indicated by the student.

Any request for a change in residence hall assignment must be submitted in writing and approved by the Housing Office.

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### Expenses

An estimate of normal expenses for a semester in each college is given below.

<table>
<thead>
<tr>
<th>College and Category</th>
<th>Average Cost Per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College of Arts and Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$8,140.00</td>
</tr>
<tr>
<td>General Fee</td>
<td>263.00</td>
</tr>
<tr>
<td>Rent of Room and Board</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>$2,180.00</td>
</tr>
<tr>
<td>Sophomore-Senior</td>
<td>$2,140.00</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>300.00</td>
</tr>
<tr>
<td><strong>College of Business Administration</strong></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$8,140.00</td>
</tr>
<tr>
<td>General Fee</td>
<td>263.00</td>
</tr>
<tr>
<td>Rent of Room and Board</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>$2,180.00</td>
</tr>
<tr>
<td>Sophomore-Senior</td>
<td>$2,140.00</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>300.00</td>
</tr>
<tr>
<td><strong>College of Engineering</strong></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>8,140.00</td>
</tr>
<tr>
<td>General Fee</td>
<td>263.00</td>
</tr>
<tr>
<td>Rent of Room and Board</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>$2,180.00</td>
</tr>
<tr>
<td>Sophomore-Senior</td>
<td>$2,140.00</td>
</tr>
<tr>
<td>Lab Fee</td>
<td></td>
</tr>
<tr>
<td>(Sophomore-Senior)</td>
<td>$300.00</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>300.00</td>
</tr>
<tr>
<td><strong>College of Nursing</strong></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$8,140.00</td>
</tr>
<tr>
<td>General Fee</td>
<td>263.00</td>
</tr>
<tr>
<td>Rent of Room and Board</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>$2,180.00</td>
</tr>
<tr>
<td>Sophomore-Senior</td>
<td>$2,140.00</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>300.00</td>
</tr>
<tr>
<td><strong>School of Law</strong></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$8,975.00</td>
</tr>
<tr>
<td>General Fee</td>
<td>244.00</td>
</tr>
<tr>
<td>Rent of Room and Board</td>
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</tr>
<tr>
<td>Books and Supplies</td>
<td>375.00</td>
</tr>
</tbody>
</table>
The University reserves the right to make changes in residence hall assignments if necessary for the most effective accommodation of the student body.

**Refunds–New Students.** The Housing Deposit is refunded in full if a written notice of cancellation is received by the Admissions Office on or before May 1 for the fall semester, or on or before November 1 for the spring semester. No refund will be given if enrollment cancellation notice is given after these respective dates.

**Refunds–Returning Students.** The full deposit is refunded if written notice is given to the Housing Office on or before the application deadline. One-half of the housing deposit is refunded if written notice of cancellation is received by the Housing Office on or before June 1 for the fall semester, or on or before December 1 for the spring semester. No refund is given if cancellation is given after June 1 for fall semester and December 1 for spring semester. The Housing Agreement may not be cancelled after July 1 for fall semester and December 31 for spring semester by students not required to live in University housing.

If a student is denied readmission or if the University should be unable to provide housing, the full amount of the deposit will be refunded.

**Occupancy.** The housing agreement is binding for the full academic year. Students who are assigned residence hall housing are permitted to move out of the residence hall only if they withdraw from the University, graduate or participate in off-campus study programs such as international study, Washington Semester, urban studies, and the like.

**Vacation Periods.** The residence halls are closed at 12:00 noon on the day following the last day of classes or final exams prior to the Thanksgiving, semester, and spring breaks. The halls reopen at 12:00 noon on the day prior to resumption of classes following the Thanksgiving and spring breaks, and at 12:00 noon on the day prior to official spring semester registration and orientation activities following the semester break. Residence Hall accommodations are available during vacation periods for international students and other residents who meet certain criteria. Contact the Housing Office for more information.

**Roommate.** Preferences should be listed on the housing application. New students are notified in July of their roommate assignments.

Arrival at the residence hall for new students and new transfer students should coincide with the first day of orientation activities. All students are expected to report immediately to their assigned residence halls when they arrive on campus.

**Furnishings.** All rooms in the University residence halls are provided with the necessary basic furniture. Occupants supply their own bedding, pillows, towels, lamps and floor coverings if desired. Coin-operated washers and dryers are also provided within each residence hall. Draperies are provided. Further information is available from the Housing Office.

University residence halls are staffed by full-time professional Residential Learning Coordinators, undergraduate paraprofessional Assistant Coordinators, and Resident Assistants.

All students residing in University-owned residence halls are financially responsible for damage to rooms and equipment. Residence Hall staff members report such damage to the Finance Office and the student or the parent is billed for the cost of repair or replacement.

**Dining Facilities.** The University operates dining facilities in the Valparaiso Union and selected residence halls for the convenience of the students. Service is available during periods of scheduled classes. When service is not provided in a residence hall, students residing in such halls may participate at a neighboring dining facility.

All students living in residence halls, other than sorority members living in Scheele Hall, must buy into the à la carte board plan at the set mandatory rate until they have completed six semesters of college attendance. Transfer students living in residence halls will also be required to take part in the à la carte board plan based on the number of semesters of attendance completed as a full-time student. Participation requirements are mandatory until the completion of six semesters of such attendance.

The mandatory rate for 1999-2000 is $805.00 per semester (freshmen) and $765.00 per semester (sophomore and junior). Those dollars may be used to purchase food in any of the residence hall dining rooms, Union cafeteria (during designated hours) or campus grocery stores during the semester. All items for sale are individually priced.

Non-mandatory meal plan students, during the 1999-2000 academic year, may purchase an initial meal plan credit for a minimum of $235.00. Further purchases may be made in $25.00 increments.

When a meal plan account is reopened for spring semester, the balance of $60.00 or less from fall will be automatically added to the required buy-in level. No remaining balances will be refunded or carried over at the end of spring semester. To supplement or reduce a food plan account, students can sell funds to or buy funds from other students already on the food plan. These transfers are handled by the Meal Plan Office in the Union (Jester's). If a new account is not opened for spring semester, the remaining balance from the fall semester will not be refunded or carried over.

**Refund Policy**

**Withdrawal from all classes.** Students who withdraw from Valparaiso University may be eligible for a refund of a portion of the tuition and room and board charges for the semester of their withdrawal.

If the student received financial aid, a portion of that refund will be returned to the federal, state, University and/or private source from which aid was received. Regardless of the formula (below) which is used, federal funds will be repaid first. If any refund remains, it will be used to repay University funds, state funds, other private sources and the student in proportion to the amount paid by each of those sources as long as there was no unpaid balance due to the University prior to the calculation of the refund. If there is an unpaid balance, all aid sources will be repaid before any refund is paid to the student.

For purposes of repayment, if funds are released to a student because of a credit balance on the student’s account, the student may then be required to repay some of the federal funds.

The date of withdrawal and basis for calculating all refunds will be the date on which the Office of the Registrar receives the withdrawal form. Each semester, a schedule of the applicable refund dates is available in the Finance Office and the Office of Financial Aid.

Two formulas exist for determining the amount of the refund, Valparaiso University’s refund policy and the Federal “Return of Title IV Aid” formula derived from the 10/07/98 Reauthorization of the Higher Education Act. The federal formula is applicable to any student receiving federal aid other than Federal Work-Study if that student withdraws on or before the 60% point in time in the semester. These students may also receive a refund of non-federal sources through the University’s refund policy. Students not receiving federal aid will have their refund calculated using only the University’s refund policy.

**The University’s refund policy.** Students who withdraw from the University will receive a pro-rated refund of tuition and room fees according to the following schedule:

- During the first week of classes: 90%
- During the second week of classes: 80%
- During the third week of classes: 70%
- During the fourth week of classes: 60%
- During the fifth week of classes: 50%
- During the sixth week of classes: 40%
- During the seventh week of classes: 30%
- After seventh week of classes: none

The unused meal plan credit is refundable throughout the semester. The refund amount equals the balance of the unused contract less a ten percent administrative fee charged on the unused portion.

There will be no refund of general, special, and laboratory fees.

**The federal formula** provides a return of Title IV aid if the student received federal financial assistance in the form of a Pell Grant, Supplemental Educational Opportunity Grant, or Federal Direct Student or PLUS loan, and withdrew on or before completing 60% of the semester. The percentage of the refund is equal to the number of calendar days remaining in the semester divided by the number of calendar days in the semester.

**Dropping Courses.** Students who drop one or more courses but continue to be enrolled in at least one course for the semester will have tuition charges refunded according to the University’s refund policy. There will be no refund of the special, laboratory or general fees.

The financial aid award, if any, is subject to revision if the student drops below full-time status.
Financial Aid

Valparaiso University is committed to providing resources necessary to help students complete their education. In selecting the students to receive this assistance, the University places primary emphasis on the student's academic achievement, character, future promise, and financial need. Financial aid consists of scholarships, grants, loans and campus employment, which may be offered to a student singly or in various combinations. The family of a student is expected to make a maximum effort to assist with college expenses. For more information about financial aid programs, contact the Office of Financial Aid.

METHOD OF APPLICATION

The following procedure should be followed by any student entering the University for the first time who wishes to apply for financial aid:

1. File an Application for Admission with the Office of Admissions. No student will be considered for assistance until the formal application has been approved.
2. Submit the Free Application for Federal Student Aid (FAFSA). The FAFSA requires no fee and can be secured from your high school guidance office or by writing to the Office of Financial Aid, Valparaiso University. All students should file the FAFSA before March 1 for priority consideration.

(FINANCIAL AID SCHOLARSHIPS)

All need-based financial assistance requires the annual filing of the Free Application for Federal Student Aid (FAFSA) or the Renewal Application. Students should file the renewal application by March 1 for priority consideration. Renewal depends on continued need, the availability of funds, and eligibility as described below.

FINANCIAL AID PROGRAMS

Financial aid packages may include gift aid (grants and scholarships) and/or self help (loans and employment).

- **Financial Aid Eligibility**: To be eligible for most federal, state, and Valparaiso University assistance undergraduate students must be enrolled full-time (some federal and state assistance is available to part-time students) in a degree or certificate program with at least twelve credits per semester; maintain satisfactory academic progress; and demonstrate financial need as determined by the filing of the FAFSA; be a U.S. citizen or an eligible noncitizen; not be in default on a federal loan or owe a refund or overpayment on any federal or state program.

- **Graduate students** also must meet the above requirements. However, they must be enrolled as half-time in a degree program with at least five credits per semester.

Original financial aid awards are based on the assumption that the recipient will be enrolled as a full-time student. Students who enroll for less than full time or who withdraw during a semester could have their financial aid award reduced or canceled. Enrollment status is determined at the beginning of each semester. For Federal Direct Loans, enrollment status is determined when the loan is disbursed.

- **SCHOLARSHIPS AND SPECIAL AWARDS**

Valparaiso University makes available to new students a variety of scholarships and awards based on academic and other qualifications. Eligibility for all scholarships and grants is determined by the University committee whose decision is final. Scholarships and awards are offered in good faith by the University with the intent that they will be renewed under the conditions specified. If an award is not renewed because the cumulative grade point average falls below the standard, the award may be restored if the student's cumulative grade point average meets the standard at a later time. The student should contact the Office of Financial Aid to request restoration of the award. The University does reserve the right to alter any scholarship or award should circumstances dictate. Academic Scholarships for freshmen are awarded on a competitive, funds-available basis to eligible admitted applicants whose admission files are complete by March 1.

(Note: Students wishing to be considered for the Valparaiso University Founder's Scholarship must submit application materials by January 15 of their senior year.)

- **ACADEMIC SCHOLARSHIPS**
  - High school seniors with outstanding scholastic achievement. Awarded without regard to financial need on a funds-available basis. Renewed if the annual grade point average at Valparaiso University is 3.0 or above and full-time status is maintained.
  - Founder's Scholarships: $16,280 (full tuition).
  - Board of Directors Scholarships: $12,210 (three quarters of tuition).
  - Presidential Scholarships: $8,140 (one half of tuition).
  - Honors Scholarships: $5,698 (thirty-five percent of tuition).
  - Crusader Scholarships: $3,256 (twenty percent of tuition).

- **SPECIAL AWARDS**

These special awards require full-time undergraduate attendance and grade point requirements for renewal.

The following awards require a 3.00 cumulative grade point average for renewal:

- **Allen Pre-Ministerial**, varying award amounts, for students preparing for church professions. A separate application is required; contact the Admissions Office.

- **Awards for Excellence**, $500 annual award, for outstanding Lutheran High School performance.

- **Chemistry Scholarships**, $1,000 annual award, selected by the Chemistry Department.

- **Physics Scholarships**, $1,000 annual award, selected by the Physics Department.
Financial Aid, Scholarships, Loan Funds

Transfer Scholarships, varying award amounts to transfer students who have completed at least 12 hours at their previous school with a 3.00 grade point average.

Phi Theta Kappa Awards, up to $3,000 annual award, to selected transfer students who are Phi Theta Kappa members.

The following awards require a $2,500 cumulative grade point average for renewal:
- Art Department Scholarships, $1,000 annual award, selected by the Art Department.
- Theatre and Television Arts Scholarships, $1,000 annual award, selected by the TTVA Department.

The following award requires a $2,500 cumulative grade point average for renewal:
- Lutheran Leadership Awards, full tuition selected for outstanding leadership, one new student from the LCMNS, and one from the ELCA. Applications are due January 15.

The following awards require a $2,000 cumulative grade point average for renewal:
- Alumni Heritage Awards, $500 annually, to children of Valparaiso University alumni.
- Deaconess Grants, varying award amounts, selected by the Lutheran Deaconess Association.
- Diversity Awards, varying award amounts, to students of multicultural background who display exceptional promise.
- International Scholarships, varying award amounts, to selected international students.
- Lilly Partnering for Success Award, $2,500 annual award. Preference given to first generation students with financial need who graduate from the "Partnering for Success" project's targeted high schools.
- Lutheran Heritage Awards, $1,000 annual award, for active members of a Lutheran congregation.
- Lutheran High School Awards, $1,000 annual awards, to students who graduate from a Lutheran High School.
- Martin Luther Awards, one-quarter tuition annual award, to children of full-time Lutheran professional church workers. Students who qualify for a merit scholarship will receive the higher of the merit award, or the Martin Luther award.
- Music Grants, varying award amounts, selected by the Music Department based on auditions.

Valparaiso University National Merit Awards, $750 annual award, to National Merit finalists in addition to other merit scholarships the student may be awarded. Recipients must list Valparaiso University as their first college choice and not be receiving another type of National Merit Scholarship.

Siblings Awards, $500 annual award, to a brother or sister of a current or former Valparaiso University student.

Athletic Grants, varying award amounts, selected by the Athletic Department and individual coaches. Renewal subject to Athletic Department policy and NCAA regulations.

CAMPUS EMPLOYMENT
Students are employed in a variety of positions on campus. Open positions are posted in the Financial Aid Office throughout the year, and also on Valparaiso University's web site at www.valpo.edu/finaid. Students should contact the individual departments with job openings to apply for positions. Students with demonstrated financial need may work under the Federal Work Study Program (FWS). FWS students may also apply for off-campus jobs in the Community Service component of the program. Students may work on campus under the Valparaiso University Work Study Program regardless of financial need.

NEED-BASED AID GRANT PROGRAMS
Valparaiso University Gift Awards are institutional awards that are not repaid. All students who file the FAFSA and demonstrate need, will be considered. These awards may be funded by endowed scholarships, and other designated funds. Students will be notified if their award is funded by an endowed scholarship, and will be encouraged to thank the donor.

Federal Pell Grants are federal grants that are available to all students who have demonstrated financial need according to a federal formula. The FAFSA is required. Awards range from $400 to $3,125 annually; may be enrolled full-time or part-time.

Federal Supplemental Educational Opportunity Grants (SEOG) are federal grants, awarded to Valparaiso University students with the greatest financial need. Amount of the awards ranges from $200 to $4,000 annually; may be enrolled full-time or part-time.

State Grants (Higher Education Award, Freedom of Choice Award, and 21st Century Award) are for eligible Indiana residents and may be used at Valparaiso University. Non-Indiana residents should contact their state agencies for information and application procedures for any state grants for which they may be eligible. Indiana residents must file the FAFSA by March 1st. Awards are based on need, and are determined annually by state formula. Students must be enrolled full-time for the standard grant programs. Limited funds may be available for part-time students.

NEED-BASED LOAN PROGRAMS
Need-based student loans feature below-market interest rates, subsidized interest, and deferred payments. Students must be enrolled at least half-time. Repayment of these loans does not begin until six to nine months after graduation or after dropping below half-time status. Payments can be deferred for attending graduate school or for a variety of special circumstances.

Repayments usually extend over a period of ten years although extended terms and income-contingent plans are also offered. Timeliness in student loan programs for prepaying interest and principal. Many Valparaiso University students receive loans as part of their financial aid packages. In addition to the loans listed below, there are other private lenders who specialize in educational loans that are not based upon financial need. Contact the Office of Financial Aid for further information.

The following federal need-based educational loans are available through Valparaiso University. Complete and submit the FAFSA. Valparaiso University notifies the student of eligibility via an Award Notification and sends a Promissory Note to sign and return.

Federal Perkins Loans. Students enrolled full-time who have exceptional need. Monies come from the federal government and are administered by Valparaiso University. The interest rate is 5 percent and repayment begins nine (9) months after the student is no longer enrolled at least half-time. Entrance and exit counseling is required. Complete and submit the FAFSA before March 1st. Part-time students may receive Perkins loans in special circumstances if funding permits.

Financial Aid, Scholarships, Loan Funds

Federal Direct Subsidized Student Loans. Students enrolled at least half-time who demonstrate financial need. Monies come from the federal government. The federal government pays interest while the borrower is in school. Repayment begins six (6) months after the borrower is no longer enrolled in college at least half-time. Entrance and exit counseling is required. A variable interest rate adjusts every July 1, capped at 8.25 percent. Loan limits are $2,625 per year for freshmen; $3,500 for sophomores; $5,500 for juniors, seniors, and fifth year students. The aggregate maximum is $23,000 in the undergraduate program. Graduate students are capped at $8,500 per year, with a lifetime aggregate cap (including undergraduate loans) of $65,000. All first-time borrowers must complete an entrance interview.

ALTERNATIVE SOURCES OF AID
The following sources are not based on financial need. Non-need based loans are limited to the cost of education less other financial aid, or the annual loan limits, whichever is less.

Federal Unsubsidized Direct Loans. These loans are available to students who are enrolled at least half-time and who are not eligible for either need-based or non-need based loans. These loans are available for up to $5,500 per academic year. The loans are non-need based and are not based on financial need. Students must complete the FAFSA and submit the FAFSA and contact the Office of Financial Aid to apply.

Federal Direct Parent Loans for Undergraduate Students (PLUS). These loans are for parents of dependent students enrolled in at least six semester hours. Monies come from the federal government. This loan is not based on financial need, but a credit check is required. The variable interest rate adjusts every July 1, and is capped at 9%. The loan limits are up to the cost of education, less other aid, per student. Repayment of the principle and interest begins 60 days after the loan is fully disbursed. Contact the Office of Financial Aid to apply.
Financial Aid, Scholarships, Loan Funds

Veterans Programs. Contact the Veteran's Administration about programs for veterans and dependents.

Valparaiso University Loans. Limited, low interest loans are administered by Valparaiso University. The amounts vary. Contact the Office of Financial Aid for details.

Academic Management Services Inc. This service offers an insured monthly payment plan. A $50 annual participation fee is charged to participants. Contact Academic Management Services, Inc., 50 Vision Blvd., East Providence, RI 02914 (Telephone: 800-635-0120 or 410-431-1290).

Vocational Rehabilitation. Under the provision of Public Law 665, the federal government and the State of Indiana jointly provide funds for scholarship grants-in-aid to students who have a physical or mental impairment which constitutes a vocational handicap. The State Vocational Rehabilitation Division is responsible for the determination of the grants.

LOAN REPAYMENT INFORMATION

Sensible borrowing can not only help pay for college but also help establish a good credit history. Similarly, not making regular payments can result in a poor credit rating or even default status on student loans. To estimate future repayment obligations for student loans, use the factors listed below, multiplied by each $1,000 in debt, to estimate a ten-year repayment amount. For example, the estimated monthly payment on $20,000 in Direct Loans at 8 percent interest would be $12.13 × $20 or $242.60. These results are estimates only; many programs have minimum monthly payments, and the Perkins program is usually repaid in quarterly installments. In addition, extended repayment plans and income-contingent plans are available.

Factors: 5 percent interest, 10.61
7 percent interest, 11.61
8 percent interest, 12.13
9 percent interest, 12.67

PAYMENT OF FINANCIAL AID

Most aid is divided and credited to student accounts in equal amounts for each semester. Most aid is ready to disburse at the beginning of each semester, although the actual date that funds are disbursed varies and no aid can be disbursed until all requested documentation has been submitted to the Office of Financial Aid. Aid is credited regularly throughout the semester. Students must be enrolled for the sufficient number of credits (according to the requirements of each program) in a semester to receive financial aid. Students whose financial aid exceeds the University charges for the semester, may request a contact from the Student Accounts Office. It is each student’s responsibility to verify semester charges, financial aid credits, and refund check amounts for accuracy. Students receive work-study awards as a direct deposit to their financial institution every two weeks for hours worked in the previous pay period, not as a credit on their student account.

Financial aid for students who withdraw from Valparaiso University will be adjusted based on University’s refund policy. Specific information may be found in the Refund Policy section of this catalog.

SPECIAL STUDENTS

Certain restrictions apply to financial aid for students who are considered to have "special" status. These are students in certification programs such as teacher/diagonal certification programs or students who have earned a bachelor’s degree and return to school to enroll in undergraduate courses necessary as prerequisites to specific graduate programs. In any case, the student is eligible only for Federal (Unsubsidized or Subsidized) Direct and PLUS loans or employment. It is advised that students with "special student" status meet with a financial aid counselor for detailed information.

EXIT INTERVIEWS

Prior to graduation, leaves of absence, or withdrawal from the University, students who have accepted loans must participate in separate interviews for Federal Direct Loans and Perkins Loans.

APPEAL PROCEDURE

A review of any decision concerning a financial aid package may be requested. First, contact the Office of Financial Aid. If the outcome of the initial review is unsatisfactory, then a case review by the Financial Aid Appeals Committee may be requested. If the decision of the Financial Aid Appeals Committee is unsatisfactory, then an appeal may be presented to the Vice President for Admissions and Financial Aid. The decision of the Vice President is final.

Financial Aid Refund Policy

If a student is due a refund under the Valparaiso University refund policy, and the student has received any financial aid other than Federal Work-Study, part of the refund must be returned to the sponsoring aid programs. The amount of refund is determined in accordance with the University refund policy listed in the catalog (see page 231). Policies for returning a portion of that refund to sponsoring aid programs are as follows.

Valparaiso University Awards and Scholarships: If a refund balance remains after funds have been returned to the federal programs, a prorated percentage of Valparaiso University funds will be refunded.

Privately Funded Grants and Scholarships: Some students will be recipients of funds from private donors such as churches, civic groups, foundations, etc. Many of these organizations will provide specific instructions concerning disbursement of their funds to students who withdraw. In the absence of specific instructions from the donor, 100 percent of the semester award will be credited to the student’s account. Funds on deposit with the University that the donor designated for future terms of enrollment within the academic year will be returned to the donor.

Title IV Programs (Federal): Federal law determines the total amount of refund due, if any, when a student withdraws and how much of that refund must be returned to the federal programs.

State Grants and Scholarships: Refunding proration is done according to specific regulations of the sponsoring state.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS POLICY

Financial Aid recipients must maintain minimum standards of satisfactory academic progress for receipt of federal, state, and most Valparaiso University aid programs. All students receiving financial assistance must maintain matriculated status in a degree program. Regulations require a maximum time frame for degree completion, a quantitative measurement (credits earned toward a degree), and a qualitative measurement (cumulative grade point average). These three criteria are checked at the end of each academic year in May to determine whether students are maintaining satisfactory academic progress.

Undergraduate Students

Graduate and Law Students should refer to the Graduate and Law Bulletins for specific policy requirements.

Time Frame Measurement. Students may attempt up to 150 percent of the hours required for a bachelor’s degree. The 150 percent cap is the maximum limit according to federal regulations. The actual credit hour limit may vary depending on the requirements of each degree program. Most programs require 124 hours: for those programs the maximum attempted hours allowed is 186. Other programs, including music, engineering, nursing, and business degrees require more than 124 hours; therefore the maximum number of attempted hours allowed would be greater. All attempted hours at Valparaiso University, including regular semesters and summer sessions, as well as any credits transferred from other schools, will apply toward the 150 percent.

Quantitative Measurement. To comply with the 150 percent time frame requirement, students must complete at least two thirds (2/3) of all Valparaiso University hours attempted with a passing grade. At the end of each academic year, each student’s Valparaiso University total hours completed will be compared to the Valparaiso University total hours attempted to determine whether they are meeting this requirement.

Qualitative Measurement. Minimum cumulative grade point average standards are as follows:

- Freshmen (less than 24 hours completed) ............. 1.65
- Sophomores (24 to 55 hours completed) ............. 1.75
- Junior and above (56 or more hours completed) ......... 2.00

Incomplete, withdrawals, repeated courses, and non-credit remedial courses. Incompletes and withdrawals will count as hours attempted but not completed. If incompletes are later completed, they will be reflected when progress is again checked, or sooner if the student appeals. Repeated courses will not add to total hours attempted or hours completed; the grade will simply be replaced. The new grade will be included in the grade point average calculation, which will be considered when progress is again checked, or sooner if the student appeals. Valparaiso University does not offer non-credit remedial courses.

Appeals and reinstatement. Students whose academic progress is not in compliance
with these standards will be notified in writing after the Spring semester that their eligibility for aid has been terminated. They will also be advised of the appeal and reinstatement policy at that time.

Students may appeal termination of their financial aid eligibility due to extenuating circumstances, which may include illness, death in the family, other circumstances beyond the student’s control, or special academic circumstances. If the appeal is approved, the student will normally have one academic year to attain the appropriate grade point average and completed credit hour standards, unless specified differently by the appeals committee. In some cases, the committee may put the student on probation for one semester and require that the student meet certain standards. Students who do not appeal, or whose appeal is denied, will not regain financial aid eligibility until the semester after they have attained the appropriate grade point average and completed credit hour standards. The student should contact the Office of Financial Aid to initiate reinstatement.

Appeals should be directed to the Office of Financial Aid Appeals Committee.

Other Considerations: Summer school credits may be considered in evaluating attainment of the academic progress standards on an appeal basis.

Certain aid programs have shorter time-frame limits, and different grade point average requirements. For example, Valparaiso University scholarships normally require a 3.0 grade point average for renewal, and most Valparaiso University and Indiana aid programs are limited to eight full-time semesters. In addition, federal loan programs have cumulative limits that may be exceeded before the maximum time-frame limits are reached.

STUDENT FINANCIAL AID RESPONSIBILITIES

Students have the following responsibilities regarding financial aid assistance:

1. To pay special attention to their application for financial aid, complete it accurately, and submit it on time to the proper office.
2. To know and meet all deadline dates for applying or reapplying for aid.
3. To provide all documentation, corrections, and new information requested by the Office of Financial Aid or the agency to which the application is submitted.
4. To notify the institution of any information that has changed since first applying for financial aid.
5. To read, understand, and keep copies of all forms that are asked to sign.
6. To repay student loans on a timely basis and keep the university informed of current address.
7. To attend any necessary interview sessions related to the loan.
8. To be aware of all published financial aid policies, understand them, and comply with these policies.

STUDENT FINANCIAL AID RIGHTS

1. To know what financial assistance is available, including information on all federal, state, and institutional financial aid programs.
2. To know the procedures and deadlines for submitting applications for each available financial aid program.
3. To know how the institution selects aid recipients.
4. To know how and when payments will be made and to be familiar with the refund policy for students who withdraw.
5. To request a review of the financial aid package should there be changes in the family’s ability to meet costs of attendance.
6. To know how the institution determines whether the student is making satisfactory progress and what happens if he or she is not.
7. To be fully informed of the terms and provisions of loan payments, including interest rates, repayment schedules, and other conditions.
8. To appeal any decisions relating to the determination of financial aid eligibility.

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Students have the following responsibilities regarding financial aid assistance:

1. To pay special attention to their application for financial aid, complete it accurately, and submit it on time to the proper office.
2. To know and meet all deadline dates for applying or reapplying for aid.
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6. To know how the institution determines whether the student is making satisfactory progress and what happens if he or she is not.
7. To be fully informed of the terms and provisions of loan payments, including interest rates, repayment schedules, and other conditions.
8. To appeal any decisions relating to the determination of financial aid eligibility.

Donated and Endowed Scholarships

These scholarships are funded by corporations, foundations, churches, organizations, and individual friends of Valparaiso University. Donors may provide annual funds, called Donated Scholarships, or establish Endowed Scholarships where the earnings from the funds are used to provide assistance to students. In most cases, donated and endowed scholarships are used to fund Valparaiso University Gift Awards and Academic Scholarships.

APPLICATION REQUIRED

Students should contact the indicated department or the Office of Financial Aid for further information about the following scholarships.

- Aid Association for Lutheran Scholars. All College and Lutheran Campus Scholarships.
- Oliver W. and Emma W. Allen Scholarship. Awarded annually to students selected through a special process, preparing for church professions within the Lutheran church (ordained ministers, commissioned ministers, associates in ministry, or lay teachers). Preference is given to students preparing to enter Lutheran seminaries, those preparing to attend seminaries of other church bodies or university-based divinity schools leading to ordination in the Lutheran church or to placement in some other responsible full-time Lutheran ministry.
- Lutheran Brotherhood. Junior and senior college scholarships for Lutheran students and Lutheran Brotherhood Members in good standing.
- The Donna S. Multiples Memorial Scholarship. Annual award. Preference to seniors enrolled in the College of Nursing at Valparaiso University, who express an interest in specializing in pediatric care and have demonstrated clinical and academic ability. Financial need not a consideration.
- Valparaiso University Guild (Cookbook) Endowed Scholarship. New scholarships will be awarded annually to freshmen students with financial need and with academic ability. The scholarships may be renewed if the recipients maintain a 3.0 or better grade point average. The scholarship recipients shall be sons or daughters of Guild members. Application must be made for this scholarship. Application forms are available from the Office of Admissions or the Guild Office.
- Valparaiso University Guild Past National President’s Endowed Scholarship. Initiated by the Past National Presidents and Executive Directors in the name of all the women who have served as presidents, vice presidents, secretaries, treasurers, and executive directors of the Guild, this scholarship is awarded to two juniors with a 3.0 grade point average at the University. These two $3,000 scholarships will be awarded to sons or daughters of Guild members. It may be renewed if the student maintains a 3.0 or better grade point average. Application must be made for this scholarship. Application forms are available from the Office of Admissions or from the Guild Office.
- Datatel Scholars Foundation Scholarships. Sponsored by Datatel Inc., the leading independent provider of information management systems to institutions of higher learning, for eligible students attending a Datatel client university. Scholarship amount ranges from $700 to $2,000, based on merit. Scholarship candidates recommended to Datatel Scholars Foundation by Office of Financial Aid based on preliminary application. Semi-finalists complete formal application in early February. Scholarship recipients are notified by Datatel in May.

Note: There is no guarantee that one of the recommended semi-finalists from Valparaiso University will be selected as a scholarship recipient.

- Indiana Nursing Scholarship Fund Program. Administered by the State Student Assistance Commission of Indiana. Eligible student must be an Indiana resident, agree in writing to work as a nurse in an Indiana health care setting for at least the first two years following graduation, demonstrate financial need, and have a minimum grade point average of 2.04 or 2.0. Renewable for a total of four years. Students must apply each year. Application forms available in the Office of Financial Aid.

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- Indiana Minority Teacher and Special Education Services Scholarship Program. Administered by the State Student Assistance Commission of Indiana. Eligible students agree in writing to pursue their teaching career in an Indiana accredited school or vocational rehabilitation or other developmentally disabled center for three out of the first five years following completion of program. Eligible students are Black or Hispanic. Minority student seeking teacher certification or a student seeking a Special Education teaching certification or a student seeking an Occupation or Physical Therapy certification, and have a minimum grade point average of 2.0. Dunn Renewable for total of four annual scholarships. Students must reapply each year. Financial need may be considered. Applications available in the Office of Financial Aid.

NO APPLICATION REQUIRED

Listed below are the scholarships awarded annually by Valparaiso University. Valparaiso University Academic Scholarships or Valparaiso University Gift Awards may be funded by these special scholarships. If additional information is required, the student will be contacted by the Office of Financial Aid. Students need not make a separate application or request to be considered for these awards.

Note: The amount and number of awards given in endowed scholarships varies, depending on the earnings of the established fund.

- 40th Reunion Scholarship.
- Elderman H. and Alyda Albers Endowed Scholarship.
- Anna B. Althana Scholarship.
- Alumni Board Endowed Scholarship (PACT).
- Amoco Foundation, Inc. Scholarship.
- John W. Anderson Scholarship.
- Reverend Theodore and Vera Andres Memorial Endowed Scholarship.
- Robert Augustine Memorial Endowed Scholarship.
- Oscar and Wilhelmina Bahr Endowed Scholarship.
- Eric Lee Bandick Endowed Scholarship.
- Bank Endowed Scholarship.
- Mr. and Mrs. Henry G. Barr Endowed Scholarship.
- Herbert C. Bartlett Endowed Scholarship.
- Otto and Gertrude Bartlett Endowed Scholarship (PACT).
- Carl H. Barz Memorial Endowed Scholarship.
- Emory and Elsie Bauer Endowed Scholarship.
- The Aimee M. L. Becker Memorial Endowed Scholarship.
- Dr. and Mrs. Henry Frederick Beckman Endowed Scholarship.
- Victor H. Bergmann Endowed Scholarship.
- Charlotte Berra Scholarship.
- Wilfred and Olga Bernalh Scholarship.
- Leo and Jean Cunningham Besozzi Scholarship.
- Bethel Lutheran Church of University City, Missouri, Endowed Scholarship (PACT).
- Inez C. and W. H. Bischel Scholarships.
- Edwin O. Bleich Scholarship.
- Charles H. and Elizabeth Blum Endowed Scholarship.
- William F. and Martha Boeger Memorial Scholarship.
- Mrs. Amalie Bokern Endowed Scholarship.
- John V. Borgerding Endowed Scholarship.
- Mr. and Mrs. Stanley E. Bovim Memorial Endowed Scholarship.
- Otis R. and Elizabeth Bowen Endowed Scholarship.
- Otis R. and Elizabeth Bowen Endowed Board of Directors Scholarship.
- Professor John Bowman Endowed Scholarship.
- Daniel M. Brandt Endowed Scholarship.
- Martin W. Brandt, Ph.D., Memorial Endowed Scholarship.
- Mrs. and Mr. Cleo Brandt Endowed Scholarship.
- Carl and Isabelle Brauer Endowed Scholarship.
- A. John & Ruth J. Briel Endowed Scholarship.
- Ruth Brown Memorial Endowed Scholarship (PACT).
- Julius C. Bruencher Endowed Scholarship.
- William G. Buchinger Endowed Scholarship.
- Mrs. Ellis M. Burkhart Endowed Music Scholarship.
- Selma Deeke Busse Endowed Music Scholarship.
- Jose Calderon Memorial Scholarship.
- Kermilt H. Carlson Endowed Scholarship (PACT).
- Oliver and Holger Cattau Memorial Endowed Scholarship.
- Dr. Eugene J. Chewsow Memorial Endowed Scholarship.
- John E. Christen Memorial Endowed Scholarship.
- Emma E. Claus Christ College Scholarship.
- Emma E. Claus Law Scholarship.
- Robert P. and Caroline McMillan Collins Endowed Scholarship.
- Concordia, Wilmington, Delaware, Endowed Scholarship (PACT).
- Concordia Lutheran Church, Kirkwood, Missouri, Endowed Scholarship (PACT).
- Robert F. Connell Memorial Scholarship.
- Delma Covert Memorial Endowed Scholarship.
- Kenneth B. Copeland Endowed Cushman College Family Memorial Endowed Scholarship.
- Eugene Crawford Memorial Endowed Scholarship (PACT).
- Crowe Chizik & Company Scholarship.
- Czarnoski Family Endowed Scholarship.
- Sister M. Hugoline Czapinski Scholarship.
- Arthur Vining Davis Endowed Scholarship.
- Edwin F. Deicke Endowed Scholarship.
- Tom and Violet DeLassus Scholarship.
- Delta Upsilon Chapter of Eta Sigma Phi Scholarship.
- Deubener-Juenemann Foundation Scholarship.
- John L. Devoss Memorial Scholarship.
- Donna and Lonnie Dodge Endowed Memorial Scholarship.
- Sophie Doem Endowed Scholarship.
- Donald W. Dopp Memorial Endowed Scholarship.
- Wilbur C. Dopp Memorial Endowed Scholarship.
- Wilbur H. and Marguerite M. Dosland Endowed Scholarship.
- Richard W. and Phyllis (Buehner) Duesenberg Endowed Scholarship.
- Rupert and Ruth Dunkalu Endowed Scholarship.
- Linda Ann Eastmond (Bauer) Memorial Endowed Scholarship.
- Charles and Ruth Eberleit Family Endowed Scholarship (PACT).
- Reverend Ernest H. Eggers Memorial Endowed Scholarship.
- Reverend and Mrs. P. J. (Myrtle E.) Eckkasteed Endowed Scholarship.
- E. Stankey and Calista Enlund Endowed Scholarship.
- Twila Fabrizius Memorial Endowed Scholarship.
- Faith Lutheran Church, Lake Forest, Illinois, Endowed Scholarship (PACT).
- Felde Scholarship.
- Robert Elmore Finding Memorial Scholarship.
- Helen Finkbeiner Memorial Endowed Scholarship (PACT).
- First National Bank of Valparaiso Scholarship.
- Carl Christian Fleischer Memorial Endowed Scholarship.
- Henry W. Fleeming Endowed Scholarship.
- Esther H. and Elmer E. Foelber Memorial Endowed Scholarship (PACT).
- Herbert J. and Marie Foelber Endowed Scholarship.
- Edith Schuchardt Forsberg Family Memorial Endowed Scholarship.
- Dr. Louis Foster Scholarship.
- First Franke Memorial Endowed Scholarship.
- Paul and Emilie Freitag Endowed Scholarship.
- Paul W. D., Jr. and Alta H. Freitag Endowed Scholarship.
- Leslie F. and Katherine D. Freking Endowed Scholarship.
- Earl R. Fruehling Endowed Scholarship.
- William A. Fuzy Family Endowed Scholarship.
- Daniel and Thomas Gahl Endowed Scholarship (PACT).
- Dr. Ernest J. Gallmeyer Memorial Endowed Scholarship.
- Dr. and Mrs. E. C. Galtster Endowed Scholarship.
- Gamma Phi Anniversary (PACT).
- William C. Gast Memorial Endowed Scholarship.
- Harold C. Gearing Endowed Scholarship.
- Martin and Dorothy Goeglein Memorial Donated Scholarship.
- Ervin E. Goehring Endowed Scholarship.
- Mr. and Mrs. William H. Gouty Endowed Scholarship.
- Grace Lutheran Church, Winter Haven, Florida, Endowed Scholarship (PACT).
- Grace Lutheran Church, River Forest, Illinois, Endowed Scholarship (PACT).
- Grace Lutheran Church, Tulsa, Oklahoma, Endowed Scholarship (PACT).
- Ervin and Helen Gratzer Endowed Scholarship (PACT).
- Erwin and Helen Gratzer Endowed Scholarship (PACT) (Van V.).
- Earl L. Grieger Memorial Endowed Scholarship.
- Professor Charles R. Grimley Endowed Scholarship.
- Leona M. Groth Memorial Endowed Scholarship.
- Henry C. and Ura E. Guhl Endowed Scholarship.
- Charles Halleck Endowed Scholarship.
- Arthur E. Hallerberg Memorial Endowed Scholarship (PACT).
- Elsa and Lloyd Haverson Endowed Scholarship.
- Clarence and Elsie Hansen Endowed Scholarship.
- Walter D. and Helen A. Hansen Endowed Scholarship.
- Rev. Dr. Oliver R. and Bertha Harms Endowed Scholarship.
- Dr. Oliver R. and Bertha Harms Endowed Board of Directors Scholarship.
- Edward W. Hartman Memorial Endowed Scholarship.
- Rev. Harlan Hartner Endowed Scholarship.
- Lily Hayden Memorial Endowed Scholarship.
- Rev. Harry H. Havstert Endowed Scholarship (PACT).
- William Randolph Hearst Endowed Scholarship.
- Walther T. F. and Laura M. Heinicke Endowed Scholarship.
- Edward H. Heinze Memorial Scholarship.
- John and Dorothy Helms Endowed Scholarship.
- Dr. Karl H. Henrichs Endowed Scholarship.
- Karl H. and Luetta M. Henrichs Endowed Scholarship.
- John and Rosa Herscher Endowed Scholarship.
- Herman C. Hesse Endowed Scholarship.
- Mr. and Mrs. Peter Hessler Endowed Scholarship.
- William and Vera Heyne Endowed Bach Scholarships (PACT).
- Charles H. Hickman Memorial Endowed Scholarship.
- Dee Hildebrandt Endowed Scholarship (PACT).
- Mary Hilgemer Endowed Scholarship.
- Dan Hilgendorf Memorial Endowed Scholarship.
- Rose L. Hill Memorial Endowed Scholarship.
- Walter S. Hilltop Endowed Scholarship.
- Hoeniger, Wagner and Evans Scholarship.
- Richard J. Hoberg Endowed Scholarship.
- Harold and Margaret Hoffman Endowed Scholarship.
- Margaret H. Hoffman Memorial Endowed Scholarship.
- Dr. O.C.J. Hoffmann-Dr. A. G. Hugelj Endowed Scholarship.
- Louis C. Holland Endowed Scholarship.
- Oscar Homann Endowed Scholarship.
- Hope Lutheran Church, Park Forest, Illinois, Endowed Scholarship (PACT).
- Dr. and Mrs. A. G. Hugelj Endowed Scholarship for Leadership.
- Joyce Huegli Memorial Endowed Scholarship.
- Golde Hunt Memorial Endowed Scholarship Fund.
- James and E. Houston Scholarship.
- Immanuel Lutheran Church, Michigan City, Indiana, Endowed Scholarship (PACT).
- Incencte Endowed Scholarship (PACT).
- Indiana Federal Bank Scholarship.
- Judges and Mrs. F. A. Jaeckel Memorial Endowed Scholarship.
- Richard F. and Martha W. Jeske Endowed Scholarship.
- Edward Jiede, Jr. Endowed Scholarship.
- Mr. and Mrs. Emil Jochum Scholarship.
- Dr. Philip G. Kapfer Memorial Endowed Scholarship.
- The Keller Memorial Endowed Scholarship (PACT).
- Susan Kiray Memorial Scholarship.
- Edwin H. Klinkerman Endowed Scholarship.
- Walter C. and Elizabeth K. Klug Memorial Endowed Scholarship.
- Ernie T. Knopp Memorial Endowed Scholarship.
- John A. Kneepel Memorial Endowed Scholarship.
- Mr. and Mrs. Edwin H. Koenen Endowed Scholarship.
- Erna S. Koenen/Mrs. Henry F. Endowed Scholarship.
- Eleanor R. Koenig Memorial Endowed Scholarship (PACT).
- Herbert H. and Edith A. Koenig Memorial Endowed Scholarship (PACT).
- Jayne Hoffmann Kruegel Memorial Endowed Scholarship.

Financial Aid, Scholarships, Loan Funds
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- Lauretta M. Kramer Memorial Scholarship.
- Matilda M. Kramer Memorial Endowed Scholarship.
- John W. and Clara A. Krathwol Endowed Scholarship.
- Mr. and Mrs. Gilbert W. Krause Athletic Endowed Scholarship.
- Carl and Viola Kreutz Endowed Scholarship.
- Reverend Paul G. Kreutz Memorial Endowed Scholarship (PACT).
- Ruth Kreutz Endowed Scholarship (PACT).
- William H. Kroeger Endowed Scholarship.
- William Henry Kroeger Memorial Endowed Scholarship (PACT).
- Walter H. Krohnke Scholarship.
- Kremsig Scholarship.
- Arlene E. Laesch Endowed Scholarship.
- Charles and Meta Laesch Endowed Scholarship.
- Clara A. Laesch Endowed Scholarship.
- Ernest and Laetz Endowed Scholarship.
- Lake County Donated Scholarship.
- Erwin A. and Eleanor H. Lange Endowed Scholarship.
- Harry and Emma Lange Memorial Endowed Scholarship.
- Helen Langer Memorial Scholarship.
- Steven and Diana Langer Law Scholarship.
- Endward and Therese Endowed Scholarship.
- Tommy Lasorda Endowed Scholarship.
- Richard H. Laube Memorial Endowed Scholarship (PACT).
- Edmund C. Laue Endowed Scholarship.
- School of Law Board of Visitors Donated Scholarship.
- Blase Lazzara Memorial Endowed Scholarship Fund.
- Mr. A. J. W. and Elfiandra M. LeBien Endowed Scholarship.
- Dr. & Mrs. H. A. P. Leininger Endowed Scholarship.
- George and F Lorett Laetz. Sr. Endowed Scholarship.
- Ernest and Clara M. Lichtfuss Endowed Scholarship.
- John A. Liechti Endowed Scholarship.
- Nancy Liekend Memorial Endowed Scholarship.
- David D. Litten Endowed Scholarship.
- Scott C. Lohr Endowed Scholarship.
- Mr. and Mrs. Orval M. Lohse Endowed Scholarship.
- Lynette and Endowed Scholarship.
- Lutheran Brotherhood Endowed Scholarship.
- Lutheran Deaconess Endowed Scholarships (PACT).
- Esther and Karl Lutze Minority Endowed Scholarship (PACT).
- Walter A. MacNary Memorial Endowed Scholarship.
- Orval L. and Maud L. Mains Memorial Endowed Scholarship.
- Mr. and Mrs. Max K. Mallon Endowed Scholarship.
- Dan and Louise Mania Endowed Chemistry Scholarship.
- Mannings/Spannagle Memorial Endowed Scholarship.
- Albert A. and Martha Marks Endowed Education Scholarship (PACT).
- Marowske Endowed Scholarship.
- Dr. and Mrs. E. W. Mariquard Endowed Scholarship.
- Margery M. Martin Scholarship.
- Gerald C. Mast Scholarship.
- G. H. Maskus Endowed Scholarship.
- Russell H. Matthias Endowed Scholarship.
- Irene Mayer Endowed Scholarship.
- Katherine McCaul Endowed Scholarship.
- James H. McGill Memorial Scholarship.
- Kelly Anne McGill Memorial Endowed Scholarship.
- J. Ron and Joanne McLeod Endowed Scholarship.
- Vera M. McLeod Memorial Endowed Scholarship.
- Mr. and Mrs. A. A. Meitz Endowed Scholarship.
- Ernest A. Menzel Endowed Scholarship.
- Memorial Endowed Scholarship.
- Mr. and Mrs. Dirk Meyer Endowed Scholarship.
- Gerhard F. Meyne Endowed Scholarship.
- Michigan Student Donated Scholarship.
- Michigan Student Endowed Scholarship.
- Bertha Miller Memorial Scholarship.
- Helen Miller Endowed Scholarship.
- Minnesota Merit Award.
- Dean H. Mitchell Endowed Scholarship.
- Marie Moehring Endowed Nursing Scholarship.
- Henry F. Moeller Endowed Endowed Scholarship.
- Alma and Henry Moeller Endowed Music Scholarship Fund.
- Dr. and Mrs. Robert C. Moellerling, Sr. Endowed Scholarship.
- Drs. Charles and Florence Montz Endowed Scholarship.
- R. Stuart and Margaret Moore Memorial Endowed Scholarship Fund.
- Robert and Neil Moore Law Scholarship.
- Morrison Foundation Endowed Scholarship.
- Clara Mueller Endowed Scholarship.
- Ewald H. Mueller Scholarship.
- Germaine E. and Donald Endowed Endowed Scholarship.
- Martin David Mundt Memorial Endowed Scholarship (PACT).
- An Endowed Music Scholarship (PACT).
- Hildegard Must Memorial Scholarship.
- George L. and Mary S. Myers Endowed Scholarship.
- Max G. and Judith E. Nagel Scholarship.
- Nancy Wehmeier Nagel and Robert B. Nagel Scholarship.
- Mr. and Mrs. Martin J. Nehring Endowed Scholarship.
- Faye Newton Memorial Endowed Scholarship (PACT).
- Nickless Family Scholarship.
- Marilyn Niequist Memorial Endowed Scholarship.
- Nicholas H. and Marguerite Lilly Noyes Endowed Scholarship Fund (PACT).
- Nuechterlein Endowed Scholarship (PACT).
- Carl and Arnold C. Nuechterlein Endowed Scholarship.
- Joel S. Oberman Endowed Basketball Scholarship.
- Olds Family Endowed Scholarship.
- Arnold Oestmann Endowed Scholarship.
- Eleanor Davis Oexmann Scholarship for the School of Law.
- Ohio Annual Endowed Scholarship.
- Rev. Armin and Evelyn Olden Endowed Scholarship.
- George S. Olive and Company Outstanding Achievement in Accounting Award at Valparaiso University.
- George S. Olive and Company Donated Scholarship.
- Helen Matsui Olson Memorial Endowed Scholarship.
- Walter E. Olson Memorial Scholarship.
- Orting Family Endowed Scholarship (PACT).
- Dr. Richard Oster Scholarship.
- Thomas Otten and Joyce Otten Memorial Endowed Scholarship (PACT).
- Our Savior Lutheran Church Congregation of Raleigh, North Carolina, Endowed Scholarship (PACT).
- Pacific Hills Lutheran Church, Omaha, Nebraska, Endowed Scholarship (PACT).
- Mollie V. Page Endowed Scholarship.
- Pauling Music Endowed Scholarship.
- Professor Charles G. Feller and His Son, John Van Alstyne Feller, Memorial Endowed Scholarship.
- Peters Family West Michigan Endowed Scholarship.
- Gilbert A. Peters Endowed Scholarship.
- Arthur F. Peterson Endowed Scholarship.
- Margaret A. Pfeiffer Endowed Scholarship.
- Dr. Pfeiffer Endowed Scholarship.
- Irma Pfuehler Memorial Endowed Lutheran Deaconess Scholarship (PACT).
- PhiDeltaTheta Class of '84 Endowed Scholarship (PACT).
- Phi Mu Alpha Endowed Scholarship (PACT).
- Breitner Phyllis Memorial Scholarship.
- Paul F. Phipps Merit in English Endowed Scholarship (PACT).
- Hattie Lowe Pierce Endowed Scholarship.
- Pilgrims Evangelical Lutheran Church of Detroit Endowed Scholarship.
- Arthur H. Poepp Memorial Endowed Scholarship.
- Arthur E. Pohman Endowed Scholarship.
- Pohman Family Donated Scholarship.
- Pohman Family Endowed Scholarship.
- Paul V. and Evelyn A. Ponitz Scholarship.
- The Robert Ponitz Endowed Scholarship.
- Porter County Cancer Society Endowed Scholarship (PACT).
- Porter County Doctors' Scholarship.
- Professor Henry W. and Laura M. Prahl Scholarship.
- Mrs. Hiszel Predowitch Memorial Endowed Scholarship.
- Presidential Endowed Scholarship for Minorities.
- Vernon F. and Katherine H. Radde Endowed Scholarship.
- Herman R. Rahm Memorial Scholarship.
- Emma and William Rakovsky Memorial Endowed Scholarship.
- Elizabeth Raney Endowed Scholarship.
- Charles and Elizabeth Rau Scholarship.
- Redeemer Lutheran Church, South Bend, Indiana, Endowed Scholarship Fund (PACT).
- Rev. and Mrs. Arthur L. Reinke and the Rev. and Mrs. Augustus Reinke Memorial Endowed Scholarship.
- Reutlinger Semester Scholarship.
- Richardson Twin Scholarship.
- Alka F. Reinhold Endowed Memorial Endowed Alumni Scholarship (PACT).
- Mr. and Mrs. Carl Ritterberg Scholarship.
- Sandra Felton Roberts Memorial Endowed Nursing Scholarship (PACT).
- Rev. Arminder and Dorothy Gosheske Scholarship (PACT).
- Cora H. Rosin Memorial Endowed Scholarship.
- Waldemar M. Roth Memorial Endowed Scholarship.
- Leona Rotzoll and Elsa Kusma Endowed Memorial Scholarship.
- Walter C. and Gudrun M. Ruble Endowed Scholarship.
- Adele Ruedtger Endowed Scholarship.
- Noah B. Ruff Memorial Endowed Scholarship.
- August and Helene Ruhe Endowed Scholarship.
- Beintie Lillie Rupecht Endowed Scholarship (PACT).
- Freeman and Frances Russell Endowed Scholarship.
- Clemence and Glencie Sabarin Endowed Scholarship (PACT).
- Gerhard Salzmann Endowed Scholarship.
- San Diego (35) Endowed Scholarship (PACT).
- Judy Satiska and Julie Kline Memorial Endowed Scholarship.
- James Savage Endowed Scholarship Fund.
- Walter W. Schantz Endowed Scholarship.
- Frederick A. Schaper Endowed Scholarship.
- Philip Scheid Family Endowed Scholarship.
- Gilbert L. Schaus Scholarship.
- Mr. and Mrs. L. Schidler Memorial Endowed Scholarship.
- Walter E. Schmaltz Memorial Endowed Scholarship (PACT).
- Jane Conway Schmeckpepper Endowed Scholarship.
- Dr. Robert V. Schnabel Endowed Scholarship.
- Mr. and Mrs. Herbert F. Stride Endowed Scholarship.
- Dr. Scholl Foundation Scholarship.
- Richard A. Schoenbohm Endowed Music Scholarship (PACT).
- Dorothy Schumacher Scholarship.
- John Schuth Donated Athletic Scholarship.
- The Robert F. Sherbert Scholarship Fund (PACT).
- Dana B. Schwahn Endowed Memorial Scholarship (PACT).
- Albert F. and Miriam B. Scribner Endowed Scholarship.
- Elmer Schaeck Memorial Endowed Scholarship.
- Susan E. Seeger Memorial Endowed Scholarship.
- Ray and Mary Seegers Family Scholarship.
- Seuel Endowed Scholarship.
- Carl W. and Caroline D. Seykoldt Endowed Scholarship.
- Louis and Helen Zahn Shales Endowed Scholarship.
- Mr. and Mrs. Hugh O. Sherbert Endowed Scholarship.
- Vera L. Sieb Endowed Scholarship.
- John F. Sievers Memorial.
- Sigma PhiEpsilon Undergraduate Endowed Scholarship.
- Sigma Tau Gamma Undergraduate Endowed Scholarship.
- Stanley B. Sink Scholarship.
- Helen Slayback Memorial Endowed Scholarship.
- Byron Smith Memorial Donated Scholarship.
- J. Howard Smith Endowed Scholarship.
- Carl O. Shohe Memorial Scholarship.
- St. John Lutheran Church, Lombard, Illinois, Endowed Scholarship (PACT).
- St. John's Lutheran Church, Long Green, Maryland, Endowed Scholarship (PACT).
- St. Peter Lutheran Church, Mishawaka, Indiana, Endowed Scholarship (PACT).
- Bertha A. Staede Memorial.
- Edward J. L. Staede and Amanda Hall Staede Endowed Scholarship.
- Arlene and Cecelia Stamm Endowed Scholarship.
- Rev. Martin Th. Steege Endowed Scholarship.
- J. L. Stendel Family Memorial Endowed Scholarships.
- Frederick A. Stendell and Harry E. Stendell Endowed Scholarship.
- Paul Stone Endowed Scholarship.
- Alvin A. and Marion S. Streder Endowed Scholarship.
- Mr. and Mrs. Herbert F. Stride Endowed Scholarship.
- Fred L. and Selma A. Strietter Memorial Endowed Music Scholarship (PACT).
Loan Funds

- **Federal Perkins Program.** Valparaiso University participates in the Federal Perkins Loan Program, and has established a fund consisting of contributions from the government and the University. Details may be obtained from the Office of Student Financial Aid.

- **The Garland Loan Fund.** Loans for students majoring in the sciences or mathematics. These will be non-interest bearing loans.

- **Garman Loan Fund.** A loan fund has been established by Benjamin L. Garman to help students who cannot qualify for a scholarship but who must have financial assistance or those with scholarships who need more help.

- **Fred Smoke Student Loan Fund.** Administered by the Valparaiso University Alumni Association, this fund was established in January, 1965, and provides funds for loans to full-time students who are residents of Porter County, Indiana.

- **Nellie Winifred Cheney Overton Memorial Loan Fund.** This fund was established by Mr. William J. Overton as a memorial to Mrs. Overton. The income from the fund is available for loans to students from Lake County, Indiana.

- **Henry Strong Educational Foundation.** Provides loans to qualified full-time upperclass students under thirty years of age.

- **Betty Rose Wulf Memorial Loan Fund.** Established by her parents, Mr. and Mrs. Walter H. Wulf, to be used by students preparing for church work, such as deaconess training.

**LOAN REPAYMENT TERMS**

Each of the loan programs contains specific repayment terms and conditions which are a part of the promissory note the student signs upon receipt of the loan fund. Students are responsible for being aware of the various loan provisions and thus should review the terms of the repayment obligation prior to accepting these loan programs.

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**UNIVERSITY PERSONNEL**

President Harre

Roy A. Austensen, Ph.D., Professor of History; Provost and Vice President for Academic Affairs; Concordia College, River Forest (B.S., 1963); The University of Illinois at Urbana-Champaign (M.A., 1964; Ph.D., 1969); University of Vienna

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James V. Bachman, Ph.D., Professor of Philosophy; the John Eckrich Professor in Religion and the Healing Arts; Valparaiso University (B.S., 1968); Cambridge University (B.A., 1970; M.A., 1974); Concordia Seminary, St. Louis (M.Div., 1972); Florida State University (Ph.D., 1986)

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Taylor.


James Fraser Moore, Ph.D., Professor of Theater; Park College (B.A., 1975); 21 Research Leave, 20 Research Patent of Education; University of Toledo (B.Ed., 1964); Chinese, Asian Studies; Nanjing University (B.A., 1980). Visiting Professor of Nursing (B.S.N., 1987; M.S.N., 1982); The University of Illinois at Chicago (Ph.D., 1992).

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William Roys Olmsted, Ph.D., Professor in Christ Church; University of Michigan (B.A., 1965); University of Paris; The University of Chicago (M.A., 1970; Ph.D., 1975). Visiting Professor of Nursing (B.S.N., 1987; M.S.N., 1982); The University of Illinois at Chicago (Ph.D., 1992).

Ceyhun Ozgur, C.P.I.M., Ph.D., Associate Professor in the College of Business Administration; University of Akron (B.A., 1982; M.S., 1984; Ph.D., 1990). Visiting Professor of Nursing (B.S.N., 1987; M.S.N., 1982); The University of Illinois at Chicago (Ph.D., 1992).

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Dean Manning Schroeder, Ph.D., Professor in the College of Business Administration; Herbert and Agnes Schulz Professor of Management; University of Minnesota (B.S.M.E., 1974; Ph.D., 1985); University of Montana (M.B.A., 1980)

Mark R. Schwenk, Ph.D., Professor of Humanities in Christ College; Dean of Christ College; Valparaiso University (B.A., 1967); Stanford University (M.A., 1969; Ph.D., 1978)

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James Chien-Hua Tan, Ph.D., Professor of Biology; Cheng Shue University, (B.S., 1957); Montana State University (M.S., 1961); North Carolina State University (Ph.D., 1968)

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Stanislaus A. Zygmun, Ph.D., Associate Professor of Physics and Astronomy; Massachusetts Institute of Technology (B.S. (Physics), 1984; B.S. (Mat. Sc.,Eng.), 1984; Ph.D., 1988)
Adjunct and Part-Time Faculty, 1998-1999

Michael Peter Adamczyk, M.M., Part-Time Instructor in Music
Larry D. Allen, M.M., Part-Time Instructor in Music
Elise Marta Alveson, M.S.N., Adjunct Assistant Professor of Nursing
Jose Arredondo, Ed.D., Part-Time Assistant Professor of Education
Rebecca Elizabeth Bailey, M.A., Adjunct Instructor in Communication
Margaret E. Bard, M.P.A., Part-Time Clinical Assistant in Nursing
James Lee Barkow, M.M.Ed., Part-Time Instructor in Music
William R. Barrick, B.S., Part-Time Instructor in Music
Dorothy C. Bass, Ph.D., Adjunct Professor of Theology
James Phillip Beasley, M.A.L.S., Part-Time Instructor in the College of Arts and Sciences
Kimberly Beasley, M.M., Part-Time Instructor in Music
E. Donald Bengel, B.S.C.E., Part-Time Lecturer in Civil Engineering
Philip C. Benson, J.D., Adjunct Professor of Law
Karen S. Berrier, Ph.D., Part-Time Assistant Professor of Foreign Languages and Literatures
Elizabeth Marie Bezak, J.D., Adjunct Professor of Law
Alan Bloom, M.A., Part-Time Instructor in History
Roger Bradford, J.D., Adjunct Professor of Law
Merlin LeRoy Bray, M.A., Part-Time Assistant Professor in Education
Jeanne Ann Brown, Ph.D., Part-Time Assistant Professor of Psychology
Jeffrey C. Brown, M.M., Adjunct Assistant Professor of Music
Rebecca J. Heim Byrum, M.L.S., Government Information Librarian with rank of Adjunct Instructor
Paul Richard Chael, J.D., Adjunct Professor of Law
Corina Kennedy Channing, M.A., Part-Time Instructor in Communication
Jeffrey Jen-kee Chin, Pharm.D., Part-Time Associate Professor of Nursing
Curtis W. Cichowski, J.D., Adjunct Professor of Law; Associate Dean of the School of Law
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Maura Elizabeth Cock, M.A., Part-Time Instructor in Music
Joseph F. Conn, B.A., Part-Time Instructor in Communication

Michele Corrazo, M.F.A., Part-Time Assistant Professor of Art
H. Jonathan Costas, J.D., Adjunct Professor of Law
Denise Elaine Criswell, M.S., Part-Time Assistant Professor of Physical Education
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Alexander L. Edgar, J.D., Adjunct Professor of Law
Carol Elaine Ediger, M.A., Part-Time Instructor in Foreign Languages and Literatures
Barbara R. Engerer, B.S., Part-Time Instructor in the College of Engineering
Judith Erwin-Neville, M.M., Part-Time Instructor in Music
Bruce Allen Evans, M.M., Part-Time Instructor in Music
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Kathyrn Johnson, J.D., Adjunct Professor of Law
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Ralph Andrew Klapis, B.M., Part-Time Instructor in Music
LeDonna Rae Koch, M.S., Part-Time Instructor in Music
Lares Rae Koch, M.S., Part-Time Assistant Professor of Business Administration
Lara B. Koch, M.S., Part-Time Assistant Professor of Education
Pamela Naber Knox, M.S., Part-Time Assistant Professor of Physics and Astronomy
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Naida Louise Lehmann, Ph.D., Part-Time Assistant Professor of Biology
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Wesley William Maier, M.A.T., Part-Time Lecturer in Mathematics and Computer Science
Diane Stanley Mallett, Ph.D., Adjunct Assistant Professor of Education
Angela M. Marotto, J.D., Adjunct Professor of Law
Teresa A. Massa, J.D., Adjunct Professor of Law
Harold L. Maupin, M.S., Part-Time Instructor in Mathematics and Computer Science
Hugh E. McGulig, Ph.D., Part-Time Assistant Professor; Director of International Studies
Susan Albrecht McPherson, M.A.L.S., Part-Time Assistant Professor of Education
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Christine Miller, J.D., Adjunct Professor of Law
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Roderick Gardner Moore, II, M.S., Part-Time Assistant Professor of Physical Education
Cheryl Buser Morgavan, Ph.D., Part-Time Associate Professor of Psychology
Patric D. Murphy, LL.M., Adjunct Professor of Law
Lee Nagel, B.S.C.E., Part-Time Lecturer in Civil Engineering
Judith Ellen Nagel, M.A.L.S., Part-Time Assistant Professor of Education
Dorothea Allwardt Nuechterlein, M.A., Part-Time Lecturer in Sociology
Selma Anderson Ochoa, M.A., Part-Time Assistant Professor of Foreign Languages and Literatures; Director of the Valparaiso University Study Center at Puebla, Mexico
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Nancy Porcaro, M.A.L.S., Part-Time Instructor in Political Science
Henry Burton Piper, Jr., Pharm.D., Part-Time Associate Professor of Nursing
Philip M. Potempa, B.A., Part-Time Instructor in Communication
Edward W. Randles, M.M., Part-Time Instructor in Music
David Read, J.D., Adjunct Professor of Law
Alaia J. Reay, B.A., Part-Time Instructor in Communication
Chad William Reichert, B.S.F.A., Part-Time Instructor in Art
Mary Lee Sledentop Riley, M.A.L.S., Part-Time Instructor in Music
<table>
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<tr>
<th>Name</th>
<th>Position</th>
<th>University</th>
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<tr>
<td>Richard E. Watson, M.M.</td>
<td>Part-Time Instructor in Music</td>
<td></td>
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<tr>
<td>Roger A. Weitgenant, J.D.</td>
<td>Adjunct Professor of Law</td>
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<tr>
<td>David M. Weiler, J.D.</td>
<td>Adjunct Professor of Law</td>
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<tr>
<td>Patricia Lorraine White, M.M.</td>
<td>Part-Time Instructor in Music</td>
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<tr>
<td>E. Louise Williams, B.A., D.D. (Hon.)</td>
<td>Part-Time Assistant Professor of Theology</td>
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<tr>
<td>Valerie Jo Ludwig Willman, Ph.D.</td>
<td>Adjunct Professor of Psychology</td>
<td></td>
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<tr>
<td>James Boyd Wilson, M.B.A.</td>
<td>Part-Time Lecturer in the College of Business Administration</td>
<td></td>
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<tr>
<td>Lea Arnold Carlson, A.M., M.S.</td>
<td>Associate Professor Emeritus of Mathematics and Computer Science; DePaul University (A.B., 1961); University of Michigan (A.M., 1962); The University of Chicago (M.S., 1971)</td>
<td></td>
</tr>
<tr>
<td>William Herbert Dauberman, P.E., M.S.</td>
<td>Professor Emeritus of Chemical Engineering; Bucknell University (B.S. in E.E., 1938); University of Pittsburgh; Illinois Institute of Technology (M.S., 1963)</td>
<td></td>
</tr>
<tr>
<td>John Fredrick Deters, Ph.D.</td>
<td>Professor Emeritus of Chemistry; State University of Iowa (B.S., New York, B.S., Ch. E., 1939); The University of Chicago (M.S., 1945); University of Notre Dame (Ph.D., 1964)</td>
<td></td>
</tr>
<tr>
<td>Ruth Ketler Deters, M.S., M.A.</td>
<td>Associate Professor Emeritus of Mathematics; Northwestern University (B.S., 1932); The University of Chicago (M.A., 1933, M.S., 1943); Illinois Institute of Technology</td>
<td></td>
</tr>
<tr>
<td>Thomas Arthur Droge, Ph.D.</td>
<td>Professor Emeritus of Theology; Concordia Seminary, St. Louis (B.A., 1953; M.Div., 1958); The University of Chicago (M.A., 1963; Ph.D., 1965)</td>
<td></td>
</tr>
<tr>
<td>Charles A. Ehren, Jr., J.D.</td>
<td>Professor Emeritus of Law; Columbia College, New York (A.B., 1964); Columbia University School of Law (J.D., 1966); University of Pennsylvania Law School</td>
<td></td>
</tr>
<tr>
<td>William Frederick Efrig, Jr., D.M.A.</td>
<td>Professor Emeritus of Law; Valparaiso University (B.A., 1968); University of Michigan (M.A., 1967; M.D.A., 1962)</td>
<td></td>
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<tr>
<td>Ahmed Sami El-Naggar, P.E., Ph.D.</td>
<td>Professor Emeritus of Civil Engineering; University of Cairo (B.Sc., 1949); University of California, Berkeley (M.Sc., 1952); Purdue University (Ph.D., 1957)</td>
<td></td>
</tr>
<tr>
<td>Bethny S. Emery, M.M.</td>
<td>Assistant Professor Emeritus of Music; Michigan State University (B.M., 1947; M.M., 1948); University of Michigan (M.M., 1951); Royal Conservatoire de Musique de Bruxelles (Premier Prix, 1957); Royal Conservatoire de Musique de Ghent; Indiana University</td>
<td></td>
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</table>

**Faculty Emeriti, 1998-1999**

**Rhea Ann Adgate, M.A.L.S.**, Assistant Professor Emeritus of Home Economics; Michigan State University (B.S., 1949); Valparaiso University (M.A.L.S., 1979)

**Norman Robert Amundsen, M.S.**, Associate Professor Emeritus of Physical Education; University of Wisconsin (B.S., 1965; M.S., 1967)


**Simone Françoise Baegler, Lic. es L.**, Assistant Professor Emeritus of Foreign Languages and Literatures; University of Bordeaux; Lindenwood College; La Sorbonne, Paris (Lic. es L., 1954); The University of Chicago

**Eldon William Balko, M.M.**, Associate Professor Emeritus of Music; Wisconsin State University (B.S., 1953); Michigan State University (M.M., 1957); University of Wisconsin

**Carlene Heidbrink Bartelt, R.N., M.S.**, Assistant Professor Emeritus of Nursing; Valparaiso University (B.A., 1946; B.S., 1972); University of Arizona (M.S., 1980)

**Louis Franklin Bartelt, Jr., L.L.M., Louis and Anna Seegers Professor Emeritus of Law; Valparaiso University (B.A., 1944; J.D., 1947); Yale University (L.L.M., 1964); University of Wisconsin


**Philipp L. Brockington, Jr., J.D.**, Associate Professor Emeritus of Civil Law; Amherst College (B.A., 1962); Harvard University Law School (J.D., 1965)

**Ruth M. Brown, R.N., M.S.**, Associate Professor Emeritus of Nursing; Indiana University (B.S.N., 1960); Purdue University (M.S., 1972)

**Vera Rose Bushing, B.L.S.**, Assistant Librarian Emeritus with rank of Assistant Professor Emeritus; Valparaiso University (B.A., 1946); The University of Chicago (B.L.S., 1947); Indiana University

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*Deceased, June 18, 1998

*Deceased, July 30, 1998
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Financial Aid Counselor ...................................................... Susan Schaefer, B.S.
### Office of Administration and Finance

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tr>
<td>Vice President</td>
<td>Charley E. Gillispie, M.B.A., C.P.A.</td>
</tr>
<tr>
<td>Executive Assistant</td>
<td>Joan I. Ritter</td>
</tr>
<tr>
<td>Assistant Controller for Student Accounting</td>
<td>Susan D. Scroggins, B.A., C.P.A.</td>
</tr>
<tr>
<td>Accountant Assistant</td>
<td>Wendy L. DiMaio, B.S.B.A.</td>
</tr>
<tr>
<td>Director of Student Accounts and Loans</td>
<td>Kathy Yerga, B.S.B.A.</td>
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<td>Director of Collections</td>
<td>Sharie Palmer</td>
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<td>Director of Support Services</td>
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<td>Director of Physical Plant</td>
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<td>Director of Dining Services</td>
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<td>Benefits Administrator</td>
<td>Laura Balinsky, B.A.</td>
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<td>Director of Athletics</td>
<td>William L. Steinbrecher, Ed.D.</td>
</tr>
<tr>
<td>Chief, University Police</td>
<td>Ed Lloyd, A.S., Criminal Justice</td>
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<tr>
<td>Director of Housekeeping Services</td>
<td>Tammy L. Tice, B.S.</td>
</tr>
<tr>
<td>Payroll Manager</td>
<td>Myroll Martin</td>
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<tr>
<td>Loan Officer</td>
<td>Lorna K. Porter</td>
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### Office of Student Affairs

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tbody>
<tr>
<td>Assistant Provost for Student Affairs</td>
<td>Bonnie L. Hunter, M.B.A., M.C.</td>
</tr>
<tr>
<td>Executive Assistant</td>
<td>Cheryl K. Oestreich</td>
</tr>
<tr>
<td>Dean of Students</td>
<td>Timothy S. Jenkins, Ph.D.</td>
</tr>
<tr>
<td>Assistant Dean of Students for Residential Life</td>
<td>Vacant</td>
</tr>
<tr>
<td>Assistant Dean of Students for Greek Life and Volunteer Programs</td>
<td>Jennifer Jones-Hall, M.S.</td>
</tr>
<tr>
<td>Director of Career Center</td>
<td>Sandra K. McGuigan, B.A.</td>
</tr>
<tr>
<td>Director of Health Center</td>
<td>Tamara J. Elkins, M.S., N.R.C.S.</td>
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<tr>
<td>Director of Multicultural Programs</td>
<td>Jane Bello-Brunson, M.Ed.</td>
</tr>
<tr>
<td>Director of Counseling Services</td>
<td>Stewart E. Cooper, Ph.D.</td>
</tr>
<tr>
<td>Director of Valparaiso Union</td>
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### Office of Institutional Advancement

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<tr>
<td>Vice President</td>
<td>Richard L. Maddox, J.D., M.Div.</td>
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<tr>
<td>Executive Assistant</td>
<td>Mary Ann Simson</td>
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<tr>
<td>Director of University Development</td>
<td>Nathan M. Noftie, M.Div.</td>
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<tr>
<td>Planned Giving Director</td>
<td>Vacant</td>
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<tr>
<td>Foundation and Corporate Relations Director</td>
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<tr>
<td>Athletics Development Director</td>
<td>Vacant</td>
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<tr>
<td>Law Development Director</td>
<td>Nancy J. Meyer, J.D.</td>
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<tr>
<td>Development Director</td>
<td>Paul C. Gray, B.A.</td>
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<tr>
<td>Development Director</td>
<td>Michelle L. Janssen, B.S.</td>
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<tr>
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<td>Sylvia D. Luekens, B.A.</td>
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<tr>
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<td>Tonia A. Hoffreng, B.A.</td>
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<td>Norman A. Wells, M.A., C.F.R.E.</td>
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<tr>
<td>Annual Giving Director</td>
<td>Cathy Sweattanoff, M.B.A.</td>
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<tr>
<td>Associate Director, Annual Giving</td>
<td>Eileen M. F. Cotton, B.A.</td>
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<tr>
<td>Campaigns and Special Projects Manager</td>
<td>Lori J. Manfred, A.A.</td>
</tr>
<tr>
<td>Director of Prospect Development</td>
<td>Martha T. Murphy, M.A.</td>
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<tr>
<td>Prospect Research Coordinator</td>
<td>Debbie S. McConnell, B.S.</td>
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<tr>
<td>Associate Director, Donor Stewardship</td>
<td>Linda S. Mullen</td>
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<tr>
<td>Information and Record Systems Director</td>
<td>Johanna B. Brock, M.S.B.A.</td>
</tr>
<tr>
<td>Associate Director Information and Record Systems</td>
<td>Alyssa D. Silveus, B.A.</td>
</tr>
<tr>
<td>Director of Alumni Affairs</td>
<td>Deborah S. Evans, B.A.</td>
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<tr>
<td>Associate Director for Alumni Affairs</td>
<td>Greg Rutzen, J.D.</td>
</tr>
<tr>
<td>Director of Communications</td>
<td>Kevan C. Kostel, M.A.</td>
</tr>
<tr>
<td>Associate Director of Communications</td>
<td>Susan A. Emery, B.A.</td>
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<tr>
<td>Graphic Design Director</td>
<td>Todd Earley, B.A.</td>
</tr>
<tr>
<td>Assistant Editor</td>
<td>Joy Williams</td>
</tr>
<tr>
<td>Director of Church Relations</td>
<td>William D. Karperski II, Ph.D.</td>
</tr>
<tr>
<td>Assistant Director of Church Relations</td>
<td>Debra D. Albers, B.S.</td>
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### University Board of Directors

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Connie B. Ashline (Vice Chair)</td>
<td>Kankakee, IL</td>
</tr>
<tr>
<td>August F. Berntli</td>
<td>Winter Haven, FL</td>
</tr>
<tr>
<td>Richard E. Beumer</td>
<td>Town &amp; Country, MO</td>
</tr>
<tr>
<td>Carl A. Brauer, Jr.</td>
<td>Ann Arbor, FL</td>
</tr>
<tr>
<td>Arnold G. Busse</td>
<td>Carmel, IN</td>
</tr>
<tr>
<td>Howard J. Claussen</td>
<td>Greenville, DE</td>
</tr>
<tr>
<td>Victor J. Dankis</td>
<td>Warren, NJ</td>
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<tr>
<td>Lorraine E. Dorough (Valparaiso University Guild)</td>
<td>McDonough, GA</td>
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<tr>
<td>Richard W. Duesenberg</td>
<td>St. Louis County, MO</td>
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<tr>
<td>Robert H. Duesenberg</td>
<td>Las Vegas, NV</td>
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<tr>
<td>Charles W. Dull</td>
<td>Hong Kong</td>
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<tr>
<td>Rupert Dunklau</td>
<td>Fremont, NE</td>
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<tr>
<td>Donald V. Fites</td>
<td>Peoria, IL</td>
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<tr>
<td>Alan F. Harre (University President)</td>
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<tr>
<td>David J. Hessler (Chair)</td>
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</tr>
<tr>
<td>Lane B. Hoffman</td>
<td>South Elgin, IL</td>
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<tr>
<td>Steven M. Hronec</td>
<td>Rancho Palos Verde, CA</td>
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<tr>
<td>R. Razz Jenkins (Alumni)</td>
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<tr>
<td>Christa R. Klein</td>
<td>York, PA</td>
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<tr>
<td>Frederick K. Krawie (Treasurer)</td>
<td>Richmond, VA</td>
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<tr>
<td>Paul R. Manske</td>
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<tr>
<td>James C. McGill</td>
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<tr>
<td>Charles S. Mueller, Jr.</td>
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<td>James W. Mueller</td>
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<tr>
<td>Jon R. Schumacher</td>
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<td>Walter R. Schur (Secretary)</td>
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<td>John W. Shilton</td>
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<td>Herbert F. Stride III</td>
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<td>Richard C. Vie</td>
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<tr>
<td>William B. Wehrenberg</td>
<td>Clemson, SC</td>
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<tr>
<td>Joel R. Wilson</td>
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<tr>
<td>Jane C. Wittlinger</td>
<td>New Buffalo, MI</td>
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### Standing Committees of the Board

The Chair of the Board and the President of the University are ex officio members of all standing committees.

#### Executive Committee
- David J. Hessler, Chair
- Connie B. Ashline, Vice Chair
- Richard E. Beumer
- Richard W. Duesenberg
- John W. Shelton
- William B. Wehrenberg
- Joel R. Wilson

#### Governance
- Richard W. Duesenberg, Chair
- Connie B. Ashline
- Joel R. Wilson

#### Administration and Finance
- John W. Shelton
- Richard W. Duesenberg
- William B. Wehrenberg
- Connie B. Ashline
- Joel R. Wilson

#### Facilities and Campus Planning
- Richard E. Beumer, Chair
- Arnold G. Busse
- C. McGill
- James W. Mueller
- Charles E. Niemier
- Charles C. Vie
- Harley W. Snyder

#### Institutional Advancement
- Richard W. Duesenberg, Chair
- Connie B. Ashline
- Robert H. Duesenberg
- Donald V. Fites
- Alan F. Harre
- Honda, IL
**University Personnel**

**Public Relations and Development:**
- John W. Shelton, Chair
- August Berenthal
- Lorraine E. Dorough

**Scholarship and Student Life:**
- William B. Wehrenberg, Chair
- Charles W. Dull
- Christa R. Klein

**President’s Advisory Council**

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Charles E. Bachman</td>
<td>Morristown, New Jersey</td>
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<tr>
<td>Stephen A. Benz</td>
<td>Fort Wayne, Indiana</td>
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<tr>
<td>Frederick M. Berenthal</td>
<td>Washington, D.C.</td>
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<tr>
<td>Richard W. Bimler</td>
<td>Bloomingdale, Illinois</td>
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<tr>
<td>Elmore L. Boeger</td>
<td>Bensenville, Illinois</td>
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<tr>
<td>Robert W. Clausen</td>
<td>South Bend, Indiana</td>
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<tr>
<td>Paul W. Czarneske</td>
<td>Birmingham, Michigan</td>
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<tr>
<td>Michael P. Epperly</td>
<td>Allentown, Pennsylvania</td>
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<td>Wilfred W. Fritz</td>
<td>Ponte Vedra Beach, Florida</td>
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<tr>
<td>Ronald Gnau</td>
<td>Mt. Prospect, Illinois</td>
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<tr>
<td>Stephen E. Gottschalk</td>
<td>Minneapolis, Minnesota</td>
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<tr>
<td>Edward H. Gross</td>
<td>Delray Beach, Florida</td>
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<tr>
<td>Albert E. Haeger</td>
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<tr>
<td>Peter A. Hessler</td>
<td>Seven Hills, Ohio</td>
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<td>Gerald E. Hoffmeister</td>
<td>Del Mar, California</td>
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<td>Philip C. Koenig</td>
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<td>Peter L. Kreutz</td>
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<td>Walter J. Kretzmann</td>
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<td>James A. Kretzschmar</td>
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<td>Harvey Lange</td>
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<td>Charles F. Lieske</td>
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<td>Donald Lohrentz</td>
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<td>Arthur S. Malasto</td>
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<td>Howard M. Metzger</td>
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<td>Harold J. Moellinger</td>
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<td>Louis S. Morgal</td>
<td>Jensen Beach, Florida</td>
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<td>Dieter H. Nickel</td>
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<td>Dennis G. Oberly</td>
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<td>Norman L. Ritter</td>
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<td>Patrick G. Scalzi</td>
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<td>Peter B. Schmalz</td>
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<tr>
<td>John P. Schroeder</td>
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<td>Patricia A. Tabor</td>
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<td>Edward W. Tornberg</td>
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<td>Barbara A. Young</td>
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<tr>
<td>Carl H. Ziegler</td>
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**Alumni Association Board of Directors**

<table>
<thead>
<tr>
<th>Name</th>
<th>Term Expires</th>
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<tbody>
<tr>
<td>R. Razz Jenkins (1977)</td>
<td>1999</td>
<td>Des Plaines, IL</td>
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<tr>
<td>Lambert Rung (1958)</td>
<td>1999</td>
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<tr>
<td>Christine Zinksy (1960)</td>
<td>1999</td>
<td>Chicago, IL</td>
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<tr>
<td>Mark Ennes (1974)</td>
<td>1999</td>
<td>Valparaiso, IN</td>
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<tr>
<td>Marie (Popp) Klugman (1972)</td>
<td>1999</td>
<td>Des Moines, IA</td>
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<tr>
<td>N. Cornell Briggs (1962, 1986)</td>
<td>1999</td>
<td>Fenton, MO</td>
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<tr>
<td>Barbara Dammann (1976)</td>
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<td>Clarendon Hills, IL</td>
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<tr>
<td>Allen L. Burreson (1959)</td>
<td>2001</td>
<td>Milford, OH</td>
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<tr>
<td>Ian Crane (1996)</td>
<td>2000</td>
<td>Bloomington, IN</td>
</tr>
<tr>
<td>Elizabeth (Hecht) DeMik (1969)</td>
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<td>Arlington, VA</td>
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<tr>
<td>Jonathan DeMik (1997)</td>
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<tr>
<td>Cindy (Atwater) Felton (1976)</td>
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<td>Marty (Burckle) Hillierich (1961)</td>
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<tr>
<td>Michael McMahon (1984)</td>
<td>1999</td>
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<tr>
<td>John Messerschmidt (1978)</td>
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<tr>
<td>Hally (Stevens) Rosenbeck (1972)</td>
<td>1999</td>
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<tr>
<td>Travis Scholl (1996)</td>
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**Parents Council**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Bob and Luanne Bumner</td>
<td>St. Louis, MO</td>
</tr>
<tr>
<td>Dennis and Delia Boese</td>
<td>Thiensville, WI</td>
</tr>
<tr>
<td>Randy and Diane Borchart</td>
<td>Apple Valley, MN</td>
</tr>
<tr>
<td>Robert and Joyce Buck</td>
<td>Roselle, IL</td>
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<tr>
<td>Doug and Elsa Felten, Co-chairs</td>
<td>Evanston, IL</td>
</tr>
<tr>
<td>Robert and Karen Grossart</td>
<td>Palos Heights, IL</td>
</tr>
<tr>
<td>Paul and Patty Jarzemowski</td>
<td>Cedar Lake, IN</td>
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<tr>
<td>Jon and Rhonda Kalkwarf</td>
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<tr>
<td>Paul Kindchi</td>
<td>Hales Corner, WI</td>
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<tr>
<td>Dennis and Ashley Kramer</td>
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<tr>
<td>Lee and E.J. McFedden</td>
<td>Glen Ellyn, IL</td>
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<tr>
<td>Glenda Peterson</td>
<td>Bloomington, MN</td>
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<tr>
<td>Dan and Kathy Scheer</td>
<td>Hutchinson, MN</td>
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<tr>
<td>Howard and Christine Schuette</td>
<td>Decatur, IL</td>
</tr>
<tr>
<td>John and Mary Squires</td>
<td>Hobart, IN</td>
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**Valparaiso University Guild Board of Directors**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Lorraine Gount Dorrough (1978)</td>
<td>McDonough, GA</td>
</tr>
<tr>
<td>Judy Fry Mason (1976)</td>
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</tr>
<tr>
<td>Sylvia Diukles Lukens (1962)</td>
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</tr>
<tr>
<td>Sue Moody Dumford (1963)</td>
<td>Naperville, IL</td>
</tr>
<tr>
<td>Colette Irwin-Knoth (1981)</td>
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Managing Editor: Ann Trost; Copy Editor: Karen Grote; Cover: Nicole Laaveg.
VALPARAISO UNIVERSITY

Location
Valparaiso, Indiana—Population 25,000
45 Miles Southeast of Chicago; 13 Miles South of Lake Michigan

Campus Size
310 Acres, 70 Buildings

Control
Independent

Religious Affiliation
Lutheran

Major Academic Divisions
(Approximate Enrollments, Fall 1997)

| College of Arts and Sciences | -1930 |
| College of Business Administration | -400 |
| College of Engineering | -325 |
| College of Nursing | -250 |
| Christ College (Honors) | -325 |
| Graduate Division | -300 |
| Law School | -400 |

Accreditation

The North Central Association of Colleges and Schools (All Programs), 30 North LaSalle Street, Suite 2400, Chicago, IL, 60602-2504; Tel: 312-263-0456; Fax: 312-263-7462; nca@nca.asu.edu

The American Chemical Society, 1155 Sixteenth St. NW, Washington, DC, 20036; Tel: 202-872-4600 or 1-800-333-9511; help@acs.org

National Council for Accreditation of Teacher Education, 2010 Massachusetts Ave. NW, Suite 500, Washington, DC, 20036-1023; Tel: 202-406-7496; Fax: 202-296-6620; ncate@ncate.org

Indiana State Department of Education—Indiana Professional Standards Board, 251 East Ohio Street, Suite 201, Indianapolis, IN, 46204-2133; Tel: 317-232-9010; Fax: 317-232-9023

National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, VA, 20190; Tel: 703-437-0700; Fax: 703-437-6312

The Council on Social Work Education, 1600 Duke Street, Suite 300, Alexandria, VA, 22314-3421; Tel: 703-683-8080; Fax: 703-683-8099

AACSB—The International Association for Management Education, 600 Emerson Road, Suite 300, St. Louis, MO, 63141-6762; Tel: 314-872-8507

The Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD, 21202; Tel: 410-347-7700; Fax: 410-625-2238

State of Indiana Health Professions Bureau—Indiana State Board of Nursing, 402 W. Washington St., Room 041, Indianapolis, IN, 46204; Tel: 317-232-2960; Fax: 317-233-4236

The National League for Nursing Accrediting Commission, 61 Broadway, New York, NY, 10006; Tel: 1-800-669-1656 x 153; nlnac@nln.org

The Association of American Law Schools, 1201 Connecticut Ave. NW, Suite 800, Washington, DC, 20036-2605; Tel: 202-296-8851; Fax: 202-296-8869; aals@aals.org

The American Bar Association, 750 N. Lake Shore Drive, Chicago, IL, 60611; Tel: 312-988-5000; info@abanet.org

Major Affiliations
The American Association of Colleges of Nursing
The American Council on Education
The American School of Classical Studies at Athens
The American Schools of Oriental Research
The American Society for Engineering Education
The Associated New American Colleges
The Association of American Colleges and Universities
The Association of Graduate Liberal Studies Programs
The Center for Research Libraries
The Council of Applied Masters Programs in Psychology
The International Association for Management Education
The Lutheran Education Association