



# GENERAL CATALOG

2021-2022

## Mission Statement

*Valparaiso University,  
a community of learning dedicated to excellence  
and grounded in the Lutheran tradition  
of scholarship, freedom, and faith,  
prepares students to lead and serve  
in both church and society.*

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### ANNOUNCEMENTS FOR 2021-2022 SESSIONS

**VALPARAISO UNIVERSITY BULLETIN**

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**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.

A separate catalog is issued for the Graduate School which should be consulted for details about the related programs.

### **Statement on Equality of Opportunity**

Please refer to the University's "Nondiscrimination and Equality of Opportunity Policy" and its "Nondiscrimination, Harassment, and Sexual Misconduct Policy," which are available in the **ACADEMIC RESOURCE GUIDE AND STUDENT HANDBOOK** and on the [General Counsel website](#).

### **Graduation Rate of Entering Freshmen**

The graduation rate for all students entering Valparaiso University as first-time freshmen during the 2014-2015 academic year was 65.5%. This graduation rate represents the percentage of students entering Valparaiso University as first-time (i.e., new) full-time degree-seeking freshmen during the 2014 Summer and Fall semesters who subsequently were awarded baccalaureate degrees by Valparaiso University within six calendar years (i.e., through August 2020).

# University Calendar for 2021-2022

*For the Colleges of Arts and Sciences, Business, Engineering, and Nursing and Health Professions*

## Summer 2021

<b>May 18</b>	Tuesday		Instruction begins
<b>May 18 – June 25</b>			Dates for Summer I courses
<b>May 18 – August 6</b>			Dates for full summer courses
<b>May 21</b>	Friday	12:00 pm	Deadline to add or drop a Summer I course without a grade of W <sup>1</sup>
<b>May 21</b>	Friday	12:00 pm	Deadline to add or drop a full summer course without a grade of W <sup>1</sup>
<b>May 25</b>	Tuesday	12:00 pm	Deadline to request S/U grading for a Summer I course <sup>2</sup>
<b>May 25</b>	Tuesday	12:00 pm	Deadline to request S/U grading for a full summer course <sup>2</sup>
<b>May 31</b>	Monday		Memorial Day – No classes, University closed
<b>June 4</b>	Friday	12:00 pm	Deadline to withdraw from a Summer I course with grade of W <sup>1</sup>
<b>June 28</b>	Monday	12:00 pm	Deadline for faculty to report Summer I course grades
<b>June 28 – August 6</b>			Dates for Summer II courses
<b>July 2</b>	Friday	12:00 pm	Deadline to add or drop a Summer II course without a grade of W <sup>1</sup>
<b>July 5 – July 6</b>			Academic Break – No classes, University closed July 5
<b>July 7</b>	Wednesday		Classes resume
<b>July 7</b>	Wednesday	12:00 pm	Deadline to request S/U grading for a Summer II course <sup>2</sup>
<b>July 16</b>	Friday	12:00 pm	Deadline to withdraw from a Summer II course with grade of W <sup>1</sup>
<b>July 16</b>	Friday	12:00 pm	Deadline to withdraw from a full summer course with grade of W <sup>1</sup>
<b>August 1</b>	Sunday		Deadline to submit a Graduation Application for graduate degrees to be conferred in December <sup>1</sup>
<b>August 6</b>	Friday		Semester ends <sup>3</sup>
<b>August 9</b>	Monday	12:00 pm	Deadline for faculty to report all grades

## Fall 2021

<b>August 25</b>	Wednesday		Instruction begins
<b>August 25 – October 13</b>			Dates for first half short courses
<b>August 25 – December 17</b>			Dates for full fall courses
<b>September 1</b>	Wednesday	12:00 pm	Deadline to register for fall semester <sup>1</sup>
<b>September 1</b>	Wednesday	12:00 pm	Deadline to add or drop a first half short course without a grade of W <sup>1</sup>
<b>September 1</b>	Wednesday	12:00 pm	Deadline to add or drop a full fall course without grade of W <sup>1</sup>
<b>September 1</b>	Wednesday	12:00 pm	Deadline to request S/U grading for a first half short course <sup>2</sup>
<b>September 1</b>	Wednesday	12:00 pm	Deadline to request to audit a course <sup>2</sup>
<b>September 6</b>	Monday		Labor Day – No classes, University closed
<b>September 22</b>	Wednesday	12:00 pm	Deadline to withdraw from a first half short course with grade of W <sup>1</sup>
<b>September 22</b>	Wednesday	12:00 pm	Deadline to request S/U grading for a full fall course <sup>2</sup>
<b>September 22</b>	Wednesday	12:00 pm	Deadline to request course intensification <sup>2</sup>
<b>October 1</b>	Friday		Deadline to submit a Curriculum Change to facilitate registration <sup>2</sup>
<b>October 1</b>	Friday		Deadline to submit a Graduation Application for undergraduate degrees to be conferred in May or August <sup>1</sup>
<b>October 14 – October 15</b>			Fall Break – No classes, University open
<b>October 15</b>	Friday	12:00 pm	Deadline for faculty to report first half short course grades
<b>October 18 – December 10</b>			Dates for second half short courses
<b>October 22</b>	Friday	12:00 pm	Deadline to add or drop a second half short course without a grade of W <sup>1</sup>
<b>October 22</b>	Friday	12:00 pm	Deadline to request S/U grading for a second half short course <sup>2</sup>
<b>October 22 – October 24</b>			Family Weekend
<b>TBA</b>			Advance registration for Spring Semester <sup>1</sup>
<b>October 27</b>	Wednesday	12:00 pm	Deadline to withdraw from a full fall course with grade of W <sup>1</sup>
<b>November 1</b>	Monday		Deadline to submit a Graduation Application for graduate degrees to be conferred in May <sup>1</sup>

<sup>1</sup> A form for this purpose is available online through DataVU

<sup>2</sup> A form for this purpose is available online at [valpo.edu/registrar/forms](http://valpo.edu/registrar/forms)

<sup>3</sup> The university is open on weekdays between academic terms, except on university holidays as defined by the Office of Human Resources.

<b>November 12</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to withdraw from a second half short course with grade of W <sup>1</sup>
<b>November 20 – November 28</b>			Thanksgiving Break – No classes, University closed November 24-26
<b>November 29</b>	<b>Monday</b>		Classes resume
<b>December 3</b>	<b>Friday</b>		Last day for tests in courses of 3 credits or more
<b>December 3</b>	<b>Friday</b>		Deadline to request a final examination date change
<b>December 10</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to officially withdraw from the University for the Fall Semester <sup>1</sup>
<b>December 10</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to request a registration change
<b>December 10</b>	<b>Friday</b>		Instruction ends
<b>December 11</b>	<b>Saturday</b>		Reading day
<b>December 13</b>	<b>Monday</b>		Final examinations begin
<b>December 13</b>	<b>Monday</b>	<b>12:00 pm</b>	Deadline for faculty to report second half short course grades
<b>December 17</b>	<b>Friday</b>		Final examinations end
			Semester ends <sup>3</sup>
<b>December 19</b>	<b>Sunday</b>		Commencement Ceremony
<b>December 20</b>	<b>Monday</b>	<b>12:00 pm</b>	Deadline for faculty to report all grades

## Spring 2022

<b>January 12</b>	<b>Wednesday</b>		Instruction begins
<b>January 12 – March 2</b>			Dates for first half short courses
<b>January 12 – May 13</b>			Dates for full spring courses
<b>January 17</b>	<b>Monday</b>		Observation of Martin Luther King, Jr.'s Birthday
<b>January 19</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to register for spring semester <sup>1</sup>
<b>January 19</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to add or drop a first half short course without a grade of W <sup>1</sup>
<b>January 19</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to add or drop a full spring course without grade of W <sup>1</sup>
<b>January 19</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to request S/U grading for a first half short course <sup>2</sup>
<b>January 19</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to request to audit a course <sup>2</sup>
<b>February 1</b>	<b>Tuesday</b>		Deadline to submit a Graduation Application for graduate degrees to be conferred in August <sup>1</sup>
<b>February 9</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to withdraw from a first half short course with grade of W <sup>1</sup>
<b>February 9</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to request S/U grading for a full spring course <sup>2</sup>
<b>February 9</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to request course intensification <sup>2</sup>
<b>February 25</b>	<b>Friday</b>		Deadline to submit a Curriculum Change to facilitate registration <sup>2</sup>
<b>March 4</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline for faculty to report first half short course grades
<b>March 5 – March 20</b>			Spring Break – No classes, University open
<b>March 21</b>	<b>Monday</b>		Classes resume
<b>March 21 – May 6</b>			Dates for second half short courses
<b>March 25</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to add or drop a second half short course without a grade of W <sup>1</sup>
<b>March 25</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to request S/U grading for a second half short course <sup>2</sup>
<b>March 30</b>	<b>Wednesday</b>	<b>12:00 pm</b>	Deadline to withdraw from a full spring course with a grade of W <sup>1</sup>
<b>April 1</b>	<b>Friday</b>		Deadline to submit a Graduation Application for undergraduate degrees to be conferred in December <sup>1</sup>
<b>TBA</b>			Advance registration for Summer and Fall Semesters <sup>1</sup>
<b>April 15</b>	<b>Friday</b>		Good Friday – No classes, University closed
<b>April 18</b>	<b>Monday</b>	<b>12:00 pm</b>	Deadline to withdraw from a second half short course with grade of W <sup>1</sup>
<b>April 28</b>	<b>Thursday</b>		Academic Celebration – No classes, University open
<b>April 29</b>	<b>Friday</b>		Last day for tests in courses of 3 credits or more
<b>April 29</b>	<b>Friday</b>		Deadline to request a final examination date change
<b>May 6</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to officially withdraw from the University for the Spring Semester <sup>1</sup>
<b>May 6</b>	<b>Friday</b>	<b>12:00 pm</b>	Deadline to request a registration change
<b>May 6</b>	<b>Friday</b>		Instruction ends
<b>May 7</b>	<b>Saturday</b>		Reading day
<b>May 9</b>	<b>Monday</b>		Final examinations begin
<b>May 9</b>	<b>Monday</b>	<b>12:00 pm</b>	Deadline for faculty to report second half short course grades
<b>May 13</b>	<b>Friday</b>		Final examinations end
			Semester ends <sup>3</sup>
<b>May 14 – May 15</b>			Commencement Ceremony
<b>May 16</b>	<b>Monday</b>	<b>12:00 pm</b>	Deadline for faculty to report all grades

# Valparaiso in Brief

## 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 human society, 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.

These basic commitments enable Valparaiso University to graduate students whose individual achievements and aspirations are linked invariably to larger social, moral, and spiritual horizons of meaning and significance. 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.

## 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 Health Professions, and Business, 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. Valparaiso University is also a founding member of the New American Colleges and Universities, a national consortium of small to mid-sized colleges and universities that are committed to the ideal of integrating liberal and professional studies.

Valparaiso University's unique status as an independent Lutheran university supplies the rationale for this special combination of liberal and professional studies. No church body has control or authority over the University, which is owned and operated by the Lutheran University Association. Valparaiso University is therefore both free and responsible to realize an educational ideal informed by the best traditions of Lutheran Christianity and of liberal and professional studies.

## 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 that the curriculum provides, the University emphasizes a Christian freedom that 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 the Christopher Center for Library and Information Resources 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 320 acres contains more than sixty 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.

## 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 University enrolls 42% of its undergraduate students from Indiana; another 48% of undergraduates come from Great Lakes states. 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. Over 57% of the students come from the upper fifth of their high school graduating classes. Approximately twenty National Merit Scholars are enrolled at the University in any given year.

A rich diversity characterizes the University faculty (312 full-time and 102 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 periodical 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 five small undergraduate colleges, and a school of graduate studies and continuing education, 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.

# Academic Programs

## An Unusual History

In its 150 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, the majority of whom are affiliated with Lutheran congregations, is a national organization whose members represent the principal regions of the United States.

## The Goals of Education at Valparaiso University

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 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 University 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.

## University-Wide Student Learning Objectives

Through the following student learning objectives, Valparaiso University affirms its mission-based commitment to educate responsible global citizens who are ready to lead and serve church and society. These objectives are designed to help colleges and departments clearly link their student learning objectives to those of the University. All academic units will indicate how the learning outcomes of their curriculum and of individual courses within that curriculum link to some, or all, of the University-wide student learning objectives. The objectives are designed to include the cognitive, skill, and value domains of learning.

Students will:

1. Demonstrate theoretical and practical knowledge as well as the intellectual skills and creative capacities pertinent to their respective fields of study.
2. Solve both conceptual and applied problems by integrating broad-based knowledge, evidence-based reasoning, and informational literacy.
3. Practice experiential, interdisciplinary, and collaborative learning in both academic and co-curricular pursuits.
4. Communicate effectively in oral, written, and digital forms in increasingly complex contexts.
5. Engage in cross-cultural dialogue and experiences with the requisite knowledge to succeed in a diverse, global community.
6. Develop character, integrity, and wisdom as they discern their vocations and prepare to ethically lead and serve church and society.

## Degrees

### Undergraduate Degrees

Associate of Arts	Bachelor of Science in Education
Associate of Science	Bachelor of Science in Electrical Engineering
Bachelor of Arts	Bachelor of Science in Environmental Engineering
Bachelor of Music	Bachelor of Science in Health Care Leadership
Bachelor of Music Education	Bachelor of Science in Health Science
Bachelor of Music Therapy	Bachelor of Science in Integrated Business and Engineering
Bachelor of Science	Bachelor of Science in Mechanical Engineering
Bachelor of Science in Business Administration	Bachelor of Science in Nursing
Bachelor of Science in Bioengineering	Bachelor of Science in Physical Education
Bachelor of Science in Civil Engineering	Bachelor of Science in Public Health
Bachelor of Science in Computer Engineering	Bachelor of Social Work

### Graduate Degrees

Doctor of Nursing Practice	Master of Education
Doctor of Occupational Therapy	Master of Health Administration
Education Specialist	Master of Public Health
Master of Arts	Master of Science
Master of Arts in Liberal Studies	Master of Science in Nursing
Master of Business Administration	Master of Science in Physician Assistant Studies

### 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 General Education Requirements at Valparaiso University

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 catalog.

1. **Freshman Studies** (taken during the freshman year)
  - The Human Experience, two semesters
2. **Academic Area Studies**
  - Writing Intensive Course: at least one course (sophomore standing recommended)
  - Theology: two courses (one in the junior or senior year)
  - Cultural Diversity: World Language: (two courses) and a Cultural Diversity course
  - Humanities: two courses, one each from two areas—Fine and Performing Arts, History, Literature, Philosophy
  - Social Science: two courses, one each from two different areas of study
  - Natural Science: two courses, one each from two different areas of study
  - Quantitative Analysis: one course
  - Kinesiology: one credit hour

## Summary of the Academic Fields of Study at the University

The fields of study listed below are available as majors. Some fields offer further specialized concentrations within the major itself.

### College of Arts and Sciences

Actuarial Science	International Relations
Astronomy	Mathematics
Biochemistry	Meteorology
Biology	Music
Chemistry	Music Education
Global Studies	Music Therapy
Communication and Visual Arts	Philosophy
Computer Science	Physical Education
Creative Writing	Physics
Criminology	Political Science
Data Science	Public and Professional Writing
Economics	Psychology
Education	Social Work
English	Sociology
Environmental Science	Spanish
Exercise Science	Sports Management
Geography	Statistics
German	Theology
History	Theology and Ministry

### Christ College

Christ College Scholar Honors Program  
Humanities

### College of Business

Accounting	International Business
Business Analytics	Management
Finance	Marketing
Integrated Business and Engineering	Supply Chain and Logistics Management

### College of Engineering

Bioengineering	Electrical Engineering
Civil Engineering	Environmental Engineering
Computer Engineering	
	Mechanical Engineering

### College of Nursing and Health Professions

Health Care Leadership	Nursing
Health Science	Public Health

Programs of the Graduate School are described in a separate catalog.

### 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 advisors, 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 Program

The Valparaiso Core Program consists of a two-semester sequence of CORE 110 and CORE 115, each a four-credit-hour course. Core is 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 texts, and of course, with each other, to explore together some of the most essential aspects of human community, past, present, and future. Classroom discussion in Core is enhanced by co-curricular programming beyond the classroom that engages students in numerous campus-wide opportunities for exploring and reflecting on our semester themes of empathy, dialogue, and justice.

Core is interdisciplinary because knowledge is interdisciplinary, and in the global community in which we now live, knowledge 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. Beginning with an understanding of the contexts in which we find ourselves, we can—in the best spirit of Lutheran higher education—create dialogue among texts and traditions, helping 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 Program 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. While CORE 110 focuses on context and analysis, CORE 115 emphasizes argument and research, and great opportunities exist in both semesters of Core for students to enhance their information literacy and become more adept at retrieving, evaluating, and managing digital resources.

Because of the interdisciplinary nature of Core, other institutions may apply the following transfer credits to their own general education requirements: CORE 110 and 115 together may be distributed as 3 credits of English composition, 3 credits of world literature/history, and 2 credits of philosophy/theology. Taken separately, CORE 110 or 115 may be distributed as 3 credits of English composition/world literature and 1 credit of philosophy/theology.

## Off-Campus Study Programs in the United States

### The Lutheran College Washington Consortium

Valparaiso University is a member of the Lutheran College Washington Consortium, sponsored by a group of thirteen Lutheran colleges and universities. Valpo juniors and seniors can study in the fall, spring, or summer in Washington, DC at the Lutheran College Washington Semester. In the fall and spring, students participate in a four-day per week internship and take two LCWS classes. LCWS will help students find an internship, and students earn 15 credit hours for the semester. The program can accommodate almost any major. LCWS students have interned in almost every field – from agriculture to zoology (and everything in between). Valpo LCWS students have interned at the White House, State Department, the National Center for Missing and Exploited Children, CNN, Sirius XM Radio, the US Marshals Service, the DNC & RNC, as well as think tanks, advocacy groups, and faith-based organizations.

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

More information on the Washington Consortium Semester is available [online](#).

### Cooperative Education Program

Cooperative education is an academic program which combines professional work experience with academic coursework. Paid employment occurs in business, industry, government, or other professional settings. The Cooperative Education experience is available in the Colleges of Arts and Sciences (page 57), Business (page 264), Engineering (page 289), and Nursing and Health Professions (page 332).

All students in good standing who meet the grade point minimum declared by the particular college may participate in the program. Students may enroll in full-time (called alternating) or part-time (called parallel) programs, except in the College of Engineering where only the alternating program is available. Academic credit for Cooperative Education is granted by the college or participating department in which the student is enrolled. The number of co-op credits counted toward a major or a degree varies by college or department. Students should consult with faculty co-op coordinators to determine how co-op credits may apply to majors and/or degree requirements.

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.

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## Other Academic Opportunities

### **Internships**

A number of internship opportunities have been established in several departments in the College of Arts and Sciences, in the College of Business, and in the College of Engineering. 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 practica 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 page 56.

### **Christ College**

This college is itself one of the unique educational opportunities available to all students of the University. It is an honors college which offers an interdisciplinary honors curriculum which seeks to address questions which cannot be answered through a single discipline. 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 beginning on page 256.

### **Summer Sessions**

The summer program serves a variety of undergraduate and graduate students. Regularly enrolled Valparaiso University students use the Summer Sessions 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 University offers one twelve-week and two six-week sessions. Although most courses are six weeks, within each six-week term usually a number of specialized courses are offered in shorter periods of time. The first of the two six-week terms begins immediately after 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.

## **Graduate School Early Entry Program**

Through the Graduate School Early Entry Program, undergraduates with junior standing and a GPA of at least 3.000 may apply for provisional admission to an eligible graduate degree program. If accepted, the student may take courses from the graduate catalog up to a maximum number of credits established by the graduate program, generally during the senior year, and apply them to his or her undergraduate degree. These credits may be used as undergraduate electives, or to complete a specific undergraduate program of study. In the latter case, the specific substitution of a graduate course for an undergraduate course is given in the description of the undergraduate program. During the senior year the student will work with both an undergraduate advisor and a graduate program advisor to coordinate the course articulations.

Pending final acceptance to the graduate program in the student's senior year, after the student matriculates to the Valparaiso University Graduate School, graduate credits earned while an undergraduate may be used in partial fulfillment of graduate degree program requirements. This reduces the cost and time required to earn the graduate degree. In some cases, two different degrees that would normally take 4+2 years to complete, if planned correctly, may be completed in 4+1 years. The graduate program specifies the limits on the number of graduate credits that may be applied to an undergraduate degree, but generally no more than half of the credits for a graduate program may be applied to both programs. All undergraduate students interested in the Early Entry program should apply during their junior year. See the **GRADUATE CATALOG** for details.

Early Entry is different from two other accelerated programs where graduate coursework does not count for undergraduate study. In the first case, there are accelerated paired programs (3+2), in which the student completes the bachelor's degree in three years and then enters the two year master's degree after passing a series of checkpoints specified by the graduate program. In the second case, under the Graduate School Early Admission program, a senior with nine or fewer hours remaining in the final semester may be provisionally admitted to a graduate program and may take up to twelve total semester hours of undergraduate and graduate courses combined. See the **GRADUATE CATALOG** for details.

## **Special Course, Program, and Activities Requirements**

Some University courses, programs, or activities require students to travel to locations off campus. When the University does not provide the transportation, or when it does and the student elects not to use it, the student is solely responsible for making his or her own safe and responsible travel plans.

Some University courses, programs, or activities also involve internship, practica, student teaching, and the like with third parties outside of the University. Some of these third parties, such as school districts or private sector employers, may require criminal, or similar background checks of the students. Each student must comply with these requests if he or she is to participate in the course, program, or activity.

## **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 and Health Professions. This endowed fund was established in memory of the wife of former President Albert G. Huegli because of her long interest in health services.

**The Janet Lynn Kerr Memorial Lectureship in Asian Studies** is an annual lecture made possible by the family, friends, and colleagues of Professor Kerr, a Christ College faculty member from 1991 until her death in 1999.

**Kenneth A. Kress Physics Lecture Fund** is used by the Department of Physics and Astronomy to host a lecture each year by an expert in the field.

**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 University as a Lutheran University.

**The Arnold Moeller College of Business Administration Endowment Lecture** was established in 1989. The fund supports faculty research and development with the College of Business.

**The Warren Rubel Lectures Endowed Fund** was established in 1992 by alumni and friends of Christ College to honor Professor Rubel's service to the University and Christ College.

**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** was established by Mr. and 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.

**The Zahn Award and Lectureship Fund** was established in 1971 by Irene Zahn in memory of her parents. The fund is to be used to provide for a scholarship for an art student and also provide for art lectures.

The annual **Louis E. and Janice M. Zeile Lecture on Christian Vocation** honors Valparaiso University graduates Louis E. Zeile (1950) and Janice M. (Kolterman) Zeile (1949). The lecture was established by their children and their spouses at the time of their parents' 50th wedding anniversary.

## 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 four-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 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.

**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 W.C. Dickmeyer Professorship in Christian Education** was established by the family and friends of W.C. Dickmeyer, who was instrumental in the purchase of the University by a group of Lutheran clergy and laymen and who served on the Board of Directors of the University for more than 40 years.

**The Phyllis and Richard Duesenberg Chair in Christian Ethics** is a University professorship established by Phyllis and Richard Duesenberg to explore, research, write, and teach the ethical implications of contemporary social issues from the Biblical perspective and the perspective of Lutheran symbolic writings.

**The Phyllis and Richard Duesenberg Chair in Christianity and the Arts** in Christ College supports the research and writing of a scholar of national stature engaged in the study of religion and art.

**The Phyllis and Richard Duesenberg Chair in Law** recognizes and supports the work of a proven and productive scholar of national reputation and a teacher of demonstrated excellence.

**The Phyllis and Richard Duesenberg Chair in Lutheran Music** supports the teaching and study of a faculty member whose efforts focus on Lutheran music.

**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.

**The Kreft Endowed Chair for the Advancement of Nursing Science** was established for the purpose of attracting and retaining high quality faculty for the College of Nursing and Health Professions and to further develop the academic, spiritual, and moral qualities of the current faculty.

**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 Erich H. Markel Chair in German Reformation Studies** was established by the Max Kade Foundation in memory of the president of the foundation from 1959 to 1999. The Markel Chair supports the teaching and research of a faculty member in the field of history whose work focuses on an understanding and appreciation of German culture.

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

**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 Frederick 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.

**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 Law School.

**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 advance the College of Engineering.

## Special Academic Endowments

### **The Albert G. Huegli Library Fund**

This fund was established by friends to honor the former president of the University.

### **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 Doris K. Christopher Endowed Fund for Faculty Development in Support of the Writing Program**

This endowed fund supports faculty development activities within or on behalf of Valparaiso University's Writing Program.

### **The Endowed Fund for Faculty Research and Faculty Development-1975 Senior Class Gift**

This endowment supports both research expenses and faculty development projects.

### **The Faculty Research and Development Endowment**

This fund is being developed by contributions from the faculty and from friends of the University.

**The Judith L. Beumer Endowed Writing Program Fund**

This endowed fund provides operational support for the Valparaiso University Writing Program.

**Kapfer Research Award**

This endowment, established by the Kapfer family, gives research support to a faculty member in the College of Arts and Sciences.

**The O. P. Kretzmann Memorial Fund for Research in the Healing Arts and Sciences**

Established by the Wheat Ridge Foundation, this endowment annually supports faculty research.

**The Library Humanities Fund**

This endowment was created by a major grant from the National Endowment for the Humanities which was matched by friends of the University, and exists to fund acquisitions in the humanities.

**The Sigrid Lindemann Faculty Development Endowment**

This endowment was established by the late Helen Lindemann in memory of her daughter who had taught in the College of Nursing. Its earnings support professional activities and research in nursing.

**The Civil, Electrical & Computer, and Mechanical Engineering Research Funds**

These funds have been developed by the faculty of the College of Engineering to support research.

**The Arnold H. Moeller College of Business Administration Endowed Fund**

This fund is available to the College of Business for purposes of underwriting professional growth.

**The Moody Laboratory Fund**

This endowment supports the development of laboratories in the Department of Mechanical Engineering.

**The Rusch Memorial Library Fund**

The earnings from this fund are used for library materials.

**The Janet Sievers Accounting Faculty Development and Research Endowment**

Established by alumni in memory of Professor Janet Sievers, this fund is used to support professional activities and research in the area of accounting.

**The Judge Luther M. Swygert Christ College Oxford Debates**

This endowed fund provides support to the Oxford Debates program hosted by Christ College – The Honors College.

**The Michael and Dianne Swygert Research Fellow**

Awarded to a faculty member or librarian who, through his or her scholarship, lecturing, written work, and contribution to the advancement of knowledge, exemplifies the highest standards.

**The Michael and Dianne Swygert Teaching Fellow**

Awarded to a faculty member or librarian who, through his or her teaching and service to students, exemplifies the highest standards of teaching and service.

**The Endowed Ziegler Family Research Fund for the Humanities**

This fund supports faculty research in the humanities.

# Global Education Programs

In an age of global interdependence, the University works to ensure its students can acquire part of their education abroad. Students can explore their academic and professional interests in another part of the world while developing transferrable skills for their future such as cultural awareness, adaptability, independence, and in many cases proficiency in a world language. Credits and grades earned through Valpo-affiliated programs count towards graduation requirements and a variety of opportunities enable students to spend a semester, academic year, or shorter terms such as spring break and summer in another country.

Students can choose from several program types including 1.) the Valpo Study Centers, 2.) Direct enrollment at an exchange partner university, 3.) Cooperative programs administered by a U.S.-based provider, 4.) the Valparaiso International Engineering Programs (VIEP), or Enhanced International Business (EIB), and 5.) Faculty-led, short-term programs or research during breaks. Credits and grades earned through Valpo-approved programs are treated as though they were earned on campus. While the course offerings available through these programs vary considerably, students may frequently satisfy Major, Minor, and/ or General Education Requirements through courses taken in these programs with careful planning and consultation with their academic advisor. Students should consult with department chairs and their academic advisor 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, World Language, History/Philosophy, Social Science, and Theology. **Participation in any Valparaiso University semester or year-long study-abroad program fulfills the Cultural Diversity General Education Requirement or Christ College seminar credit.**

Students considering study abroad should consult their academic advisor as well as the Office of Global Education early in their academic program, to ensure the coherence and continuity of that program. Freshman year is not too early to begin thinking about studying abroad and with careful planning students can study abroad and complete their degree program on time.

Applications open early in the semester before the term abroad. The deadlines remain the same each year. They are:

- Summer, Fall, and Academic Year: March 1
- Spring and Spring Break: October 1

Some programs do have early deadlines depending on required host applications or other requirements. It is important to double check the individual page for the program(s) of interest to determine the official deadline. While students will not apply for their study abroad program until the semester before, they are encouraged to meet with a study abroad advisor, their academic advisor, and their financial aid advisor to begin planning as early as possible.

Study abroad programs have varying requirements for admission. All programs have a minimum cumulative GPA requirement, although some programs have flexibility for students that are close to the minimum and will be considered for admission on a case-by-case basis. Some programs have a minimum world language requirement, a minimum class standing, or other requirements for admission. Consult the program page and/or the program's study abroad advisor for information on admission requirements.

Most financial aid that students receive while attending Valparaiso University may be applied to the Valparaiso University-approved programs. Exceptions may include work-study and other on-campus aid such as music, performance, or athletic scholarships, which are simply put on hold for the semester off-campus. Please meet with your Financial Aid Advisor for details on your specific award and how it will apply to study abroad. For approved programs, students will pay regular tuition and general fee on campus. This will be posted to the Student Account just as it would for a student staying on campus. Depending on the program, room and board, a Center Fee, or other costs may be assessed through their Student Account as well, though these may be paid directly to the program provider or institution. Each program page has a Budget Sheet for the current terms that will give an estimate of overall cost, including expenses paid to the Student Account, those paid directly to the program provider and general out-of-pocket expenses. The study abroad advisors can go over cost information in detail with interested students.

Students who choose to participate in programs not on the approved list, at their own expense, should consult with the director of Global Education. When students decide on a program, it is necessary to obtain the prior approval of an academic advisor, the director of Global Education, and the dean of the college in order to assure in advance that the credit for courses taken abroad will transfer to Valparaiso University. If participating in a semester program, the student will need to submit a Leave of Absence. Also, the student should meet with a member of the Financial Aid Office. Although Valparaiso University grants/scholarships are not available for non-Valparaiso University programs, Federal, Indiana, and private scholarships and loans are. You should continue to file your FAFSA by the state deadline each year. The Financial Aid Office will discuss your plans with you and answer questions regarding aid for your time off-campus as well as implications for outstanding student loans.

All official program information, estimated budgets, requirements, and deadlines are located on the study abroad website ([valpo.edu/globaleducation](http://valpo.edu/globaleducation)) and can be found by clicking on the "Programs" tab.

## Valpo Study Centers

### Cambridge, England

Coordinated by a permanent on-site coordinator, the Cambridge Study Center provides an ideal setting for up to eighteen students per semester to integrate their academic work with the rich heritage of Britain. Students live in facilities provided by the University, choose from a wide variety of courses as determined by their individual needs, and participate in at least one group excursion to various historical regions of Britain.

#### Program Requirements

Sophomore standing and a grade point average of 2.750 are required.

#### Program Curriculum

This program offers an exciting array of courses through a combination of offerings offered through our partners at Anglia Ruskin University (ARU) and the Westfield House.

All students take GS 390 – British Life and Culture for one credit instructed by the Westfield House.

The courses offered through Anglia Ruskin University (ARU) are listed on their website (linked through the Valpo program page). Students are welcome to take any courses offered provided they meet any ARU requirements, such as prerequisites. Students will need to get approval from the appropriate department chairs with regards to how the courses will fit into their degree program and fulfill requirements.

The Westfield House has course offerings taught both in-house, and in the form of hybrid courses where students will attend lectures through Cambridge University and conduct their tutorial/discussion through Westfield House. Hybrid courses with Cambridge University lectures are open to students with at least a 3.000 cumulative GPA. Students are welcome to take any courses offered provided they meet any Westfield House requirements, such as prerequisites. Students will need to get approval from the appropriate Department Chairs with regards to how the courses will fit into their degree program and fulfill requirements.

This program is offered in either the fall or spring semester. It is possible to study for a year with approval.

### Reutlingen, Germany

The Reutlingen Study Center, located on the campus of its partner institution, the *Hochschule Reutlingen*, is coordinated by an on-site coordinator with support from the Reutlingen International Office. All students will take a German language course. They may then choose between the Center courses offered, or courses offered through Reutlingen University in Business or Engineering per their individual needs. Excursions, as well as opportunity for independent exploration and personal travel, complement the in-class learning and encourage the development of a more global perspective. Internship opportunities with German professionals are also a possibility for students with higher German language levels. International Business majors participating in the Enhanced International Business in German (EIB – German) program will enroll in course-work at the Valpo Study Center in Reutlingen, along with business electives in German at the *Hochschule Reutlingen*. Engineering majors participating in the Valparaiso International Engineering Program – Germany (VIEP – German) will also enroll in course-work at the Valpo Study Center as well as electives in German at the *Hochschule Reutlingen*.

#### Program Requirements

Sophomore standing with a grade point average of 2.750 is required; no prior knowledge of German is required.

#### Program Curriculum

All students take a German language course and will be placed into GER 101 or GER 204 based on their level. GER 101 and GER 204 may apply toward the General Education World Language Requirement. GER 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: ECON 290 fulfills one of the Social Science requirements. Most other courses are provided by the Hochschule in Engineering and Business. Many of those courses are already pre-approved. Students are welcome to take any courses offered through Reutlingen University provided they meet any Reutlingen University requirements, such as prerequisites. Students will need to get approval from the appropriate department chairs with regards to how the courses will fit into their degree program and fulfill requirements.

This program is available in either the fall or spring semester, but the fall semester is offered to Engineering and Business students, and the spring is offered to Business and Arts & Sciences students. It is possible to study for a year with approval.

## **Hangzhou, China – Suspended for 2021-22**

The city of Hangzhou is well renowned for its cultural history, its tea and silk production, and according to Chinese tradition, for being a paradise on earth. Zhejiang University, which lies just north of West Lake, is the host institution for students wishing to study Chinese language and culture. This program is designed to be language intensive, while providing the opportunity to experience facets of Chinese culture through excursions, lectures (in English), and demonstration classes of such arts as calligraphy and taiqi chuan. All students will take a Chinese Culture and Civilization course (EAST 395), as well as either five or ten credits of language at an appropriate level. Additional courses may be offered, depending on on-site availability and individual student needs. 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 with prior approval. Classes are conducted from early September to mid-December, allowing for periods of independent exploration and travel.

### **Program Requirements**

Sophomore standing and a grade point average of 2.750 are required, but there is no prior Chinese language requirement.

### **Program Curriculum**

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

<b>EAST 109</b>	Intensive Elementary Chinese	5 Cr.
<b>EAST 110</b>	Intensive Elementary Chinese: Conversation	5 Cr.
<b>EAST 209</b>	Intensive Intermediate Chinese	5 Cr.
<b>EAST 210</b>	Intensive Intermediate Chinese: Conversation	5 Cr.
<b>EAST 309</b>	Intensive Advanced Chinese I	5 Cr.
<b>EAST 310</b>	Intensive Advanced Chinese II	5 Cr.
<b>EAST 395</b>	Chinese Culture and Civilization	3 Cr.
<b>EAST 495</b>	Supervised Reading and Research	3 Cr.

EAST 109 and 110 are for students with no prior knowledge of Chinese and must be taken concurrently. Students may take both EAST 109 (Reading/Writing) and EAST 110 (Conversation) for credit, or they may take EAST 109 for credit and audit EAST 110. EAST 209 and 210 are for students with prior knowledge of Chinese and must be taken concurrently.

These courses may apply toward a major in Chinese and Japanese Studies. EAST 109, EAST 110, EAST 209, and EAST 210 may apply toward the General Education World Language Requirement. Additional courses offered are typically intended to fulfill General Education requirements to supplement the curriculum. A complete list will be shared on the study abroad program page once determined. This program is available in the fall semester only.

## **San José, Costa Rica**

Students may study one semester, either fall or spring, or an entire academic year, at this study center in San José, Costa Rica in partnership with The Praxis Center. San José, the capital of Costa Rica, is a city of about 1.5 million people located in the Central Valley of Costa Rica. It is a bustling modern city surrounded by mountains, about 2 hours from the Pacific coast and 4 hours from the Atlantic coast. Students will study the Spanish language and the history of Costa Rica during the first half of the term. In the second half of the term, students can either enroll in a part-time internship and an elective course, or choose to enroll in elective courses without the internship. Classes are held on the campus of the University of Costa Rica, the *Universidad Bíblica Latinoamericana*, and The Praxis Center, which are all located on the east side of town and easily accessible by public bus.

### **Program Requirements**

Sophomore standing and a grade point average of 2.750 are required. Two semesters of college-level Spanish is recommended, but not required to participate. Students with less than two semesters of college-level Spanish will be considered for admission on a case-by-case basis.

### **Program Curriculum**

Students are placed in language courses according to an exam given at the University of Costa Rica. The Spanish section of the Department of World Languages and Cultures will award credit for these language classes. All students will enroll in WLC 337, Ethnology and History of Costa Rica. WLC 335, Perspectives on Healthcare in Costa Rica, is an optional elective during the second half of the term. Students are also able to complete a World Languages and Cultures Internship during the second half of the term. The following courses are offered:

<b>WLC 337</b>	Ethnology and History of Costa Rica	3 Cr.
<b>WLC 335</b>	Perspectives on Healthcare in Costa Rica	3 Cr.
<b>WLC 486</b>	World Languages and Cultures Internship	1-3 Cr.

For those with higher language proficiency, students can take additional course-work from the University of Costa Rica's Spanish language program, the *Universidad Bíblica Latinoamericana* and The Praxis Center. Students will need to get approval from the appropriate department chairs with regards to how the courses will fit into their degree program and fulfill requirements.

This program is available in the fall or spring term, or for the full academic year.

## Exchange Programs

### Chile – Universidad Viña del Mar

Students whose program interests include both Spanish and Latin American studies may apply to participate in the exchange program with the *Universidad Viña del Mar*, located on the Pacific coast next to Valparaíso, Chile. Participants live with a host-family and attend classes in Viña del Mar.

#### **Program Requirements**

Intermediate Spanish skills (SPAN 204 or its equivalent, minimally), sophomore standing, a grade point average of 3.000 or better, and approval of the Spanish section are required.

#### **Program Curriculum**

Students enroll in Spanish courses offered by the *Universidad Viña del Mar*, as well as other courses related to the culture and history of Chile and Latin America.

The program is available in the fall semester (August to December), spring semester (March to June) or for the full year.

### England – Anglia Ruskin 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 Ruskin University in Cambridge. Students pay tuition and General Fee to Valparaiso University, and pay room and board costs in Cambridge.

#### **Program Requirements**

Sophomore standing with a grade point average of 3.000 are required.

#### **Program Curriculum**

Students can select courses from the full range of undergraduate programs in Liberal Arts, Science, and Business. For additional information, consult the program advisor and the program page on the Study Abroad website.

### France – La Rochelle International Business School

Valparaiso University has established an exchange partnership with La Rochelle Business School (*Groupe Sup de Co*) in La Rochelle on France's Atlantic coast. It offers a special opportunity for students to study Business Administration and develop their French language skills in this private business school of 1600 students. La Rochelle Business School students also come to Valparaiso for a semester of study. Valparaiso University students at La Rochelle Business School may take some courses in English. Valparaiso University students are housed in apartments near the university.

#### **Program Requirements**

FREN 203 or the equivalent is required. College of Business students must have completed the Freshman/Sophomore core classes. Approval of the dean of the College of Business and the French section as well as a 3.000 overall grade point average are required.

#### **Program Curriculum**

Students take a course in French as a World Language as well as appropriate courses in various areas of business administration, which may include marketing, intercultural management, or international logistics. Some courses may be taken in English. Normally students will register for a total of about 14 credits. All credits are considered Valparaiso University credits and count toward College of Business electives or requirements, a French major or minor, general education requirements, or as elective credits. The program is available only in the spring semester.

### Germany – Hochschule für Kirchenmusik, Rottenburg

Students whose program interests include both German and music may apply to participate in the one-on-one exchange with the *Hochschule für Kirchenmusik* in Rottenburg am Neckar.

#### **Program Requirements**

This program requires advanced German skills (GER 220 or its equivalent, minimally), advanced organ skills, junior standing, a grade point average of 3.000 or better, and approval of the German section and the Department of Music.

#### **Program Curriculum**

Students enroll in courses offered by the *Hochschule*, all of which are related directly to music, and for studio lessons in organ. All courses are conducted in German. All courses are considered to be Valparaiso University courses and will count toward the music major, toward General Education requirements, or as elective credit. The program is available in the spring semester only.

**Germany – Eberhard-Karls-Universität Tübingen**

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

**Program Requirements**

GER 204 or the equivalent, junior standing, a grade point average of 3.000 or better, and approval of the German section are required.

**Program Curriculum**

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

The five-week Language and Orientation Program allows students to earn three elective credits towards the German major or minor requirements. Other courses may apply toward certain 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.

**Japan – Kansai Gaidai University**

Valparaiso University has an exciting exchange program with Kansai Gaidai University, located in the culturally rich area between Osaka and Kyoto. The program 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, tuition, and general fee to Valparaiso University. The program is available fall and/or spring semesters.

**Program Requirements**

A grade point average of 3.000 and sophomore standing are required. Two semesters of college Japanese are recommended but not required. References from academic advisors and professors are also needed, as well as permission from the director of Global Education. Admission is competitive.

**Program Curriculum**

Students are placed in Japanese language classes according to proficiency tests given during orientation in Japan. Students are required to study the language, but are free to choose among the courses offered as long as full-time status is maintained.

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 advisors and the appropriate bulletins to match their course selections with requirements.

**México – Universidad de las Américas-Puebla**

Valparaiso University students may study fall semester, spring semester, or the entire year at the *Universidad de las Américas Puebla* (UDLAP) in Puebla, Mexico. Cholula, a small town rich in pre-Hispanic history, is a short bus ride from Puebla, a modern city of two million people located about 100 miles southeast of Mexico City. Surrounded by breathtaking snow-capped mountains, the region offers a wide variety of cultural experiences through which students come to understand this country, which is both ancient and modern, developing and industrialized, relaxed and bustling. Students live with Mexican suitemates in on-campus residence halls.

**Program Requirements**

SPAN 203, at least sophomore standing, and a grade point average of 3.000 or better are required.

**Program Curriculum**

Based on a placement exam, students enroll in Spanish language, literature, business, and civilization courses for international students, offered at the beginning, intermediate, and advanced levels. Students with solid language skills may enroll in one or more courses from the regular curriculum for Mexican students. 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.

Courses may apply toward the Spanish major or minor, or toward certain General Education Requirements, including Social Science, Humanities: Fine Art, World Language, and/or Cultural Diversity course.

## **Spain – Universidad de Zaragoza – Suspended for 2021-22**

One of Valparaiso University's newest exchange programs with the *Universidad de Zaragoza* offers students the opportunity to enroll in Spanish courses at the Center of Spanish as a World Language at the *Universidad de Zaragoza*, as well as take one or two additional courses from the university at large. Zaragoza is a very rich city in art history and offers students the opportunity to travel easily around Spain and Europe. Students live with a host-family.

### **Program Requirements**

Intermediate Spanish skills (SPAN 204 or its equivalent, minimally), sophomore standing, a grade point average of 3.000 or better, and approval of the Spanish section are required.

### **Program Curriculum**

Students enroll in Spanish courses offered by the *Universidad de Zaragoza* faculty members, as well as other courses focusing on history, literature, history of art, and society, among others. In addition, students have the option of enrolling directly into the *Universidad de Zaragoza*'s business and engineering schools, taking such coursework in Spanish. Engineering majors participating in the Valparaiso International Engineering Program – Spanish, will enroll at the *Universidad de Zaragoza*. The program is available in the fall semester, spring semester, or for the full year.

## **Utrecht, Netherlands – University College Utrecht Exchange Program**

Study at an honors college in a beautiful, historic city in the heart of Europe. Christ College has recently formed this partnership with University College Utrecht (UCU), a liberal arts honors college in The Netherlands. Christ College students will be able to study at a prestigious European university with students from across Europe, and the globe, in a small, honors college setting. The entire campus is English-speaking, and many of the inhabitants of The Netherlands speak English as well.

### **Program Requirements**

Students must be part of and approved by Christ College to participate.

### **Program Curriculum**

Christ College students will be able to choose from a wide variety of courses, all taught in English, which can fulfill Christ College, general education, and/or major and minor requirements, with careful planning.

## **Valparaiso International Engineering Program**

### **VIEP-French: Université de Technology de Compiègne**

VIEP-French is a five-year program that leads to a degree in one of six engineering disciplines (bioengineering, civil, computer, electrical, environmental, or mechanical) and a major or minor in French. Students spend the fourth year abroad, enrolling in several courses in the fall term at the Université de Technology de Compiègne (UTC) near Paris, France. They then spend the spring semester in a co-op work experience in France. Compiègne is an historic city about 50 miles northeast of Paris.

### **Program Requirements**

Students must be enrolled and in good standing in the VIEP -- French program. Approval of the VIEP -- French directors is required. See the VIEP description on page 293.

### **Program Curriculum**

Courses to be taken at UTC are chosen in consultation with the student's College of Engineering advisor and will include engineering courses as well as a course in French as a World Language. All courses are considered to be Valparaiso University credits and will count toward the student's engineering major and French major or minor.

## VIEP-German: *Hochschule Reutlingen*

VIEP-German is a five-year program that leads to a degree in one of six engineering disciplines (bioengineering, civil, computer, electrical, environmental, or mechanical) and a major or minor in German. Students spend the fourth year abroad, enrolling in several courses in the fall term at the Valpo Study Center in Reutlingen and a technical course in German at the *Hochschule Reutlingen*. Students then work for a German company or research laboratory in the spring semester and summer for a co-op placement. Students live in campus housing for the fall term and many stay in Reutlingen for the co-op placement, although some students may prefer to seek a position farther away.

### Program Requirements

Students must be enrolled and in good standing in the VIEP-German program. Approval of the VIEP-German directors is required. See the VIEP description on page 293.

### Program Curriculum

Courses to be taken at the *Hochschule Reutlingen* are chosen in consultation with the student's College of Engineering advisor and will include engineering courses as well as a course in German as a World Language. All courses are considered to be Valparaiso University credits and will count toward the student's engineering major and German major or minor.

## VIEP-Spanish: *Universidad de Zaragoza* – Suspended for 2021-22

VIEP-Spanish is a five-year program that leads to a degree in one of six engineering disciplines (bioengineering, civil, computer, electrical, environmental, or mechanical) and a major or minor in Spanish. Students spend the fourth year abroad, enrolling in several courses in engineering, math or science, taught in Spanish, during the fall term at the *Universidad de Zaragoza*. Students will have an opportunity to take a two-week intensive Spanish language course before the start of the semester. In the spring, students work for a Spanish company or research laboratory either in Zaragoza or elsewhere. Students receive personalized assistance in housing, course selection, and more from the School of Engineering and Architecture's International Office. Students are encouraged to live with a host-family, but can also live in a shared apartment with other university students.

### Program Requirements

Students must be enrolled and in good standing in the VIEP-Spanish program. Approval of the VIEP-Spanish directors is required. See the VIEP description on page 293.

### Program Curriculum

Courses to be taken at the *Universidad de Zaragoza* are chosen in consultation with the student's College of Engineering advisor and will include engineering courses as well as a course in Spanish as a World Language. All courses are considered to be Valparaiso University credits and will count toward the student's engineering major and Spanish major or minor.

## VIEP in China: *Zhejiang University* – Suspended for 2021-22

VIEP in China is a five-year program that leads to a degree in one of six engineering disciplines (bioengineering, civil, computer, electrical, environmental, or mechanical) and a minor in Chinese. Students spend the fourth year and following summer abroad, enrolling in the Valpo Study Center in Hangzhou during the fall semester. Students will study intensive Mandarin Chinese at Zhejiang University. In the spring, students work for a U.S.-based or Chinese company in China or participate in a research project at a Chinese university. Students will live in a residence hall at Zhejiang University during the fall term and can either remain in Hangzhou for the co-op placement or seek a position elsewhere.

### Program Requirements

Students must be enrolled and in good standing in the VIEP in China program. Approval of the VIEP in China directors is required. See the VIEP description on page 293.

### Program Curriculum

Courses to be taken at the Valpo Study Center in Hangzhou and at Zhejiang University are chosen in consultation with the student's College of Engineering advisor and will include Chinese as a World Language. All courses are considered to be Valparaiso University credits and will count toward the student's engineering major and Chinese minor.

## Affiliate Programs

### Athens, Greece – College Year in Athens

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 a minimum GPA of 3.000 are eligible to apply. There is no language requirement to participate.

#### 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 World Languages and Cultures. Normally four courses constitute full-time study. Students may apply to study during the fall or spring semester.

### Budapest, Hungary – Budapest Semesters in Mathematics

In cooperation with Budapest Semesters in Mathematics (BSM), Valparaiso University offers the opportunity for select mathematics majors to study advanced course-work from leading Hungarian scholars. Students spend part of their junior or senior year in a 15-week program located in Budapest, Hungary. Budapest, a city of about two million, has a long tradition of mathematical scholarship and is home to eleven universities. Students can choose to live with a home-stay or in a furnished apartment with other BSM students.

#### Program Requirements

Students must have at least sophomore status, be in good academic standing, and have completed one semester of Real Analysis or Abstract Algebra by the start of the program. No prior knowledge of Hungarian is required. All courses are conducted in English.

#### Program Curriculum

Students enroll in about four classes for the fall or spring semester and credit is awarded by the Department of Mathematics and Statistics. An optional two-week intensive Hungarian course is available before the beginning of the program and includes tours of the city and practical living skills.

## Nantes, France – IES Abroad

Nantes is well-known for being a charming city in which to live in France, and it's quite easy to see why. Home to many young professionals and students, there are plenty of new friends to make and an active nightlife waiting for you in Nantes. This program enjoys a close relationship with the Université de Nantes. You have access to the school's libraries, computer labs, cafeterias, and sports facilities, and are welcome to join student clubs and other social and sports organizations. You also have many opportunities for enrolling in university courses. IES Abroad courses are taught in French by native French faculty, many of whom are professors at the Université de Nantes. You select from IES Abroad language and area studies courses, and can add a teaching internship and university courses to complete your schedule.

### Program Requirements

Students must have at least sophomore standing, at least a 2.750 cumulative GPA, and have taken at least four semesters of college-level French.

### Program Curriculum

Our French Language Immersion & Area Studies Program has two important goals: to improve your written and verbal proficiency in French through language and area studies courses, and to introduce you to contemporary France and its role in the European Union. A beautiful and bike-friendly city on the Loire River, Nantes offers wonderful food, outdoor spaces, and stunning modern and classic architecture. This program is available for the fall or spring semester, or the academic year with approval.

## Paris Internship Program – Boston University

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 FREN 204 and an overall grade point average of 3.000. 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 a one-week orientation and seven 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: Arts/Architecture/Arts Administration; Business/Economics/Finance; International Organizations; Politics/International Relations; Health/Human Services; Advertising/Marketing/Public Relations; Film/Radio/Television; Journalism; or Hospitality Administration. This program is one semester only. Students may enroll for either the fall or spring semester.

## Southern Africa – Augsburg College

As a result of a partnership with the Center for Global Education at Augsburg College, Valparaiso University offers a challenging study-abroad program in South Africa and Namibia. Valparaiso University students live together with other students from the United States, as well as with families in Soweto, South Africa; in Windhoek, Namibia; and in a rural Namibian community.

### Program Requirements

Sophomores, juniors, and seniors with a grade point average of 3.000 are eligible to apply. Enrollment is limited to twenty-four students each semester, drawn from colleges and universities throughout the United States. All courses are conducted in English.

### Program Curriculum

The theme for both semesters is *Nation Building, Globalization, and Decolonizing the Mind: Southern African Perspectives*, and the offerings include courses in the following disciplines: political science, religion, interdisciplinary studies, and sociology. An internship is also possible. 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. Students may participate during either semester.

## Limerick, Ireland – CISabroad

Study at the University of Limerick in Ireland through CISabroad. This program offers state-of-the art facilities, great housing, and classes with Irish students so you can immerse yourself in the local culture. Explore castles, stroll along the Shannon River, and learn the fiddle during your semester abroad in Ireland!

### **Program Requirements**

Sophomore standing and a cumulative GPA of 2.900 are required.

### **Program Curriculum**

Students may choose from a wide array of courses available through the University of Limerick. The corresponding Valpo department must approve credit earned in Limerick.

## Newcastle, Australia – CISabroad

Study at the University of Newcastle in Australia through CISabroad. The University of Newcastle has a stunning, ecologically sustainable campus where students can experience the true Aussie lifestyle.

### **Program Requirements**

Sophomore standing and a cumulative GPA of 2.500 are required.

### **Program Curriculum**

Students enroll in about four classes for the fall or spring semester. The corresponding Valpo department must approve credit earned in Newcastle.

## Faculty-led, Short-term Programs

Valparaiso University offers various short-term, faculty-led programs or research abroad for academic credit, which generally take place during the two-week spring recess or during the summer. Students are encouraged to take advantage of these opportunities. Faculty-led programs are proposed and run in partnership with the faculty and academic departments. The official list of Spring Break programs are typically released the August prior, and summer programs are typically released the January prior. Consult the Office of Global Education for more information.

# Facilities for Learning

## University Library Resources, Services, and Facility

Students turn to the Christopher Center Library to reach a level of independence in finding resources and in understanding the mechanics of information; utilizing computers for retrieval; and reading, interpreting, and writing citations. They learn information-seeking skills, including how to articulate their research needs. Most importantly, students learn how to evaluate information, find different viewpoints, and recognize the biases of any author through customized assistance. The library faculty provide course-specific, assignment-based information literacy instruction in collaboration with each academic college, as well as through individual student research appointments.

The Christopher Center for Library and Information Resources has an important place in student academic achievement. It is home to all University library faculty and staff, services, resources, and materials; the publicly accessible Help Desk for Information Technology; the Academic Success Center; the Access and Accommodations Resource Center; the campus Writing Center; and the University Archives and Special Collections. At 105,000 square feet, the building provides a comfortable atmosphere for research, inquiry, discussion, and study. With 178 public computers, 30 charging stations, three fireplace lounges, a gourmet coffee shop, and dozens of group study spaces, students will find the Christopher Center to be a modern, state-of-the-art campus facility to meet their research needs. It can hold a total of 600,000 library volumes, both on open bookshelves throughout the building and within its robotic high density storage and retrieval system.

The Library plays an important role in scholarly communication by organizing print and electronic information for easy retrieval. Accessible via the Library's home page, [library.valpo.edu](http://library.valpo.edu), the Library offers access to scholarly information across academic disciplines within more than 55,000 journals, 150,000 e-books, and approximately 190 electronic databases. The Library's discovery tool (Summon), searches most of the library's paid content (articles, books, etc.) on one platform. An online public catalog of its holdings, primarily books in print and electronic format, is searchable in a variety of ways. The Christopher Center holds the Moellering Collection, which is comprised of more than 340,000 volumes, adding approximately 4,000 new print volumes each year. In addition, the campus community may access over 8,800 e-books through the catalog. Students may request interlibrary loan service for articles and books that are not held locally. New services and resources are continuously evaluated for selection, acquisition, and organization to support the mission of the University.

## Information Technology

The Office of Information Technology (IT) coordinates and manages all aspects of technology on campus. From servers and data networks to communications systems and classroom technology, IT assists the campus community in a multitude of ways.

## The Valparaiso University Network

IT manages services which provide secure email, websites, administrative data, shared file space, network printing, general productivity software, discipline-specific applications, and many other functions.

Residence hall rooms, offices, classrooms, laboratories, and special-purpose computer labs are connected to the Valparaiso University network via wired or wireless access. This network provides access to the internet, printing, network storage space, library resources, and a variety of other applications. For those living off campus or away from campus, the department has provided opportunities to connect to campus computers that may contain important software programs to which users might not otherwise have access.

## Computer Access for Students

While students are welcome to come to campus with personal computers, laptops, tablets, personal printers and mobile devices, they also have access to computers and printers all across campus. Each residence hall has a computer lab open 24 hours per day for residents with multiple workstations and network printer access. All residence hall rooms have both wired and wireless access available, allowing those who bring their own computers and/or smart-TVs to connect to the campus network. For non-residential students, there is a computer lab in the Harre Union that is also available 24 hours per day through access with their Valpo ID (OneCard). Other computer labs and printers are located across campus in academic buildings and the Christopher Center (Library). Many campus printers can be accessed wirelessly from personal computers using our PaperCut system as well, which allows students access to an established quota from which they may print all year.

## Assistance with Resources

The IT Help Desk, located on the first floor of the Christopher Center, is managed by professional staff and student consultants who will answer technology-related questions and route service requests (ITickets) to technical staff. The Help Desk should be the first stop for assistance with campus technology, and is accessible in a variety of ways, including online ([valpo.edu/ITmailto:](mailto:valpo.edu/ITmailto:)), email ([helpdesk@valpo.edu](mailto:helpdesk@valpo.edu)), phone (219.464.5678), and in person.

## Facilities for Learning

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The IT staff can assist with questions regarding email, web browsers, anti-virus/anti-malware applications, printing, word processing, spreadsheets, databases, desktop publishing, an online course management system, an online registration and records system, statistical analysis software, presentation graphics, mobile device connectivity, and more. If a campus member needs assistance with technology, the IT team is there to help!

In addition to the above-mentioned services, the IT department also provides access to the entire online learning library of LinkedIn Learning. This personal and professional resource provides 24-hour access to thousands of video-based courses on business, technical, and creative topics for learners of all levels via any device connected to the internet. We encourage all students, faculty and staff to check out this free resource to gain new knowledge and support developing passions!

# Honors and Awards

## Graduation Honors

### **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 3.80 in their work at this institution are graduated Summa Cum Laude.

### **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 3.600 in their work at this institution are graduated Magna Cum Laude.

### **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 3.400 in their work at this institution are graduated Cum Laude.

### **Christ College Honors**

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

### **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 56 and following.

## Semester Honors

Undergraduate students who achieve a standing of 3.500 in any semester are awarded semester 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 completed 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.

Semester Honors are also referred to as the dean's list.

## 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 Lambda Delta**

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

### **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 Association to Advance 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 are eligible for membership.

### **Lambda Pi Eta**

This national honor society of the National Communication Association (NCA) recognizes communication majors who have achieved a high level of academic excellence.

### **Phi Beta Kappa**

This national honor society, founded in 1776, recognizes academic excellence and outstanding scholarly achievement in the liberal arts and sciences.

### **Sigma Theta Tau**

This international 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.

### **Departmental Honor Societies**

Accounting—Accounting Society	Meteorology—Chi Epsilon Pi
Chemistry—Phi Lambda Upsilon	Music—Pi Kappa Lambda
Classics—Eta Sigma Phi	Philosophy—Phi Sigma Tau
Decision Science—Alpha Iota Delta	Kinesiology—Phi Epsilon Kappa
Drama—Alpha Psi Omega	Physics—Sigma Pi Sigma
Economics—Omicron Delta Epsilon	Political Science—Pi Sigma Alpha
Education—Kappa Delta Pi	Psychology—Psi Chi
English—Sigma Tau Delta	Social Science—Pi Gamma Mu
French—Pi Delta Phi	Social Work—Phi Alpha
Geography—Gamma Theta Upsilon	Sociology—Alpha Kappa Delta
German—Delta Phi Alpha	Spanish—Sigma Delta Pi
History—Phi Alpha Theta	Theatre—Alpha Psi Omega
Journalism—Society of Collegiate Journalists	Theology—Theta Alpha Kappa
Marketing—Alpha Mu Alpha	

### **Awards and Prizes**

#### **James and Joanne Albers Theology Paper Prize**

This prize is presented annually by the Theology Department to the graduating theology or theology and ministry major who has written the outstanding thesis (or other major course paper) in theology during the senior year. The award is made possible by the generosity of Professor of Theology emeritus James Albers and Joanne Albers, his wife.

#### **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 the name of Dr. Walter E. Bauer, Distinguished Service Professor Emeritus of History.

#### **The Bluemel Award**

Awarded to a graduating senior nursing student who demonstrates determination, perseverance, a sense of humor, a desire to elevate the standards of nursing, recognition of the importance of the role of the nurse in prevention of illness, and a concern for human worth and dignity, regardless of race, creed, or culture.

#### **Delta Sigma Pi Award**

Awarded to a College of Business senior with the highest cumulative grade point average after seven semesters of study.

#### **The Donnelley Prize**

The Donnelley Prize annually rewards the best student essays on humankind's relationship to the environment with a cash award of \$750 and support for summer internships or research in environmental issues, particularly in the Chicago region. Environmental and biomedical ethicist Strachan Donnelley, Ph.D., a former Christ College faculty member and Vivian Donnelley, a Valpo alumna, endowed the prize.

#### **Bruce and Linda Eastmond Award**

These are annual awards presented to an outstanding senior student 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 World Languages and Cultures to the French major who has demonstrated outstanding achievement and promise in French studies. It is given in honor of Professor Emerita Hazel Guillaumant and her husband, Roger.

#### **The Patterson MacLean Friedrich Scholarship**

The Friedrich Scholarship is awarded annually to the outstanding junior student majoring in French at Valparaiso University.

### **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 and International Relations 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.

### **Indian Medical Association of Northwest Indiana Scholarship in Nursing**

This award is presented to a student entering the senior year who is selected by the dean of Nursing and Health Professions. The student must have resided in Northwest Indiana prior to admittance into Valparaiso University and plan on practicing in Northwest Indiana after graduation.

### **Alfred H. Meyer Award**

The Alfred H. Meyer Award annually recognizes a geography major based on his/ her performance in a variety of categories. This award was established by alumni of Valparaiso University's geography program and members of the faculty to honor Dr. Meyer who served the Department of Geography and Meteorology (known then as the Department of Geography and Geology) as its founder and first chair. The award includes a cash prize.

### **Walther M. Miller Memorial Prize**

The Miller Prize is awarded annually to the senior 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.

### **Thora Moulton Prize**

The Moulton Prize is awarded annually to the outstanding junior student in German studies and is awarded in honor of Professor Emerita Thora Moulton.

### **Nancy Wehmeier Nagel and Robert B. Nagel Prize**

The Nancy Wehmeier Nagel and Robert B. Nagel Prize is awarded annually to the graduating female mathematics major with the highest grade point average.

### **Eugene M. Rasmusson Award**

The Eugene M. Rasmusson Award annually recognizes a meteorology major based on his/ her performance in a variety of categories. The award was established to honor Dr. Rasmusson who dedicated his distinguished career to the field of meteorology and was widely recognized for his research and publications and for his superior example of scholarship and service. The award includes a cash prize.

### **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.

### **The Dorothy Paulsen Smith Award**

Awarded to a graduating senior nursing student whose quest for excellence has reflected the spirit of the College of Nursing and Health Professions. Criteria for choice include demonstrated scholarship and leadership, openness and enthusiasm, energy and creativity, empathy and compassion.

### **The Donna Spanopoulos Memorial Scholarship in Pediatric Nursing**

This award is presented by the Spanopoulos family each spring to a student entering the senior year, in memory of the founder of Infant and Child Special Care, Valparaiso, now part of Lurie Children's Hospital. The \$1,000 award was established to encourage interest in the practice of pediatric nursing. The student must demonstrate academic and clinical excellence in the nursing care of children and an expressed interest in specializing in pediatric nursing.

### **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 nonfiction prose essay.

### **The Wall Street Journal Award**

Awarded to the outstanding senior business student in the College of Business.

### **The Charles W. Wolf Award**

The Charles W. Wolf Award is presented annually to the most outstanding pre-medical arts junior who is majoring in either chemistry or biochemistry.

## **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 Valparaiso University.

# Student Life

The University accepts and practices the view that a liberal education concerns the growth of the whole person. Its residential and co-curricular life encourages students to develop their full potentials, complementing and enriching their academic curricula.

The Student Life Division coordinates the various aspects of student life and proactively engages in the holistic development of students to learn, grow, and strive toward their fullest potential within an inclusive and supportive community.

## Student Conduct and the Honor System

Valparaiso University holds to 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**, located on the General Counsel [website](#).

Each student enrolling at Valparaiso University thereby accepts the rules, regulations, and procedures as found in this catalog and the **ACADEMIC RESOURCE GUIDE AND STUDENT HANDBOOK**. 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 Vice President for Student Life on the recommendation of the Campus Judicial 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. All entering students must agree 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 specifically requested. 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. The students are chosen by the incumbent members subject to the approval of the president of the University, and the faculty members are elected by the faculty.

## The Arts

The mission of the programs in the visual and performing arts at Valparaiso University is to educate 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 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.

### Music

The Department of Music offers all students the opportunity to study and perform as singers and instrumentalists in an array of curricular and co-curricular ensembles. Students wishing to perform in selective ensembles may audition for the Valparaiso University Chorale, the University Symphony Orchestra, the Kantorei, Jazz Ensemble, and the Chamber Concert Band, as well as a variety of chamber ensembles including Woodwind Quintet, String Quartet, Percussion Ensemble, Brass Ensemble, and others. The Community/University Concert Band, New Music Ensemble, and Jazz Combos are open to all students with no audition required. Additional student-organized performing groups include Crusader Pep Band, Handbell Choir, Matins Choir, and various a cappella singing groups. For an additional charge, a limited number of students may enroll in private music lessons in voice, piano, guitar, organ, and most orchestral and band instruments.

### Theatre

The University Theatre brings the best of classic drama, new plays, and dance to the Valparaiso University Center for the Arts. Theatre opportunities are available for any student interested in dramatic arts. Theatre work is focused in the areas of performance, production, management, and outreach theatre. Opportunities exist for advanced students to design, supervise, or manage in all areas.

**Art**

The Department of Communication and Visual Arts offers studio courses in painting, drawing, digital art, video art, design, graphic design, photography, and art history. Student and faculty work, as well as the work of other distinguished artists, is exhibited in the Brauer Museum of Art, in the Strimbu Gallery on the second floor of the Center for the Arts, and in the permanent collection at the Christopher Center for Library and Information Resources. Our students have opportunities to develop publishing and production skills by working with *The Lighter*, *The Torch*, and other campus publications. Several internships are available to students on and off-campus. Summer programs of study in Europe or Asia are also available to provide students with immediate experience of diverse cultural heritages, in addition to all regular world studies programming during the academic year.

**Dance**

Through learning and participating in dance, students are able to reflect on the ways dance is part of the human experience and part of their own lives. Each semester students may choose from a number of different dance courses offered through the Department of Theatre. Styles covered may include: ballet, tap, jazz, modern, and musical theatre styles.

**University Dance Ensemble**

Under the leadership of Department of Theatre faculty, the University Dance Ensemble meets regularly throughout the academic year for technique classes and choreography. All University students are welcome to audition for the Dance Ensemble. Academic credit can be given for those students choreographing or performing in the annual Concert of Dance. Dance Ensemble auditions are held at the beginning of the fall semester.

**Professional and Public Writing**

The English Department offers majors and minors in professional and public 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 to Valparaiso University students for fiction, poetry, and nonfiction prose. *The Cresset* internship provides experience in editing and publishing. *The Lighter*, a biannual campus literary magazine, presents student work in award-winning form.

**Athletics**

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

**Recreational Sports/Intramurals**

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, fitness classes, and clinics offered by the Recreational Sports staff.

**Intercollegiate Competition**

Women's sports offered are: basketball, bowling, cross country, golf, soccer, softball, swimming, tennis, indoor and outdoor track and field, and volleyball. Membership is maintained in the National Collegiate Athletic Association Division I. The women's teams participate in the Missouri Valley Conference and the Southland Bowling League.

Men's sports offered are: football, golf, basketball, baseball, cross country, swimming, and indoor and outdoor track and field. Membership is maintained in the National Collegiate Athletic Association Division I. The men's teams participate in the Missouri Valley Conference, the Mid American Conference, and the Pioneer Football League, an NCAA FCS Conference.

**The Valley on ESPN**

As a member of the Missouri Valley Conference, the University produces over 50 athletic productions for air on the family of ESPN networks. These productions originate from a state-of-the-art control room located in the ARC and use the same equipment that can be found in production trucks and studios. Students have the opportunity to be members of the production crew and work in on-air roles. These opportunities include camera operator, grip, audio, sideline reporters, graphics, and replay operators. The crew also produces the commencement ceremonies that happen on the Valparaiso University campus. For further information about getting on the crew, please email Ron.Blatz@valpo.edu.

## Publications and Broadcasting

Students are encouraged to work in any aspect of campus publications and broadcasting, including writing, editing, advertising, sales, photography, and layout. The 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 graphic design, photography, and editorial work and is open to students from all academic disciplines.

### The Lighter

*The Lighter*, a student literary magazine, is published twice a year and welcomes contributions from all members of the University student 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.

### VUTV

The award winning Valparaiso University Television provides students with hands-on training and experience in television production. Students can gain experience as producers, directors, camera operators, editors, and on-air talent for a variety of news, educational features, and entertainment programs for the campus community. No prior experience is necessary. Delivery is through campus cable channel 15, a YouTube channel, and the Valparaiso University website along with live streaming. For information on The Valley on ESPN, see the above section on Athletics.

### WVUR

The campus radio station WVUR (95.1 FM) broadcasts to the local Valparaiso area community, and is also available worldwide as a webcast. The station is managed and operated by students, who DJ their own music shows, produce newscasts and weather reports, call broadcasts of VU sporting events, run remote broadcasts of Chapel services and other campus events, and produce podcasts, live interviews and other on-air programs.

Academic Advising  
Valparaiso University strives to empower students to reflect on their vocations, take ownership of their education and professional development, and to lead and serve in the ever-changing global community. Academic advising provides information about higher education processes, procedures, and program expectations. Entering students are assigned to an academic advisor to assist them in selecting a curriculum, meeting University requirements, and making the most of their studies.

Students who have not declared a major are assigned an exploratory advisor; however, as soon as students declare a major, they are assigned to a departmental advisor.

All students must meet with their academic advisors before students may register for classes each semester. The advising meeting indicates only that advisors have counseled the student on the best course selection to progress to degree attainment. Students should use the program evaluation (degree audit) option on DataVU to track their graduation requirements.

## **Access and Accommodations Resource Center (AARC)**

Valparaiso University's Access and Accommodations Resource Center coordinates university efforts to provide access and opportunity to students with disabilities, including students who have disabilities that are non-apparent. Students wanting to learn more about services or accommodations available to those with a documented disability should contact the AARC. Inquiries should be directed to the director of the AARC at 219.464.5206 or by email at [aarc@valpo.edu](mailto:aarc@valpo.edu). Please note that students diagnoses remain confidential, despite communication with various entities on campus regarding students needs.

Steps involved in receiving accommodations from the AARC:

1. Disclose disability to staff of the Access and Accommodations Resource Center (AARC). This can be done by contacting staff in the AARC located in CCLIR 165 and 164, or emailing them at [aarc@valpo.edu](mailto:aarc@valpo.edu).
2. After the student has disclosed a disability, AARC will ask the student to complete the Accommodation Request Form found on the office webpage. The form will also be emailed to students upon initial contact.
3. Schedule an intake appointment with the staff of the Access and Accommodations Resource Center (AARC) [mailto:](mailto:mailto) to discuss specific needs and barriers.
4. AARC will review documentation (attached in Accommodation Request form) and notes from intake meeting to determine the following
  - Does the student's condition rise to the level of a disability as defined in Section 504 of the Rehabilitation Act of 1973 and with the Americans With Disabilities Act amended in 2008?
  - What are the functional limitations of the disability in an educational setting?
  - What, if any, accommodations would be reasonable and appropriate for the student?
5. If a need for accommodations is determined, staff in the AARC will produce an accommodation letter that will be distributed to the student's professors and academic advisor. These letters will verify disability (diagnosis not stated) and list reasonable accommodations. It is the student's responsibility to discuss the listed accommodations with the professors and to arrange the usage of accommodations when applicable.
6. If a student has problems relative to the provision of accommodations, the student should contact the AARC.

For further information, please refer to Valparaiso University's Access and Accommodations Resource Center website: [valpo.edu/access-and-accommodations-resource-center](http://valpo.edu/access-and-accommodations-resource-center).

## **Graduate Tutoring**

Graduate content tutoring is coordinated with the Graduate School in communication with the graduate program directors. Graduate tutoring is made available across program content areas to serve the academic needs of all graduate students. Tutoring is provided in a location that is determined by the program director and the instructor of the course in which tutoring is being provided. If a graduate student expresses interest in additional one-on-one tutoring for a particular class, an attempt will be made by the Graduate School to find someone to help.

Graduate faculty and students are available to assist graduate students, and online writing assistance may be available.

## **Academic Support Services**

### **Academic Learning Centers**

There are four academic learning centers on campus: Academic Success Center (ASC), Hesse Learning Resource Center, Language Resource Center, and Judith L. Beumer Writing Center. These learning centers are united in purpose and distinct in service. Valpo students have access to numerous campus resources committed to success inside and outside the classroom. Students are encouraged to take advantage of the learning centers, where peer tutors are available to help them grow as writers, strengthen learning strategies, practice language skills, and thrive during their academic journey.

### **Tutoring**

The learning centers provide free tutoring services in a variety of forms and venues across campus. Students experiencing difficulties with coursework, or students wanting to further improve their skills, should consider the following options:

1. Work with the Professor – The first option for help in a course is usually for the student to work directly with the professor during weekly office hours. Frequently, simple concerns regarding coursework can be resolved by speaking to the professor.
2. Help Sessions – Besides seeking support from the professor, the student should also seek help provided by departments, colleges, and learning centers. Some departments have undergraduate teaching assistants and student aides who provide group help sessions for first-year and second-year courses free of charge to students. Professional colleges also arrange academic support in conjunction with particular courses, and the university's learning centers function to offer group and individual learning assistance.
3. Tutoring – If help sessions are not available or have not met the need, then a student can seek tutoring opportunities from one of the campus learning centers. Each center connects students with tutors through a specific process. Some centers

have an application process where students can request to be paired with a tutor for certain courses; pairing is based on individual needs and tutor availability. Other centers serve students through drop-in tutoring hours or online scheduling for individual or shared appointments. Students should contact the appropriate center to learn how to connect with a tutor for a specific course or subject. If students are uncertain where to begin, they should visit the welcome desk in the Academic Success Center (ground floor of the Christopher Center Library) for a referral.

4. **Study Groups** – Students are also encouraged to gather in small groups and work with each other in mastering class material. This practice reinforces learning from daily lectures and supports good study habits.

## Academic Success Center (ASC)

The ASC is located in the Christopher Center Library, Room 110, on the lower level by the Writing Center. For more information visit the ASC in person or online at [valpo.edu/academic-success-center](http://valpo.edu/academic-success-center), call 219.464.5985, or email [Academic.Success@valpo.edu](mailto:Academic.Success@valpo.edu).

The ASC promotes academic achievement by connecting students with opportunities to enhance their learning, boost performance, and develop new study skills. In collaboration with other offices, ASC staff work to provide academic support services and programs that benefit the learning needs of students and advance their academic goals. The ASC promotes academic achievement through the following core programs and services:

- Peer Tutoring Program (course-specific tutoring in many subjects at the 100-200 level)
- Supplemental Instruction Program (weekly, peer-led, collaborative learning sessions in CHEM 111/121/122 and BIO 151/152/171/172)
- GS-100: Strategies for Academic Success (1-credit study skills course)
- Help Sessions (weekly assistance for 200- and 300-level Nursing courses)
- Referral Services (connecting students to appropriate campus resources via email, phone, and drop-in visits)

## Peer Tutoring Program

After seeking support from the professor, help sessions, and any available Supplemental Instruction sessions, then a student can request a spot in the ASC Peer Tutoring Program for a specific course by submitting a Peer Tutor Request form on the ASC website. The ASC hires and assigns peer tutors to work with undergraduate students enrolled in a variety of 100-200 level courses. Peer tutors have successfully completed the courses (or similar courses) for which they provide tutoring and are recommended by professors. The tutoring sessions arranged by the ASC uphold the standards set by the university's Honor Code. It is the student's responsibility to abide by what is authorized and unauthorized aid in a particular course.

## Strategies for Academic Success (GS 100)

This course is designed for students who want to enhance their academic achievement by strengthening their learning strategies and study skills. Course topics include effective use of study time and learning strategies (active reading, note taking, organizing, memory techniques), test preparation (study plans), test-taking techniques, time management, overcoming procrastination, goal setting, motivation, decision making, academic resilience, self-regulation, and using academic support resources on campus.

This course is coordinated through the Academic Success Center and is appropriate for all students who want to boost their academic performance and learn success strategies that can be used in a variety of learning contexts. First year students may find the fall course particularly helpful as they make the transition to college life.

## Hesse Learning Resource Center

Staffed by a team of engineering peer tutors, the Hesse Learning Resource Center provides academic support and resources for all students taking classes included in the engineering program. The Hesse Scholars are trained to help guide students toward a better understanding of course content, and to focus on assisting students to develop the skills necessary to become independent learners. Located in Gellersen Center 121, the Hesse Center promotes student success through the following programs:

- Walk-in Peer Tutoring: Monday-Thursday 10:30 a.m. – 5:30 p.m., and 7 – 10 p.m., Friday from 10:30 a.m. – 2:30 p.m., Saturday from 2–5 p.m., and Sunday 7-10 p.m.
- Course-Specific Help Sessions
- Personalized Weekly Tutoring Schedules
- Academic Coaching for Students in Academic Recovery

Additional details on help sessions and tutoring schedules can be found at [valpo.edu/hesse-center](http://valpo.edu/hesse-center). Questions or individual tutoring requests can be directed to the Hesse Center Director at [Laura.Sanders@valpo.edu](mailto:Laura.Sanders@valpo.edu) or 219.464.5210.

## Language Resource Center (LRC)

Located in the College of Arts and Sciences Building, the Language Resource Center supports Valpo language learners within an internationally focused setting. The LRC welcomes all students, while providing an environment and resources that meet the particular needs and interests of students enrolled in world language courses, as well as international students.

Central in the design of the LRC is the priority placed on face-to-face communication and authentic language use among students interested in cultural and linguistic exchange. This occurs through LRC-sponsored tutoring, conversation partner pairings formally integrated into certain courses, informal learning programs, and activities sponsored by student groups. The LRC promotes academic achievement through these core programs, resources, and services:

- Language Partner Program: Tutoring support in French, German, and Spanish; additional languages supported as needed. Chinese tutoring, coordinated through the Valparaiso University Confucius Institute, also takes place in the LRC.
- Learning resources and reference materials: Open computer lab, comfortable study space, international film collection, global TV, study tips and reference materials, and cultural enrichment items
- French and Spanish reading collection: Books of various genres, topics, and levels available for students to borrow or read in the LRC
- GS-106/GS-180: English Conversation Partners: One credit course in which domestic and international students are paired for one-on-one weekly English conversation

Information on how to schedule a tutoring session with an LRC language partner, current LRC hours, and other details can be found at [valpo.edu/language-resource-center](http://valpo.edu/language-resource-center). For additional assistance, please stop by the LRC in the Arts and Sciences building, Room 240; email LRC@valpo.edu; or call 219.464.5764.

## Judith L. Beumer Writing Center

At the Writing Center, undergraduate and graduate students discuss their writing with trained, experienced writing consultants. Free individual and small group peer consultations and workshops on writing are offered to support undergraduate and graduate students in their development as writers. Sessions provide strategies and guidance on writing assignments from any discipline, at any stage in the writing process, and for writers at all skill levels. The goal is to help students become credible, confident writers.

After students register for free online, appointments can be made at [valpo.mywconline.com](http://valpo.mywconline.com). Graduate students should make appointments with graduate or undergraduate/graduate consultants in the Writing Center, and undergraduate students may make appointments with any consultant. Undergraduate and graduate students may also drop in since walk-in appointments are also sometimes available. For additional contact information and resources, visit [valpo.edu/writingcenter](http://valpo.edu/writingcenter).

During fall and spring semesters, consultants are available Monday through Thursday, 9:30 a.m. to 8 p.m. and Friday 10:30 a.m. to 4 p.m. Limited weekend hours are also available. Summer hours vary; the online schedule has a full list of available hours. The Writing Center is located on the first floor of the Christopher Center, near the IT Help Desk and Grinders. Online consultations are also available at varying times.

## International Student Support

Writing consultants work closely with international students, including graduate students. Consultants enjoy working with students from programs across campus, and many have experience working with second language writers.

# **College of Arts and Sciences**

Visit the [College of Arts and Sciences](#) online.

**Dean Jon T. Kilpinen, Ph.D.  
Assistant Dean Adrian Lee, M.A.  
Interim Assistant Dean Elizabeth A. Douglas, J.D.**

The College of Arts and Sciences, the largest college of the University, consists of 22 departments, provides the majority of the General Education courses as well as majors in the liberal arts, the sciences, and in several professional areas.

Each degree in the College consists essentially of three parts:

1. The General Education component
2. The major field or interdisciplinary program
3. Elective courses, often including a minor or minors

## **General Education**

An overview of the General Education Program is presented on page 10 with variations specified in the detailed presentation of degree requirements below.

## **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 of Arts Degree (61 Cr.)

<b>A. General Education Requirements</b>	<b>37-38 Cr.</b>
1. <b>CORE 110</b> The Human Experience	4 Cr.
2. <b>CORE 115</b> The Human Experience	4 Cr.
3. <b>THEO 200</b> The Christian Tradition	3 Cr.
<b>4. Cultural Diversity</b>	<b>11 Cr.</b>
World Language (one language)	8 Cr.
Cultural Diversity course	3 Cr.
<b>5. Humanities</b>	<b>6 Cr.</b>
Two of the following options:	
Fine and Performing Arts	3 Cr.
A literature course numbered 200 from English, World Languages, or Theatre	3 Cr.
A History course	3 Cr.
A Philosophy course (except 145/245)	3 Cr.
<b>6. Social Sciences</b> (from two different subject areas)	<b>6 Cr.</b>
<b>7. Natural Science</b> (with lab)	<b>3-4 Cr.</b>
<b>B. Concentrations</b>	<b>21 Cr.</b>
Beyond completing the general education requirements, students elect one of the following concentrations. Coursework used to meet general education requirements for the A.A. degree may not be used to meet concentration requirements.	
<b>1. Culture and Humanity</b>	
21 credit hours drawn from at least two of the following subjects: English (ENGL), History (HIST), Philosophy (PHIL), Theology (THEO), or Greek and Roman Studies (GKRO)	
<b>2. Social and Behavioral Science</b>	
21 credit hours from at least two of the following subjects: Economics (ECON), Political Science and International Relations (POLS), Psychology (PSY), Sociology and Criminology (SOC), and approved courses in Geography (GEO 101, 102, 200, 210, 274, 301, and approved 490)	
<b>3. Communication and Expressive Arts</b>	
21 credit hours from at least two of the following subjects: Art (ART), World Languages and Cultures (WLC), Communication (COMM), Music (MUS), and Theatre (THTR)	
From these concentrations, a student may construct the equivalent of an academic minor or, with additional coursework, an academic major that may be applied toward the requirements for the B.A. degree.	

**Associate of Science Degree (60 Cr.)****A. General Education Requirements**

<b>1. First Year Core</b>	<b>8 Cr.</b>
CORE 110 The Human Experience	4 Cr.
CORE 115 The Human Experience	4 Cr.
<b>2. Social Science</b>	<b>3 Cr.</b>
<b>3. Health and Wellness</b>	<b>1 Cr.</b>

**One of the following options:**

KIN 100 Healthy Lifestyles	1 Cr.
KIN 101 Wellness and Stress	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 advisor.

**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. THEO 200
2. The student must earn a cumulative grade point average of 2.000 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 51.

**Bachelor of Arts Degree (124 Cr.)**

<b>A. General Education Requirements</b>	
<b>1. First Year Core</b>	<b>8 Cr.</b>
CORE 110 The Human Experience	4 Cr.
CORE 115 The Human Experience	4 Cr.
<b>2. Theology</b>	<b>6 Cr.</b>
THEO 200 The Christian Tradition	3 Cr.
One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
At least one course identified as a Writing Intensive Course (WIC). This course may also be counted as partial fulfilment of another general education requirement. Sophomore standing recommended.	
<b>4. Cultural Diversity</b>	<b>11 Cr.</b>
a. <b>World Language</b>	8 Cr.
Course number 102 in a world language in which the student has no more than one year of high school credit, or course number 203 in any world language. A student who has completed a second year language course in high school will not be granted credit toward degree requirements for level 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 world language requirement provided that they have successfully completed ENGL 101, ENGL 102, ENGL 103, or ENGL 200, Literary Studies.	
b. <b>Cultural Diversity course</b>	3 Cr.
1) Three credits of a diversity course(s) from a specified list of approved courses. <b>This course cannot be applied simultaneously towards fulfillment of any other General Education requirement with the exception of the Writing Intensive Course requirement.</b>	
2) A semester abroad in one of the International Study Programs, or the Washington Semester Program.	
<b>5. Humanities</b>	<b>6 Cr.</b>
Two of the following options:	
a. Fine and Performing Arts	3 Cr.
A designated historical/critical or creative/performance course in Communication and Visual Arts, English, World Languages and Cultures, Music, Philosophy, or Theatre	
b. A History course	3 Cr.
c. A literature course numbered 200 or above from English, World Languages and Cultures, or Theatre	3 Cr.
d. A Philosophy course (except PHIL 145 or PHIL 345)	3 Cr.
<b>6. Social Sciences</b>	<b>6 Cr.</b>
Two three-credit courses from two different subject areas in the social sciences: Economics, Gender Studies, Geography courses listed specifically as Social Science courses, Political Science and International Relations, and Sociology and Criminology	
<b>7. Natural Sciences</b>	<b>6-8 Cr.</b>
Two courses of at least three credits each, for a total of at least six credits; each course must have a laboratory component and be selected from two of the following subject areas: Astronomy, Biology, Chemistry, Geography, Meteorology, Natural Science (NS), Physics, and Psychology.	
<b>8. Quantitative Analysis</b>	<b>3 Cr.</b>
One designated Quantitative Analysis course of at least three credits	
This requirement can be fulfilled by approved courses in either the major or minor field, <b>but a course cannot be applied simultaneously towards fulfillment of this requirement and any other General Education requirement with the exception of the Writing Intensive Course requirement.</b>	
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
One of the following options:	
KIN 100 Healthy Lifestyles	1 Cr.
KIN 101 Wellness and Stress	1 Cr.
<b>B. Major Field Requirements</b>	
Students may fulfill the major field requirements of the Bachelor of Arts degree by completing either a Departmental Major or an Individualized Major and by meeting one of the completion requirements listed below, or by completing an Interdisciplinary Program (see page 45).	

## **Departmental Major**

In order to fulfill requirements under the Departmental Major, students must complete the required credits for the academic major, but may not exceed 60 credits in any one subject. For a list of the academic fields of study, see page 11.

## **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 at [valpo.edu/registrar/forms](http://valpo.edu/registrar/forms). 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. At least 18 of the 30 credits in the individualized major must be taken beyond the introductory level.
3. The proposed major must be accompanied by a minor within a discipline listed in the **GENERAL CATALOG**.
4. None of the courses chosen may be courses used to meet the General Education requirements.
5. Courses taken for this major may not be counted for credit towards a minor or second major.
6. The proposed major must be supported and supervised by one of the deans in the College of Arts and Sciences or an academic advisor.
7. A comprehensive rationale statement by the student justifying the major must accompany the *Individualized Program* form. This form must list the specific courses to be taken and be approved by the faculty supervisor before it is approved in the Dean's Office. Any revisions must also be approved by the Dean of the College.
8. The proposed major must be submitted online for approval, preferably by the beginning of the junior year, but no later than November 1 for December degree candidates and April 1 for May or August degree candidates.

The selection of courses for an individualized major should reflect serious deliberation on the part of the student and advisor.

An 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 only. An individualized major may not be used to meet the requirements for the Bachelor of Science degree. Students may not pursue Honors Work as part of an individualized 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.** This restriction refers to courses within the major or minor field, not to additional courses required from outside of the major or minor field.
2. An **approved individualized minor**. 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 at [valpo.edu/registrar/forms](http://valpo.edu/registrar/forms). **A student may not graduate with both an individualized major and an individualized minor as the method of fulfilling major area graduation requirements.**
3. A **second academic major**. A second major may be chosen from Departmental Major options or an interdisciplinary program. An approved individualized major may also be presented in fulfillment of requirements of a second major, unless the first major is also an individualized major. Only one individualized major or minor may be applied to the major field requirement.
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 sixty credit hours from one subject area may be applied toward the 124 required for graduation.** Students may not complete an individualized major of forty credits or more to satisfy the major field requirement. The limitation does not apply to students pursuing the Bachelor of Music or Bachelor of Music Education degrees.
6. An **interdisciplinary minor**, see listing below.

## Interdisciplinary Programs

The College of Arts and Sciences offers several interdisciplinary programs of study that 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 Actuarial Science, Chinese and Japanese Studies, Data Science, Environmental Science, International Economics and Cultural Affairs, Global Service, and a complementary major in Theology and Ministry.

In addition, minors in interdisciplinary programs in American Studies, Applied Statistics, Business Administration, Business Analytics, Cinema and Media Studies, Environmental Studies, Ethnic Studies, Forensic Science, Fundamentals of Business, Gender Studies, Human Aging, Latin American/Latino Studies, Philanthropic Leadership and Service, and Urban Studies may be added to departmental majors.

## Bachelor of Music Degree (128-132 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 2.000.

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 Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
a. <b>THEO 200</b> The Christian Tradition	3 Cr.
b. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>11 Cr.</b>
a. <b>World Language</b>	8 Cr.
b. <b>Cultural Diversity Course</b>	3 Cr.
<b>5. Humanities</b>	<b>6 Cr.</b>
Two courses, one each from two different areas:	
a. Fine and Performing Arts	3 Cr.
b. History	3 Cr.
c. Literature	3 Cr.
d. Philosophy	3 Cr.
<b>6. Social Sciences</b>	<b>3 Cr.</b>
<b>7. Natural Sciences</b>	<b>3-4 Cr.</b>
<b>8. Quantitative Analysis</b>	<b>3-4 Cr.</b>
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
<b>One of the following options:</b>	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

### B. Music Requirements

The requirements for the major fields are given beginning on page 165.

**Bachelor of Music Education Degree (132-136 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. They must have a grade point average of 2.500. 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.

**A. General Education Requirements**

For details, see Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
a. <b>THEO 200</b> The Christian Tradition	3 Cr.
b. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>3 Cr.</b>
a. <b>ED 470</b> Diversity, Equity, and Education	3 Cr.
<b>5. Humanities</b>	<b>3 Cr.</b>
One of the following options:	
a. History	3 Cr.
b. Literature	3 Cr.
c. Philosophy	3 Cr.
<b>6. Social Sciences</b>	<b>3 Cr.</b>
a. <b>ED 206</b> School and Society	3 Cr.
<b>7. Natural Sciences</b>	<b>3-4 Cr.</b>
<b>8. Quantitative Analysis</b>	<b>3-4 Cr.</b>
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
One of the following options:	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

**B. Other Required Course**

<b>1. PSY 110</b> General Psychology	<b>3 Cr.</b>
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**C. Professional Education Requirements**

<b>1. ED 210</b> Communication for Engagement, Instruction, and Classroom Management	<b>3 Cr.</b>
<b>2. ED 215</b> Technology in the Classroom	<b>1 Cr.</b>
<b>3. ED 220</b> Educational Psychology	<b>3+0, 3 Cr.</b>
<b>4. ED 357</b> Designing Curriculum, Assessment, and Learning Plans	<b>3 Cr.</b>
<b>5. ED 360</b> Literacies Across the Content Areas	<b>3 Cr.</b>
<b>6. ED 445</b> Seminar: Efficacy in Professional Practice	<b>3 Cr.</b>
<b>7. ED 459</b> Supervised Teaching in Middle or Secondary School	<b>12 Cr.</b>
<b>8. ED 467</b> English Language Learning Methods	<b>3 Cr.</b>
<b>9. MUS 489</b> School Music II	<b>3 Cr.</b>
<b>10. SPED 440</b> Differentiated Instructional Practices	<b>3 Cr.</b>

**D. Music Requirements**

The requirements of the major field are given on page 167.

**Bachelor of Music Therapy Degree (132 Cr.)****A. General Education Requirements**

For details, see Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
a. <b>THEO 200</b> The Christian Tradition	3 Cr.
b. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>3 Cr.</b>
a. <b>SOC 275</b> Systems of Social Stratification	3 Cr.
<b>5. Humanities</b>	<b>3 Cr.</b>
One course from the following areas:	
a. History	3 Cr.
b. Literature	3 Cr.
c. Philosophy	3 Cr.
<b>6. Social Sciences</b>	<b>3 Cr.</b>
a. <b>SOCW 260</b> Diverse Populations: Human Rights and Justice	3 Cr.
<b>7. Natural Sciences</b>	<b>4 Cr.</b>
a. <b>PSY 110</b> General Psychology	3 Cr.
b. <b>PSY 111</b> Laboratory in General Experimental Psychology	1 Cr.
<b>8. Quantitative Analysis</b>	<b>3-4 Cr.</b>
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
<b>One of the following options:</b>	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.
<b>B. Other Required Courses</b>	<b>6 Cr.</b>
1. <b>PSY 215</b> Lifespan Development	3 Cr.
2. <b>PSY 235</b> Abnormal Psychology	3 Cr.
<b>C. Music Therapy Requirements</b>	

The requirements for the major fields are given beginning on page 168.

**Bachelor of Science Degree (124 Cr.)****A. General Education Requirements**

For details, see Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
a. <b>THEO 200</b> The Christian Tradition	3 Cr.
b. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>3-4 Cr.</b>
One of the following options:	
a. World Language 203 or higher	4 Cr.
b. Cultural Diversity course	3 Cr.
<b>5. Humanities</b>	<b>6 Cr.</b>
Two courses, one each from two different areas:	
a. Fine and Performing Arts	3 Cr.
b. History	3 Cr.
c. Literature	3 Cr.
d. Philosophy	3 Cr.
<b>6. Social Sciences</b>	<b>6 Cr.</b>
<b>7. Natural Sciences</b>	<b>6-8 Cr.</b>
<b>8. Quantitative Analysis</b> (MATH 124 or 131) <i>Note: some majors require MATH 131</i>	<b>4 Cr.</b>
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
One of the following options:	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

**B. Major Field Requirements**

A student must complete one disciplinary science major (actuarial science, astronomy, biology, chemistry, computer science, data science, exercise science, geography, mathematics, meteorology, physics, psychology, statistics) and:

1. A science minor, **OR**
2. A neuroscience minor, **OR**
3. A non-science disciplinary or interdisciplinary major, **OR**
4. The Fundamentals of Business Minor (page 350), **OR**
5. The Business Administration Minor (page 349), **OR**
6. The Business Analytics Minor (page 350), **OR**
7. The Applied Statistics Minor (page 351), **OR**
8. An Engineering Minor (page 290), **OR**
9. The Geographic Information Systems Minor (page 129), **OR**
10. The 32-credit Environmental Science Complementary Major (page 123)

**OR** two minimum disciplinary science majors (actuarial science, astronomy, biology, chemistry, computer science, data science, engineering, geography, mathematics, meteorology, physics, psychology, statistics);

**OR** the 52-credit Environmental Science Major

**OR** the 28-credit Exercise Science Major, plus either the Chemistry or Human Biology Minor (see page 146)

**OR** complete at least 40 credit hours in the first major.

**No more than 60 credit hours from a single subject area may be applied toward the 124 credit hours required for graduation.**

**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.

**A. General Education Requirements**

For details, see Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
a. <b>THEO 200</b> The Christian Tradition	3 Cr.
b. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>3 Cr.</b>
a. <b>ED 470</b> Diversity, Equity, and Education	3 Cr.
<b>5. Humanities</b>	<b>3 Cr.</b>
a. <b>ENGL 200</b> Literary Studies	3 Cr.
b. One of the following options:	
1) <b>HIST 120</b> The American Experience to 1877 <b>OR</b>	3 Cr.
2) <b>HIST 121</b> The American Experience in the Modern World	3 Cr.
<b>6. Social Sciences</b>	<b>3 Cr.</b>
a. <b>ED 206</b> School and Society	3 Cr.
<b>7. Natural Sciences</b>	<b>6-8 Cr.</b>
a. Two courses from the list of Natural Science courses on page 442	
<b>8. Quantitative Analysis</b>	<b>3 Cr.</b>
a. <b>MATH 214</b> Mathematics for Elementary Teachers II	3 Cr.
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
One of the following options:	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

**B. Education Requirements**

The requirements for the elementary and secondary education majors are listed beginning on page 100.

**Bachelor of Science in Physical Education Degree (124 Cr.)****A. General Education Requirements**

For details, see Bachelor of Arts degree.

<b>1. First Year Core</b>	<b>8 Cr.</b>
<b>2. Theology</b>	<b>6 Cr.</b>
c. <b>THEO 200</b> The Christian Tradition	3 Cr.
d. One 300-level Theology course	3 Cr.
<b>3. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>4. Cultural Diversity</b>	<b>3-4 Cr.</b>
One of the following options:	
a. World Language 203 or higher	4 Cr.
b. Cultural Diversity course	3 Cr.
<b>5. Humanities</b>	<b>3 Cr.</b>
One of the following options:	
a. Fine and Performing Arts	3 Cr.
b. History	3 Cr.
c. Literature	3 Cr.
d. Philosophy	3 Cr.
<b>6. Social Sciences</b>	<b>6 Cr.</b>
<b>7. Natural Sciences</b>	<b>6-8 Cr.</b>
<b>8. Quantitative Analysis</b>	<b>3 Cr.</b>
<b>PSY 201</b> or <b>MATH 124</b> (or higher)	
<b>9. Health and Wellness</b>	<b>1 Cr.</b>
<b>One of the following options:</b>	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

**B. Major Field Requirements**

The first major, if the student has a double major, must be physical education. See page 146 for specific major requirements.

## Bachelor of Social Work Degree (124 Cr.)

### A. General Education Requirements

For details, see Bachelor of Arts degree.

<b>A. First Year Core</b>	<b>8 Cr.</b>
<b>B. Theology</b>	<b>6 Cr.</b>
e. <b>THEO 200</b> The Christian Tradition	3 Cr.
f. One 300-level Theology course	3 Cr.
<b>C. Writing Intensive Course</b>	<b>3 Cr.</b>
<b>D. Cultural Diversity</b>	<b>11 Cr.</b>
a. World Language	8 Cr.
b. Cultural Diversity course	3 Cr.
<b>E. Humanities</b>	<b>6 Cr.</b>
Two courses, one each from two different areas:	
a. Fine and Performing Arts	3 Cr.
b. History	3 Cr.
c. Literature	3 Cr.
d. Philosophy	3 Cr.
<b>F. Social Sciences</b>	<b>6 Cr.</b>
<b>G. Natural Sciences</b>	<b>6-8 Cr.</b>
<b>H. Quantitative Analysis</b>	<b>3-4 Cr.</b>
<b>I. Health and Wellness</b>	<b>1 Cr.</b>
<b>One of the following options:</b>	
a. <b>KIN 100</b> Healthy Lifestyles	1 Cr.
b. <b>KIN 101</b> Wellness and Stress	1 Cr.

### B. Major Field Requirements

The first major, if the student has a double major, must be social work. See page 219 for specific major requirements.

## Special Academic Regulations for the College of Arts and Sciences

### Regulations Concerning General Education Requirements

1. **No course may be used to meet more than one General Education Requirement, with the exception of the writing intensive course requirement.**
2. Only courses of at least three credits may be used in meeting General Education Requirements, excluding the requirement in Kinesiology.
3. Courses taken to fulfill major requirements (departmental majors or interdisciplinary majors) 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 Kinesiology 100 or Activity Courses** toward a degree in the College of Arts and Sciences.
2. Non-music majors are **limited to 16 total credit hours of applied music (studio instruction and/or ensemble)**. For further clarification, see page 175.
3. **No more than 60 credit hours in any one subject** may be applied toward the total of 124 credit hours required for graduation, each subject being identified by the 2-4 letter code preceding each course number in the catalog (e.g., COMM, MUS, KIN, THTR). This limitation does not apply to students pursuing:
  - a. the Bachelor of Music degree
  - b. the Bachelor of Music Education degree
4. A student may apply **no more than 16 credit hours of ROTC coursework** toward a degree in the College of Arts and Sciences. These credits may be used as free electives only.
5. A student may apply **no more than 30 credit hours collectively from the professional colleges** of the University toward a degree in the College of Arts and Sciences. Furthermore, no more than 15 of these credits may be included within an Individualized Major. In that case, any remaining professional college credits, up to the maximum of 30, may only be counted towards electives and general education requirements.
6. A student may opt not to include grades and credits from professional colleges of the University when applying for admission to the College of Arts & Sciences.

## 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, beginning on page 40. 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 Diaconal Education and Formation Process, the pre-legal program, and the pre-medical 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 page 42 for the degree requirements for the Associate in Science degree. Students should contact a pre-medical 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.

The University currently prepares applicants for licensure in the following licensure categories listed under types of school and developmental settings.

### **License: Elementary Teaching**

Elementary: Grades K-6

Additional content areas in any subject areas listed under Secondary Teaching

### **License: Secondary Teaching**

Grades 5-12 Content Areas:

English/Language Arts

World Languages-Chinese, French, German, Latin, Spanish

Mathematics

Science-Life Sciences, Physical Sciences, Chemistry, Physics, Earth/Space Sciences

Social Studies

History

### **P-12 License**

Art Education

Exceptional Needs- Mild Intervention

Health Education

Music Education

Physical Education

World Languages-Chinese, French, German, Latin, Spanish

## 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 pre-medical arts programs of the college. Students in these programs must have their schedules approved at the beginning of each semester by a major advisor. All recommendations to the professional schools are sent out by this Committee: Professors Nelson (Psychology), Scaglione-Sewell (Biology), L. Eberhardt (Biology); Associate Professors Goyne (Chemistry), K. Jantzi (Chemistry), and R. Clark (Chemistry).

Students are invited to join the Alliance of Healthcare Professionals, an organization that promotes interest in medical and healthcare fields through a program of guest lectures and social events. Students intending to earn a D.O or M.D. degree and who have outstanding academic records may be invited to join Alpha Epsilon Delta, a national medical honorary society.

In some fields such as medicine, dentistry, veterinary medicine, optometry, and pharmacy, 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 and pharmacy.

Students who want to enter **allied health fields** that require two years or less of college preparation may want to earn the Associate in Science Degree described on page 42.

The course, GS 394, Health Care Professional Apprenticeship (see page 59), is offered in the Summer I Session (see page 370) and is of interest to students in pre-medical arts. 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 complete 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**

Students who plan to attend law school after graduation should select any rigorous course of study for their majors. According to the American Bar Association, "The ABA does not recommend any undergraduate majors or group of courses to prepare for a legal education. Students are admitted to law school from almost every academic discipline. Taking a broad range of difficult courses from demanding instructors is excellent preparation for legal education." Based on these ABA recommendations, Valparaiso University does not require Pre-Law students to follow a specific curriculum. Instead, students are encouraged to select a major that will be both challenging and interesting and that will help them develop strong research and writing skills. Additionally, students may choose from an array of elective courses on legal topics offered by several of the College of Arts and Sciences departments, including Communication, Political Science and International Relations, and Sociology and Criminology. The College of Business also offers courses in business law.

Pre-Law students at Valparaiso University are encouraged to be active in the Pre-Law Society, seek guidance on law school admissions, and participate in several programs, including the Career Fair, Mock Trial Team, and legal career panels.

The combination of rigorous academic work has prepared many of the University's graduates for placement in some of the finest and most prestigious law schools in the country. For more information, contact the program coordinator at James.Old@valpo.edu.

## **Preparation for Seminary**

Graduates of Valparaiso University are accepted into the seminaries not only of The Lutheran Church—Missouri Synod (LCMS) and the Evangelical Lutheran Church in America (ELCA), but also of other Protestant bodies, and into graduate divinity schools throughout the United States. (Students are encouraged to consult the web sites of divinity schools or graduate programs in theology or religion for specific admission requirements.)

## **Recommended Preparation for Admission to M.Div. Program at LCMS Seminaries**

The LCMS seminaries in St. Louis, Missouri, and Fort Wayne, Indiana, recommend a bachelor's degree that includes a broad liberal arts curriculum and preferably the ability to read languages (especially German, Latin, Greek, and Hebrew). Language skills can be acquired through courses provided at the seminary as well. Students accepted into the M.Div. program must pass the Entry Level Competency Examinations (Old Testament content, New Testament content, Christian doctrine, Biblical Greek, and Biblical Hebrew) before they can enroll in M.Div. courses. Valparaiso University offers courses in all of these areas of study through the departments of Theology and World Languages and Cultures. Finally, both seminaries expect applicants to have taken courses to improve written and spoken English: English composition and writing, and speech (both writing and delivering).

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## For Students Preparing for Admission to the Seminaries of the ELCA

The eight seminaries of the ELCA offer a variety of post-baccalaureate degree programs, including the M.Div., which is the basic professional degree for those seeking ordination as pastors, and the M.A., which may be used to prepare for other ministries in and beyond the church (diaconal ministers, Associates in Ministry, and education).

While specific requirements for admission vary, the following captures the typical academic prerequisites:

1. a bachelor's degree from an accredited college or university (some seminaries specify the B.A. degree; others do not) with a cumulative GPA of 2.500-3.000 on a 4.000 scale
2. a broad background in the liberal arts (English composition and literature, history, philosophy, psychology, the biological/natural and social sciences, and world languages)
3. some seminaries require up to two semesters of classical or koine Greek (which may often be met by means of a summer intensive language course)

Beyond these academic requirements, another part of the application for admission to the ELCA seminaries addresses personal qualifications. Those interested in pursuing a rostered ministry in the ELCA should also begin to forge a relationship with their synod candidacy committee as they begin the application process.

Further information is available from the chair of the Department of Theology and on the department's web site: [valpo.edu/theology](http://valpo.edu/theology).

## Arts and Sciences Pre-Engineering Program

Applicants for admission to the College of Engineering may require additional work, usually in mathematics or the sciences, before admission is granted. Such students may be admitted to the pre-engineering program in the College of Arts and Sciences for this preparation if they are registered for, or have completed a college-level pre-calculus course. While in the program, pre-engineering students may take engineering courses if they satisfy the prerequisites and corequisites. Students in this program are expected to make progress toward admission into the College of Engineering in a timely manner. In order to enter the College of Engineering, pre-engineering students must have a cumulative resident grade point average of 2.000 or higher in each of the three categories listed in the College of Engineering Graduation Requirements section (page 294). Pre-engineering students who have not matriculated into the College of Engineering within three semesters will be removed from the program and will need to select another major within the College of Arts and Sciences, the College of Business, or the College of Nursing and Health Professions. Students should contact the College of Engineering Assistant Dean for Student Success for details.

## Diaconal Education and Formation Process

The University and the Lutheran Deaconess Association (LDA) cooperate in the education and formation of men and women for service in diaconal ministry. In response to a changing world, the LDA offers a process that allows students to express their Christian vocation through church, civic, or human service professions. Plans may be individualized, combining diaconal students with many academic majors, to earn a graduate or undergraduate degree.

The education and formation process is under the counsel and guidance of the staff of the Lutheran Deaconess Association. Inquiries should be directed to the Director of Education and Formation, Center for Diaconal Ministry, 1304 LaPorte Avenue, Valparaiso, Indiana 46383-9978. Phone 219.464.6925. Email: deacserv@valpo.edu. Contact the Director of Education and Formation for application forms and fee schedule. Students may apply during their sophomore year, but must be at least 20 years old or have junior standing. Week-long orientation and annual seminars are required during each year of the process.

Diakonal students work with the LDA staff and academic advisors to determine a program of academic study, planned experiences, and reflection in these areas:

### **1. Spirituality**

Focus on personal and spiritual growth, which may include spiritual direction, discernment retreats, counseling, journal reflection, prayer, and worship.

### **2. Theology**

Academic courses cover these topics.

Exceptions can be made with agreement between LDA and the student's academic advisor.

- a. Biblical Studies, both Old and New Testament, or overview of the Bible
- b. Church History, from the apostolic era through Reformation to present
- c. Lutheran/Christian Theology
- d. World Religions or in-depth study of a non-Christian tradition
- e. Theology of Diaconal Ministry (THEO 451/551)
- f. Basic Homily Preparation, proclamation of the gospel
- g. Practicum in Ministry (THEO 480/680. May be taken twice, to fulfill work/ministry requirement; see below
- h. Clinical Education for Ministry (THEO 453/553). May be taken to fulfill work/ministry requirement; see below

Other courses may be suggested, depending on the student's ministry focus, such as: understanding of self, others, and group dynamics; Christian worship; religious education; understanding issues of human need; and social justice.

### **3. Work/Ministry**

**Fieldwork** at a practical ministry site; 100 hours over two semesters. May be taken for credit at Valparaiso University (THEO 480/680, two credits per semester), or may be completed without academic credit.

**Clinical Pastoral Education** may be taken for credit at Valparaiso University (THEO 453/553, Clinical Education for Ministry), or may be completed through a certified CPE program off-campus.

**Internship** in a ministry or human services profession, one-year, full-time paid position. May be done between the junior and senior year or after graduation.

### **4. Diaconal Community**

Participation in the deaconess community, including campus activities, area deaconess groups, and annual conferences.

Deaconess ministries have been combined with, but are not limited to, these academic majors and programs: Theology; Nursing; Church Music, liturgy, worship; Education; Psychology; Social Work; pre-medical, medical fields, occupational therapy/physical therapy; world languages and classical languages; International Service; Business.

## 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 requirement of the College of Arts and Sciences. This requires them to earn at least 157 credit hours and to have a standing of at least 2.000 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. Students may not pursue Honors Work as part of an individualized major.

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 3.000 and a grade point average in the major of at least 3.500 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 that 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 on the College of Arts and Sciences [website](#). (For more information, please attend the Beyond Valpo 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 first 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 should enroll in a course numbered 497 Honors Work in (the major department or program) in the first semester of the senior year.

A student who has been admitted to Honors Work **must present completed draft of the project to the chair of the major department (or program) at least ten class days 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 should register during the second semester of the senior year for a 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. **The completed project report must be delivered to the chair of the major department or program at least fifteen class days 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 matter 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 Dean's Office, 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. The official, archival copy of an honors project is stored in ValpoScholar.

**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 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 2.500. 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.

## General Courses Offered by the College of Arts and Sciences

<b>CORE 110</b>	<b>The Human Experience</b>	4 Cr.
	A writing-intensive interdisciplinary course that initiates first year students into the Valparaiso University 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, 4 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. Prerequisite: Appropriate IELTS/TOEFL/SAT/ACT score.	
<b>CORE 115</b>	<b>The Human Experience</b>	4 Cr.
	A writing-intensive interdisciplinary course that initiates first year students into the Valparaiso University 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, 4 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. Prerequisite: CORE 110 or CC 110.	
<b>CPED 381</b>	<b>Cooperative Education I</b>	0.5-3 Cr.
	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 2.500, and the approval of the coordinator of cooperative education.	
<b>CPED 382</b>	<b>Cooperative Education II</b>	0.5-3 Cr.
	The prerequisites for additional cooperative education experiences are the same as for CPED 381, plus positive work performance evaluations by the previous cooperative employer(s).	
<b>CPED 383</b>	<b>Cooperative Education III</b>	0.5-3 Cr.
	The prerequisites for additional cooperative education experiences are the same as for CPED 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 above.	

<b>GS 100</b>	<b>Strategies for Academic Success</b>	1 Cr.
	A seminar designed to offer skill development and student success strategies that will enhance and promote academic achievement. Course topics include effective use of study time and learning strategies (active reading, note taking, organizing, memory techniques), test preparation (study plans), test-taking techniques, time management, overcoming procrastination, goal setting, motivation, decision making, developing a strength-based mindset, and using academic support resources on campus. The course meets over a 14-week or 7-week period, depending on the section.	
<b>GS 105</b>	<b>Transitioning to Valpo for International Students</b>	1 Cr.
	A seminar designed to offer success strategies and skill development (especially in writing and speaking English) for international students new to living and studying in the U.S. Readings, writings, discussions, and activities in the course will provide support for students' successful integration into campus culture while maintaining cultural identity. Course topics include transitioning to the U.S. academic, social, and political culture, thinking independently and creatively, learning about academic honesty, meeting academic challenges, understanding University policies and procedures, using campus resources, getting involved in campus activities, participating in class, and interacting with professors. A 7-week course offered in both fall and spring semesters.	
<b>GS 106</b>	<b>English Conversation Partners</b>	1 Cr.
	This full-term course is designed for international students who will engage in cross-cultural conversations in groups of two or three with domestic/native English speaking students enrolled in GS 180. Students will gain experience in language skills, speech behaviors, cultural knowledge, and socialization. Requirements include a minimum number of conversation hours as well as a written reflection. Permission of the instructor is required. S/U grade. May be repeated for up to 2 total credits. International Students only.	
<b>GS 150</b>	<b>Exploratory Studies</b>	2 Cr.
	This course will focus on three areas: an analysis of students' personal strengths, interests, beliefs, and values; a concentrated exploration of academic majors; and an introduction to career exploration and preparedness. Study and discussion of texts and films along with informal and formal writing will help students as they are guided to discern possible academic, career, and vocational pathways. This course will be required of all exploratory students in the first semester of their freshman year; any student may elect to take the course.	
<b>GS 180</b>	<b>Civic Engagement</b>	1-2 Cr.
	This course recognizes student volunteer service work for the community. Students earn the credit by completing a specific project, which may be initiated as part of a particular course, through a recognized University service organization, or independently. If students undertake the project through a service organization or independently, a professor must certify the project as appropriate, supervise its completion, and assign the grade. Students must file a proposal with the supervising professor and register for the credit. The proposal must present a detailed overview of the work of the project, which must entail a substantial time commitment (a minimum of 45 hours of work is required for each credit), and identify a written reflection component specifically related to the project. Students may not earn additional GS credit for work already required by the service-learning component of a course. Internship students may earn GS credit through an additional project, with the consent of the instructor. S/U grade. This course may be repeated for up to 3 total credits.	
<b>GS 200</b>	<b>Study Circle on Race Relations</b>	2 Cr.
	This course will offer 8-20 students the opportunity to engage in a series of participatory, democratic discussions about race relations on campus and in society. In addition, students will learn how to become involved in improving human relations by developing and implementing an 'action plan' component that involves collaborative, practical strategies that improve race and ethnic relations on campus and in our community. The instructor(s) for the course will serve as facilitator(s), establishing ground rules for a safe, focused discussion in which participants can exchange ideas freely and consider a variety of views about race relations in America. This course is offered for S/U grade only and may be used in partial fulfillment of the Cultural Diversity component of the General Education Requirements.	
<b>GS 201</b>	<b>Facilitator Training for Study Circles</b>	1 Cr.
	This course will be offered to students who have completed GS 200 and who want to become facilitators for Study Circles on Race Relations. By taking this course, students will understand what a study circle is, learn about specific study circle programs, understand the role of a facilitator, and practice the basic skills needed to be an effective study circle leader. There will be weekly readings and reflection papers as well as an end of the term report. This course is offered for S/U grade only and may be used in partial fulfillment of the Cultural Diversity component of the General Education Requirements. Prerequisite: GS 200.	

<b>GS 202</b>	<b>Study Circles on Race Relations: Civic Engagement</b>	1 Cr.
	This course will be offered to students who have completed GS 200 and who want to continue to work on community race relations issues initiated in GS 200. Students earn the credit by expanding the scope of the GS 200 action plan. Students must file a proposal with one of the co-directors of the Study Circles program and identify a written reflection component specifically related to the project, in order to register for the course. The proposal must present a detailed overview of the work of the project. A minimum of 20 hours of work is required. This course is offered for S/U grade only and may be used in partial fulfillment of the Cultural Diversity course component of the General Education Requirements. Prerequisite: GS 200.	
<b>GS 220</b>	<b>Contemporary Issues in Philanthropy and Service</b>	3 Cr.
	This course examines current trends and challenges in the fields of philanthropy, service, and non-profit leadership. Topics may include the rise in social enterprises, venture philanthropy, micro-lending, and the influence of technology on giving patterns. The course will also emphasize the shifting roles and relationships of the private, public, and non-profit sectors in meeting social needs and leading social change. Prerequisite: Core 115, CC 115, or permission of the instructor.	
<b>GS 386</b>	<b>Internship</b>	1-6 Cr.
	Students may arrange, in consultation with a dean in the College of Arts and Sciences, for an experiential-learning work opportunity in a supervised internship. Midterm progress report and final report required. Proposals for General Studies internships must be approved by the dean of the college. Limited to internship credit that does not meet the requirements for internship credit in a disciplinary curriculum. S/U Grade only.	
<b>GS 390</b>	<b>General Topics</b>	1-3 Cr.
	A course on a specialized topic that may not fit conveniently within a particular department, or that may be interdisciplinary in nature. May be repeated for credit provided topics are different.	
<b>GS 390</b>	<b>Topics in English Life and Culture</b>	3 Cr.
	A study of selected aspects of English life and culture. Topics might include, but are not restricted to politics, education, religion, business, environment, and multicultural issues. Cambridge Center only. May be repeated for credit provided topics are different.	
<b>GS 390</b>	<b>Topics in German Life and Culture</b>	3 Cr.
	A study of selected aspects of German life and culture. Topics might include, but are not restricted to politics, education, religion, business, environment, and multicultural issues. Reutlingen Center only. May be repeated for credit provided topics are different.	
<b>GS 394</b>	<b>Health Care Professional Apprenticeship</b>	1 Cr.
	The course is designed to provide an opportunity for students to observe health care professionals at work in a hospital or clinic setting. The student is required to spend at least 120 hours shadowing one or more health care professionals. Students must submit a daily journal and paper detailing their experiences to their academic advisor. S/U grade. Prerequisites: Proof of instruction in safeguarding the privacy of Protected Health Information (PHI) as specified in the Health Insurance Portability and Accountability Act (HIPAA); one year in residence; a minimum cumulative grade point average of 3.200; and approval of the academic advisor.	
<b>GS 395</b>	<b>Independent Study Project</b>	1-4 Cr.
	An independent project is conducted on a topic selected by a group or individual. Graded S/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.	
<b>GS 489</b>	<b>Professional and Career Development</b>	1 Cr.
	Encourages students to reflect upon their career goals, strengths, and challenges as they plan entry into the job market or prepare for job transition, to develop successful skills for a job search, and when appropriate, to prepare for graduate study. S/U grade only.	

**Natural Science Courses**

<b>NS 101</b>	<b>Introduction to Forensic Science</b>	2+3, 3 Cr.
	Forensic science is the application of scientific principles to criminal and civil laws within a criminal justice system with the goal toward establishment of guilt or innocence. This course is designed to introduce some of the specialized fields of forensic science, to learn the fundamental principles of science and technology upon which they are based, and to apply them to a number of suspicious situations and criminal cases. This course is intended for non-science majors for partial fulfillment of the General Education Requirements in Natural Science. Not open to students who have received credit for CHEM 111, 115, 121, or 131 or BIO 151, 152, 171, or 172 without the consent of the instructor. Prerequisite or Corequisite: Grade of C- or higher in MATH 110 or placement higher than MATH 110 on the math placement process.	
<b>NS 102</b>	<b>Science of the Indiana Dunes</b>	2+3, 3 Cr.
	This course poses questions about how earth systems work together to produce the physical landscape of the dunes and also asks scientific questions about the human transformation of that landscape. The course is problem oriented and explores questions about the interaction among ecology/biogeography, atmosphere, water, and geology. It also examines the local environment in both regional and global contexts, considering questions about how change shapes the environment, both in the past and into the future. Throughout, students learn scientific concepts and methods and gain basic scientific literacy in order to understand the landscape. This course is intended for non-science majors for partial fulfillment of the General Education Requirements in Natural Science and includes a laboratory component. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>NS 103</b>	<b>Practical Stream Stewardship: How to Save the Planet One Trout at a Time</b>	2+3, 3 Cr.
	An interdisciplinary course with laboratory designed to train students to apply the scientific method to restore a river. Through site visits and field observations, students will survey a river to discover limiting factors then plan and execute improvements. Discussions will include finding community partners, permitting and financing restorations, and learning a philosophy which guides us to attainable ends. Fieldwork is suited for someone with an active lifestyle who enjoys the outdoors. This will be a hybrid course taught in Summer II. Lectures will be online; laboratories (fieldwork) will be on Saturdays from 9 a.m. to 4 p.m.	
<b>NS 104</b>	<b>Principles of Evolution</b>	2+2, 3 Cr.
	An introduction to evolutionary principles. Topics may include mutation, selection, genetics, abiogenesis, and speciation. Responses to evolutionary theory, including social Darwinism, eugenics, and creationism, will also be discussed. This course is intended for non-science majors for partial fulfillment of the General Education requirements in Natural Science and includes a laboratory component.	
<b>NS 105</b>	<b>Discovering Insects: Pests or Pals?</b>	2+3, 3 Cr.
	This course introduces students to the biodiversity within the bizarre and alien world of insects. It uses insects as a platform to discuss important biological principles. Topics include insects as a life form, the interaction of insects and humans, and insects of medical/forensic importance. The lab focuses on basic insect identification and insect behavior experiments. This course is intended for non-science majors for partial fulfillment of the General Education Requirements in Natural Science and includes a laboratory component. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>NS 190</b>	<b>Topics in Natural Science</b>	1-3 Cr.
	A study of selected interdisciplinary topics in the natural sciences. Prerequisite: consent of the instructor. Fulfills the Natural Science General Education requirement.	
<b>NS 490</b>	<b>The Scientific Endeavor</b>	3 Cr.
	(Also offered as CHEM 490 and PHYS 490.) A study of foundational principles and assumptions of the scientific endeavor, its various methodologies, and its scope and limitations. This will include illustrations from historical case studies and "scientific revolutions." Students will also study the ethical and moral connections between their personal and professional lives. Prerequisite: junior or senior standing. This course may not be used to fulfill the requirements of a science major. This course may be used to fulfill the Humanities: Philosophy requirement of the General Education Requirements when cross-listed with CC 300.	

# Actuarial Science

Learn more about [Actuarial Science](#) at Valpo online.

**Associate Professor Patrick Sullivan (director).**

## Administration

This program is administered by the Department of Mathematics and Statistics in consultation with the Economics Department and the College of Business.

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

## Objectives

Actuarial science can be described as the study of the current financial implications of future contingent events. Actuaries, employed by insurance companies, consulting firms or government agencies, must have excellent quantitative reasoning skills in addition to an understanding of modern business and finance. The Actuarial Science program provides a background in the areas of mathematics, finance, statistics, and economics. Students interested in pursuing the Actuarial Science major or minor should confer with the program director.

## Bachelor of Science – Actuarial Science Major (Minimum 61 Cr.)

A minimum of 61 credit hours approved by the program chair is required. Specific required courses are listed below. Introductory courses fulfill the Quantitative Analysis General Education Requirement and 3 of the 6 credits required for the Social Science General Education Requirement.

Introductory Courses		21 or 23 Cr.
ACC 205	Financial Accounting	3 Cr.
ECON 221	Principles of Microeconomics	3 Cr.
ECON 222	Principles of Macroeconomics	3 Cr.
IDS 115	Business Applications for Decision-Making	3 Cr.
MATH 131	Calculus I	4 Cr.
MATH 132	Calculus II	4 Cr.
One course from the following options:		
MATH 264	Linear Algebra	3 Cr.
MATH 260	Linear Systems and Matrices	1 Cr.
Probability and Statistics		24 Cr.
One course from the following options:		
STAT 140	General Statistics	3 Cr.
STAT 240	Statistical Analysis	3 Cr.
IDS 205	Business Statistics	3 Cr.
One course from the following options:		
STAT 340	Statistics for Decision Making	3 Cr.
ECON 325	Econometrics	3 Cr.
STAT 299	Statistics Colloquium I	1 Cr.
STAT 343	Time Series Analysis	3 Cr.
STAT 344	Stochastic Processes	3 Cr.
STAT 363	Introduction to SAS	3 Cr.
STAT 399	Statistics Colloquium II	1 Cr.
STAT 441	Probability	4 Cr.
STAT 442	Mathematical Statistics	3 Cr.

## Actuarial Science

<b>Finance</b>		<b>15 Cr.</b>
<b>FIN 304</b>	Financial Management	3 Cr.
<b>FIN 410</b>	Theory of Corporate Finance	3 Cr.
<b>FIN 420</b>	Investment Management	3 Cr.
<b>ECON 338</b>	Economics of Financial Markets	3 Cr.
<b>ACRS 325</b>	Actuarial Modeling	3 Cr.
<b>Capstone Course</b>		<b>1 Cr.</b>
<b>STAT 499</b>	Statistics Colloquium III	1 Cr.

### **Actuarial Science Minor (Minimum 19 Cr.)**

On a smaller scale than the major, the minor in Actuarial Science provides a foundation for students desiring to explore a career as an actuary. Some of the courses in this minor have a prerequisite of MATH 131 and MATH 132.

<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>ACRS 325</b>	Actuarial Modeling	3 Cr.
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>FIN 304</b>	Financial Management	3 Cr.
<b>STAT 441</b>	Probability	4 Cr.

### **Actuarial Science Courses**

<b>ACRS 325/525</b>	<b>Actuarial Modeling</b>	3 Cr.
A study of actuarial models in the context of insurance. Topics include mathematics of finance (including interest theory, annuities, and loans), bonds, cash-flow, interest rate swaps, financial derivatives and options, and actuarial professional issues. Prerequisite: MATH 132.		
<b>ACRS 386</b>	<b>Internship in Actuarial Science</b>	1-3 Cr.
Opportunities for students to have direct, supervised experience in public agencies or private industry, such as insurance companies or consulting firms. S/U grade. Prerequisites: Actuarial Science major and approval of the chair of the Actuarial Science program.		
<b>ACRS 400</b>	<b>Actuarial Exam P/ Exam 1 Review</b>	1 Cr.
A review of the material covered by the SOA exam P and CAS exam 1. S/U grade. Prerequisite or corequisite: STAT 441.		
<b>ACRS 402</b>	<b>Actuarial Exam FM/ Exam 2 Review</b>	1 Cr.
A review of the material covered by the SOA exam FM and CAS exam 2. S/U grade. Prerequisite or corequisite: ACRS 325.		
<b>ACRS 495</b>	<b>Independent Study in Actuarial Science</b>	1-3 Cr.
Students study advanced topics in actuarial science under the supervision of a faculty member. Written work is required. May be repeated for credit. Prerequisite: consent of the chair of the Actuarial Science program.		

# Biology

Learn more about the [Department of Biology](#) at Valpo online.

**Professors Eberhardt (chair), Scaglione-Sewell, Swanson, Watters; Associate Professors Bouyer, Bugajski, Dick; Assistant Professors Berberoglu, Kenney-Hunt, Nakamoto, Orozco-Nunnally.**

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, evolutionary. The department offers instruction at each of these levels designed to meet the requirements for graduate study, for professional schools, and for teaching careers in biology or for working in industrial or governmental positions.

The Biology Department is housed in both the Neils Science Center and the new Center for the Sciences, teaching-research facilities with state-of-the-art equipment. Nearly all biology courses have a laboratory component and all 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 Park, 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 faculty members. Majors also have opportunities to study abroad at the University's overseas centers or at affiliated institutions as well as at recognized programs sponsored by national laboratories and other distinguished institutions.

## Pre-Medical 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, 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 Pre-Medical Arts.

## Bachelor of Arts – Biology Major (Minimum 28 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**Two courses from BIO 290 to BIO 380**

**Two courses from BIO 420 to BIO 490**

**Two credits from the following options:**

<b>BIO 493</b>	Seminar in Biology	1 Cr.
<b>AND/OR BIO 496</b>	Research in Biology	1-2 Cr.

**Additional Required Courses**

**Two semesters of general chemistry**

**Please see the description of the Bachelor of Arts requirements on page 43 for more information.**

## Bachelor of Science – Biology Major (Minimum 28 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**Two courses from BIO 290 to BIO 380**

**Two courses from BIO 420 to BIO 490**

**Two credits from the following options:**

<b>BIO 493</b>	Seminar in Biology	1 Cr.
<b>AND/OR BIO 496</b>	Research in Biology	1-2 Cr.

**Additional Required Courses**

**Two semesters of general chemistry and one semester of organic chemistry**

**Second major in another science (Please see the description of the Bachelor of Science requirements on page 47 for more information.)**

## Biology

### Bachelor of Science – Biology Major (Minimum 32 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**Two courses from BIO 290 to BIO 380**

**Two courses from BIO 420 to BIO 490**

**Two credits from the following options:**

<b>BIO 493</b>	Seminar in Biology	1 Cr.
<b>AND/OR BIO 496</b>	Research in Biology	1-2 Cr.

**Four credits from BIO 290 to BIO 498**

**Additional Required Courses**

**Two semesters of general chemistry and one semester of organic chemistry**

**Please see the description of the Bachelor of Science requirements on page 47 for more information.**

### Bachelor of Science – Biology Major (Minimum 40 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**Two courses from BIO 290 to BIO 380**

**Two courses from BIO 420 to BIO 490**

<b>Two credits from BIO 493</b>	Seminar in Biology	1 Cr.
<b>Two credits from BIO 496</b>	Research in Biology	1-2 Cr.

**At least six additional credits from BIO 290 to BIO 499**

**Additional Required Courses**

**Two semesters of general chemistry and one semester of organic chemistry.**

**Note:** BIO 486 may not be counted toward any of the above departmental majors.

Depending on career goals and special requirements for graduate schools and professional programs, majors are advised to include in their plans of study courses in advanced chemistry, advanced mathematics including calculus, computer science, physics, and statistics.

### General Biology Minor (Minimum 15 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**Three additional credits from BIO 290 to BIO 490**

### Human Biology Minor (Minimum 15 Cr.)

<b>BIO 151</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152</b>	Human Anatomy and Physiology II	3+3, 4 Cr.

**Seven additional credits from BIO 210 to BIO 490**

**Note:** BIO 486 may not be counted toward the above departmental minors. Additionally, Exercise Science majors may use BIO 205 or KIN 205 for the additional biology credits required for the Human Biology Minor.

### Biology Research Intensive Concentration

The Research Concentration is intended for students primarily interested in pursuing graduate study. Qualifying students may participate in this highly-selective program. Applications and additional information about this program are available from the office of the chair of the department.

## Biology Research Intensive Concentration within Bachelor of Science (Minimum 33 Cr.)

<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 195</b>	Introduction to Biological Research	1 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.
<b>BIO 496</b>	Research in Biology	6 Semesters

**Two courses from BIO 290 to BIO 380**

**Two courses from BIO 420 to BIO 490**

### Additional Required Courses

**Two semesters of general chemistry and one semester of organic chemistry.**

**Please see the description of the Bachelor of Science requirements on page 47 for more information.**

**Note: Must achieve and maintain a GPA of 3.000, both in the major and overall, to qualify for, and remain in, this program.**

**Note: BIO 486 may not be counted toward the above departmental major.**

### Field Station

Valparaiso University has a partnership with a biological field station in southern Michigan called Pierce Cedar Creek Institute. Funding is available through PCCI for student/faculty summer research collaborations at the field station. See the department chair for more information.

### Biology Club

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

### Senior Assessment Examination

All graduating seniors will take the Biology Assessment Examination during their final semester of biology instruction. See the chair of the department for details.

### Approval of Schedules

All students taking majors or minors in biology and all students planning to teach biological subjects must have their schedules approved by their academic advisors at the beginning of each semester.

**Note:** Entering students who satisfy requirements for Biology 171 and 172 or equivalent by passing the College Level Examination Program (CLEP) examination in Biology or the Advanced Placement Examination (AP) in Biology are granted 8 credit hours toward graduation. Students who pass the International Baccalaureate (IB) Examination in Biology are granted 4 credit hours for BIO 171.

### Biology Courses

<b>BIO 125</b>	<b>Biotechnology</b>	3+2, 4 Cr.
	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 a biology course for partial fulfillment of the General Education Requirements in Natural Science and includes a laboratory component. 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 process. Students may register concurrently for MATH 110 and BIO 125.	
<b>BIO 151</b>	<b>Human Anatomy and Physiology I</b>	3+3, 4 Cr.
	An introductory study of the physiochemical nature of cells and tissues, cell division and human genetics, the musculoskeletal system, the nervous system and special senses, and chemical control. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. 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 process. Students may register concurrently for MATH 110 and BIO 151.	
<b>BIO 152</b>	<b>Human Anatomy and Physiology II</b>	3+3, 4 Cr.
	A continuation of Human Anatomy and Physiology I. A study of hematology and the anatomy and physiology of the following organ systems: cardiovascular, respiratory, digestive, excretory, endocrine, and reproductive. Course includes a laboratory component. 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 process. Students may register concurrently for MATH 110 and BIO 152.	

<b>BIO 171</b>	<b>Unity of Life</b>	3+3, 4 Cr.
	A study of organic molecules, cells, tissues, and organs for biology majors and general biology minors. Emphasis is placed on the principles which unify all living forms: structure, energetics, physiology, inheritance, and development. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. This course is required for biology majors and general biology minors including pre-medical and some other pre-professional students. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and BIO 171.	
<b>BIO 172</b>	<b>Diversity of Life</b>	3+3, 4 Cr.
	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, ecology, evolution, and the social and economic importance of representative members. Course includes a laboratory component. Field trips are required. May be used in partial fulfillment of the General Education Requirements in Natural Science. Prerequisite: Grade of C- or higher in BIO 171 or 151, or equivalent, or consent of the chair of the department; MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and BIO 172.	
<b>BIO 195</b>	<b>Introduction to Biological Research</b>	1 Cr.
	An introduction to biological research methods and literature. Laboratory work is required. Typically taken in spring semester of the freshman year. Prerequisite: BIO 171 and consent of the chair of the department. S/U grade only.	
<b>BIO 205</b>	<b>Fundamental Nutrition</b>	3 Cr.
	A study of the basic principles of human nutrition. Emphasis is on practical application and includes a focus on sports nutrition. Not open to students who have received credit for either KIN 205 or BIO 260.	
<b>BIO 210</b>	<b>Microbiology</b>	3+3, 4 Cr.
	A study of bacteria, viruses, and other microorganisms. Major emphasis is given to understanding infectious disease and immunology. Course includes a laboratory component. Prerequisites: BIO 151 or 171 and CHEM 111 or 121.	
<b>BIO 215</b>	<b>Fundamental Microbiology for Engineers</b>	3 Cr.
	A fundamental study of the structure, function, and growth of microorganisms. Roles of microorganisms in industry and the environment will be considered. Open only to students enrolled in the College of Engineering with sophomore standing or above, or with consent of the department chair. Prerequisite: CHEM 115.	
<b>BIO 250</b>	<b>Human Environmental Biology</b>	3 Cr.
	A study of the relationships between humans, technology, and the environment. Emphasis is placed on ecological principles, human population growth, resources, and pollution. May be used by Elementary Education majors to fulfill the conservation requirement. Field trips are required.	
<b>BIO 260</b>	<b>Human Nutrition</b>	3 Cr.
	Basic principles of human nutrition including nutrient functions, recommendations, and food sources. Not open to students who have received credit for either BIO 205 or KIN 205. Prerequisite: CHEM 111, BIO 151, and BIO 152, or consent of the chair of the department.	
<b>BIO 270</b>	<b>Genetics and Genome Evolution</b>	3+3, 4 Cr.
	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, mutation, variation, and evolution of genomes. Human genetics and social implications are discussed. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. Prerequisite: Grade of C- or higher in BIO 172 or 152, or equivalent.	
<b>BIO 290</b>	<b>Biological Topics</b>	2-4 Cr.
	A consideration of various topics in biology through lectures, laboratory work, field work, and conferences. The topics are related to staff and student interests. May be taken more than once if topics are different. Course may include a laboratory component. Prerequisite: certain topics may have specific course requirements. Examples of probable offerings are Tissue Culture, and Parasitology.	
<b>BIO 310</b>	<b>Evolution</b>	3 Cr.
	This course explores the principles of modern evolutionary biology. Topics include the history of life on earth, population genetic models to explore evolutionary change, and molecular and phylogenetic approaches to understanding evolutionary theory. The application of evolutionary theory to medicine and ecology will also be covered. Prerequisite: BIO 270.	
<b>BIO 320</b>	<b>Comparative Vertebrate Anatomy</b>	2+3, 3 Cr.
	A comparative study of representative vertebrate animals, with emphasis on evolution, structures, functions, and laboratory dissections. Course includes a laboratory component. Prerequisite: BIO 152 or 172.	

<b>BIO 321</b>	<b>Mathematical Models of Infectious Disease</b>	3 Cr.
	(Also offered as MATH 321.) An application of mathematical methods and concepts to the study of infectious diseases. Analysis of outbreaks and control methods (such as vaccinations) using differential equations and elementary matrix algebra. Prerequisite: MATH 131 and one of STAT 140, STAT 240, or PSY 201. This course is usually offered online during the summer semester.	
<b>BIO 330</b>	<b>Arthropods and Disease</b>	3 Cr.
	A study of the arthropods that cause disease in humans and animals. The course will focus on the biology of the arthropods that make them effective vectors of disease. Control of arthropod borne disease will be discussed. Topics will change as new diseases emerge, but possible topics include: mosquito biology, malaria, dengue hemorrhagic fever, bed bugs, and Lyme disease. Prerequisite: BIO 172.	
<b>BIO 340</b>	<b>Human Molecular Genetics</b>	3 Cr.
	An expansion of principles covered in BIO 270, Genetics and Genome Evolution. This course explores complications of simple Mendelian genetics and related genetic technologies. Topics may include human genome mapping, sequencing and evolution, complex genetic traits, gene therapy, genetic testing, and DNA fingerprinting. Special attention is given to the ethical issues raised by emerging technologies in genetics. Prerequisite: BIO 270.	
<b>BIO 350</b>	<b>Field Biology: Spring</b>	2+4, 3 Cr.
	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, but in the field attention is paid to other common or conspicuous organisms. Field trips are required. Course includes a laboratory component. Prerequisite: BIO 172.	
<b>BIO 360</b>	<b>Modern Microscopy</b>	2+3, 3 Cr.
	An advanced study of practical techniques of light microscopy, scanning electron microscopy, and digital image processing. Emphasis is placed upon producing micrographs that convincingly illustrate results of biology experiments. Collaboration with student investigators in other courses is strongly encouraged. Course includes a laboratory component. Prerequisite: BIO 152 or 172.	
<b>BIO 370</b>	<b>Neurobiology</b>	3 Cr.
	Organization and function of the vertebrate nervous system from the tissue to the organismal levels, with focus on cellular and molecular neurobiology. Main topics include the electrochemical bases of neural communication, cellular bases of sensations, motor behaviors, and homeostasis. Students will read primary literature. Prerequisite: BIO 151 or 171 required; CHEM 121 or 131 recommended.	
<b>BIO 375</b>	<b>Human Anatomy</b>	2+3, 3 Cr.
	Human Anatomy provides advanced students with in-depth anatomical training at the microscopic and gross (macroscopic) level. While performing cadaver dissections, students learn about the structures of the human body, their integration, and most importantly, variation among humans. The course will include an introduction to anatomical terms, human histology, movement, and the anatomy of the major body systems: Integumentary, Skeletal, Muscular, Nervous, Cardiovascular, Lymphatic, Respiratory, Digestive, Urinary, and Reproductive. Prerequisite: BIO 152 or BIO 172.	
<b>BIO 380</b>	<b>Principles of Human Physiology</b>	3 Cr.
	A study of the function of and interactions between organ systems and the mechanisms that regulate their physiology. Emphasis is placed on the basic principles of homeostasis and an introduction to disease physiology and drug actions. Prerequisite: BIO 172 and junior standing. Not open to students with credit for BIO 151 or BIO 152.	
<b>BIO 420</b>	<b>Developmental Biology</b>	3+3, 4 Cr.
	An introduction to the descriptive and analytic study of animal development and growth, with emphasis on vertebrate animals. Course includes a laboratory component. Prerequisite: BIO 270.	
<b>BIO 430</b>	<b>Plant Biology</b>	3+3, 4 Cr.
	An introduction to the principles and methods of plant systematics and their use in the understanding of plant form, function, and natural history. Laboratories emphasize how genomics is shaping views of plant evolution. Laboratory work will also include a survey of plant taxonomy with an emphasis on the flora of the Midwest. Field trips required. Prerequisite: BIO 270.	
<b>BIO 435</b>	<b>Insect Biology</b>	3+3, 4 Cr.
	A study of the biology of insects including their morphology, reproduction, feeding behaviors, and evolutionary successes. The lab requires an insect collection and collecting field trips are required. Prerequisite: BIO 172.	

<b>BIO 440</b>	<b>Ecology</b>	3+4, 4 Cr.
	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. Course includes a laboratory component. Prerequisite: BIO 172 and preferably a prior field course.	
<b>BIO 445</b>	<b>Forensic Biology</b>	3+3, 4 Cr.
	A study of the biological fields associated with forensic science. Forensic entomology, anthropology, botany, taphonomy, and serology will be discussed in detail. The laboratory will focus on field collection techniques and evidence recovery of biological specimens. Field trips are required. Prerequisite: BIO 172.	
<b>BIO 450</b>	<b>Molecular Biology</b>	3+3, 4 Cr.
	A study of the molecular basis of genetic interactions and processes in prokaryotic and eukaryotic organisms. Laboratories emphasize standard microbiological techniques as well as recent advances in gene cloning and molecular genetics. Prerequisites: BIO 270 and CHEM 221.	
<b>BIO 460</b>	<b>Cell Biology</b>	3+3, 4 Cr.
	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, organelles, energy transformation, membrane transport, excitability, contraction, and signal transduction. Prerequisite: BIO 270 and CHEM 221.	
<b>BIO 486</b>	<b>Internship in Biological Science</b>	0.5-2 Cr.
	Students gain experience in biology by working for private or public research/diagnostic labs, state or federal agencies, environmental consulting firms, nonprofit environmental groups, or other appropriate organizations. Final written report required. This course may not be counted toward a major or a minor in this department. S/U grade only. Prerequisite: major or minor in biology and consent of the chair of the department.	
<b>BIO 490</b>	<b>Biological Topics</b>	2-4 Cr.
	A consideration of various topics in biology through lectures, laboratory work, field work, and conferences. The topics are related to staff and student interests. May be taken more than once if topics are different. Prerequisite: certain topics may have specific course requirements.	
<b>BIO 493</b>	<b>Seminar in Biology</b>	1 Cr.
	Student and staff presentation and discussion of selected topics in biology. Current topics are Animal Behavior, Biological Controversies, Embryology, Immunology, and Diet and Disease. Intended for seniors. 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 a broad spectrum of topics is available. A maximum of four seminars (on different topics) may be credited toward graduation. S/U grade optional.	
<b>BIO 494</b>	<b>Pre-Medical Arts Colloquium</b>	0 Cr.
	(Also offered as CHEM 494.) All Pre-Medical Arts students are encouraged to register for this course every semester. May not be counted for a major or minor. S/U grade.	
<b>BIO 496</b>	<b>Research in Biology</b>	1-2 Cr.
	Special research problems. Prerequisites: 12 credit hours of biology, prior approval of a supervising instructor and the chair of the department is required. May be repeated for additional credit. S/U grade optional.	
<b>BIO 497</b>	<b>Honors Work in Biology</b>	3 Cr.
	See Honors Work, page 56.	
<b>BIO 498</b>	<b>Honors Candidacy in Biology</b>	3 Cr.
	See Honors Work, page 56.	
<b>BIO 499</b>	<b>Biology Colloquium</b>	0-1 Cr.
	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.	

# Chemistry

Learn more about the [Department of Chemistry](#) at Valpo online.

**Professor Peller; Associate Professors R. Clark, Goyne, Holt, C. Iceman, K. Jantzi (chair); Assistant Professors Pruitt, P. Smith.**

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 Valparaiso University's 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 or a Bachelor of Science degree in chemistry or a Bachelor of Science degree in biochemistry.

## Pre-Medical Arts Programs

A major in chemistry or biochemistry 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 Pre-Medical Arts.

## Chemical Engineering

The College of Engineering offers a minor in engineering. Combining an engineering minor with a major in chemistry will prepare students who wish to pursue further studies in chemical engineering. Further information may be obtained from the chair of the Chemistry Department or the College of Engineering assistant dean for student success.

## Major

The Department of Chemistry offers two majors, chemistry and biochemistry, with five degree options. In addition to the courses listed below, all majors are expected to register for CHEM 499 Chemistry Colloquium every semester.

### Bachelor of Arts – Chemistry Major (Minimum 27 Cr.)

#### One course from the following options:

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.

#### One course from the following options:

<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 132</b>	General Chemistry II for Chemistry Careers	3+3, 4 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+4, 4 Cr.

#### One course from the following options:

<b>CHEM 311</b>	Elementary Physical Chemistry	3+3, 4 Cr.
<b>CHEM 315</b>	Biochemistry I	3+3, 4 Cr.
<b>CHEM 321</b>	Physical Chemistry I	3+3, 4 Cr.
<b>CHEM 499</b>	Chemistry Colloquium (4 semesters)	0 Cr.

#### Three additional credits from 300 or 400 level Chemistry courses.

**Bachelor of Science – Chemistry Major – Double Science Major (Minimum 27 Cr.)****One course from the following options:**

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.

**One course from the following options:**

<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 132</b>	General Chemistry II for Chemistry Careers	3+3, 4 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+4, 4 Cr.

**One course from the following options:**

<b>CHEM 311</b>	Elementary Physical Chemistry	3+3, 4 Cr.
<b>CHEM 321</b>	Physical Chemistry I	3+3, 4 Cr.
<b>CHEM 499</b>	Chemistry Colloquium (4 semesters)	0 Cr.

**Three additional credits from 300 or 400 level Chemistry courses.****Must be combined with a minimum major in another science (see page 47),****Bachelor of Science – Chemistry Major (Minimum 32 Cr.)****One course from the following options:**

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.

**One course from the following options:**

<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 132</b>	General Chemistry II for Chemistry Careers	3+3, 4 Cr.

**One course from the following options:**

<b>CHEM 190</b>	Introduction to Chemical Research	0+3, 1 Cr.
<b>CHEM 496</b>	Directed Research in Chemistry	1 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+4, 4 Cr.

**One course from the following options:**

<b>CHEM 311</b>	Elementary Physical Chemistry	3+3, 4 Cr.
<b>CHEM 321</b>	Physical Chemistry I	3+3, 4 Cr.
<b>CHEM 499</b>	Chemistry Colloquium (6 semesters)	0 Cr.

**Seven additional credits from 300 or 400 level Chemistry courses.**

**ACS Certified Bachelor of Science – Chemistry Major (Minimum 43 Cr.)**

This degree option meets the guidelines of the American Chemical Society.

**One course from the following options:**

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.

**One course from the following options:**

<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 132</b>	General Chemistry II for Chemistry Careers	3+3, 4 Cr.
<b>CHEM 190</b>	Introduction to Chemical Research	0+3, 1 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+4, 4 Cr.
<b>CHEM 315</b>	Biochemistry I	3+3, 4 Cr.
<b>CHEM 321</b>	Physical Chemistry I	3+3, 4 Cr.
<b>CHEM 322</b>	Physical Chemistry II	3+3, 4 Cr.
<b>CHEM 421</b>	Advanced Inorganic Chemistry	3 Cr.
<b>CHEM 422</b>	Inorganic Chemistry Laboratory	0+6, 2 Cr.
<b>CHEM 496</b>	Directed Research in Chemistry	2 Cr.
<b>CHEM 499</b>	Chemistry Colloquium (6 semesters)	0 Cr.

Three additional credits from 300 or 400 level Chemistry courses.

**PHYS 141 and 142 (with labs) and MATH 260 and 270 are required for certification.**

**CHEM 496 may be taken instead as the Honors Work sequence, CHEM 497 and 498.**

**ACS Certified Bachelor of Science – Biochemistry Major  
(Minimum 43 Chemistry Cr. and 12 Biology Cr.)**

This degree option meets the guidelines of the American Chemical Society.

**One course from the following options:**

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.

**One course from the following options:**

<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 132</b>	General Chemistry II for Chemistry Careers	3+3, 4 Cr.
<b>CHEM 190</b>	Introduction to Chemical Research	0+3, 1 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+4, 4 Cr.
<b>CHEM 315</b>	Biochemistry I	3+3, 4 Cr.
<b>CHEM 316</b>	Biochemistry II	3 Cr.
<b>CHEM 321</b>	Physical Chemistry I	3+3, 4 Cr.
<b>CHEM 322</b>	Physical Chemistry II	3+3, 4 Cr.
<b>CHEM 417</b>	Biochemistry Laboratory	0+6, 2 Cr.
<b>CHEM 421</b>	Advanced Inorganic Chemistry	3 Cr.
<b>CHEM 496</b>	Directed Research in Chemistry	2 Cr.
<b>CHEM 499</b>	Chemistry Colloquium (6 semesters)	0 Cr.
<b>BIO 171</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 270</b>	Genetics and Genome Evolution	3+3, 4 Cr.

**One course from the following options:**

<b>BIO 450</b>	Molecular Biology	3+3, 4 Cr.
<b>BIO 460</b>	Cell Biology	3+3, 4 Cr.

**PHYS 141 and 142 (with labs) and MATH 260 and 270 are required for certification.**

**The research conducted in CHEM 496 should be in the area of Biochemistry. It may also be taken as BIO 496, or the Honors Work sequence CHEM 497 and 498.**

**Chemistry Minor (Minimum 16 Cr.)**

A minimum of 16 credit hours in chemistry, including at least 8 credits numbered 200 and above, 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 2.500 in their mathematics and science courses. For further information, refer to Cooperative Education, College of Arts and Sciences, page 57.

**Credit by Examination**

Credit for CHEM 121 and 122 may be earned through the College Level Examination Program subject examination in General Chemistry or through the Advanced Placement Examination in Chemistry. Credit for CHEM 121 may be earned through the International Baccalaureate Program subject examination in Chemistry.

**Approval of Schedules**

All students taking a major or a minor in chemistry must have their schedules approved by their departmental advisor at the beginning of each semester.

**Chemistry Courses**

<b>CHEM 111</b>	<b>Introduction to Chemistry</b>	3+2, 4 Cr.
	A one semester overview of general, organic, and biochemistry. Intended for non-science majors who elect chemistry to meet one part of the natural science requirement. Course includes a laboratory component. Students with a major or minor in elementary education, nursing, or physical education ordinarily take this course to meet their chemistry requirement. Not open to students with credit for CHEM 115, 121, or 131. Students may take CHEM 111 prior to taking CHEM 121, but may not use both courses toward a chemistry major or minor, or toward fulfillment of the General Education Requirements in Natural Science. Prerequisite: Grade of C- or higher in MATH 110 or placement higher than MATH 110 on the math placement process.	
<b>CHEM 115</b>	<b>Essentials of Chemistry for Engineers</b>	3+2, 4 Cr.
	A one semester introductory course in the principles of chemistry for engineering students. Course includes a laboratory component. Not open to students with credit for CHEM 121 or CHEM 131. Prerequisite: MATH 131 and enrollment in the College of Engineering, or consent of the chair of the department.	
<b>CHEM 116</b>	<b>Applications of Chemistry in Engineering</b>	3+3, 4 Cr.
	A continuation of CHEM 115; offering additional principals of chemistry for engineering students, especially civil engineering students, with emphasis on analytical chemistry. Course includes a laboratory component. Not open to students with credit for CHEM 122 or CHEM 132. Prerequisite: CHEM 115 and enrollment in the College of Engineering, or consent of chair of the department.	
<b>CHEM 120</b>	<b>General Chemistry Peer Learning</b>	0 Cr.
	An optional structured study session in which teams of students work together to develop and improve their problem solving, professional communication, and study skills in general chemistry. May be repeated. S/U grade only. Corequisite: CHEM 121 or CHEM 122.	

<b>CHEM 121</b>	<b>General Chemistry I</b>	3+3, 4 Cr.
	An introductory course covering atomic theory, stoichiometry, aqueous solution reactivity, thermochemistry, quantum mechanics and periodic properties, chemical bonding and molecular structure, gases and kinetic molecular theory, and intermolecular forces and solutions. The first of a two semester sequence. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. For students pursuing STEM or health-related careers in areas other than chemistry or biochemistry. Required of majors and minors in chemistry and majors in biochemistry, except for students who take CHEM 131. Not open to students with credit for CHEM 115 or CHEM 131. Not open to students in the College of Engineering except with permission of the chair of the department. Prerequisite: grade of C- or higher in CHEM 111 or MATH 111, or placement higher than MATH 111 on the math placement process.	
<b>CHEM 122</b>	<b>General Chemistry II</b>	3+3, 4 Cr.
	The second semester of an introductory course emphasizing intermolecular forces and the properties of liquids, solids, and solutions, chemical kinetics, chemical equilibrium and its relationship to reactivity, thermodynamics and Gibb's Free Energy, electrochemistry, nuclear chemistry, and main group chemistry. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. For students pursuing STEM or health-related careers in areas other than chemistry or biochemistry. Required of majors and minors in chemistry and majors in biochemistry, except for students who take CHEM 132. Not open to students with credit for CHEM 116 or CHEM 132. Not open to students in the College of Engineering except with permission of the chair of the department. Prerequisite: Grade of C- or higher in CHEM 121 or CHEM 131.	
<b>CHEM 131</b>	<b>General Chemistry I for Chemistry Careers</b>	3+3, 4 Cr.
	An introductory course covering atomic theory, stoichiometry, aqueous solution reactivity, thermochemistry, quantum mechanics and periodic properties, chemical bonding and molecular structure, gases and kinetic molecular theory, and intermolecular forces and solutions. The first of a two semester sequence. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. For students pursuing careers in chemistry or biochemistry. Required for majors and minors in chemistry and majors in biochemistry, except for students who take CHEM 121. Not open to students with credit for CHEM 115 or CHEM 121. Not open to students in the College of Engineering except with permission of the chair of the department. Prerequisite: Grade of C- or higher in CHEM 111 or MATH 111, or placement higher than MATH 111 on the math placement process.	
<b>CHEM 132</b>	<b>General Chemistry II for Chemistry Careers</b>	3+3, 4 Cr.
	The second semester of an introductory course emphasizing intermolecular forces and the properties of liquids, solids, and solutions, chemical kinetics, chemical equilibrium and its relationship to reactivity, thermodynamics and Gibb's Free Energy, electrochemistry, nuclear chemistry, and main group chemistry. Course includes a laboratory component. May be used in partial fulfillment of the General Education Requirements in Natural Science. For students pursuing careers in chemistry or biochemistry. Required of majors and minors in chemistry and majors in biochemistry, except for students who take CHEM 122. Not open to students with credit for CHEM 116 or CHEM 122. Not open to students in the College of Engineering except with permission of the chair of the department. Prerequisite: Grade of C- or higher in CHEM 121 or CHEM 131.	
<b>CHEM 190</b>	<b>Introduction to Chemical Research</b>	0+3, 1 Cr.
	An introduction to chemical research methods and literature. A laboratory project is required. S/U grade. Prerequisite: CHEM 121 or 131.	
<b>CHEM 221</b>	<b>Organic Chemistry I</b>	3+3, 4 Cr.
	An introductory survey of the nomenclature, reactions, structures, and properties of carbon compounds. Course includes a laboratory component. Prerequisite: Grade of C- or higher in CHEM 116, 122, or 132.	
<b>CHEM 222</b>	<b>Organic Chemistry II</b>	3+3, 4 Cr.
	A continuation of CHEM 221. A further study of the reactions, structures, and properties of carbon compounds, including reaction mechanisms and complex organic reactions. Course includes a laboratory component. Prerequisite: Grade of C- or higher in CHEM 221.	

<b>CHEM 230</b>	<b>Quantitative Analysis</b>	3+4, 4 Cr.
	A study of the theory of chemical equilibria, electrochemistry, and elementary chemical analysis. Course includes a laboratory component. The laboratory work consists of an introduction to gravimetric, volumetric, and instrumental methods of analysis. Prerequisite: Grade of C- or higher in CHEM 116, 122, or 132 or consent of chair of the department.	
<b>CHEM 290</b>	<b>Perspectives on Chemistry</b>	1-4 Cr.
	Topics related to chemistry. May not be counted toward a major or minor in chemistry. May be repeated for credit, provided topics are different.	
<b>CHEM 311</b>	<b>Elementary Physical Chemistry</b>	3+3, 4 Cr.
	A one-semester course in physical chemistry covering elementary thermodynamics and kinetics, together with their applications to various chemical systems. Course includes a laboratory component. A Writing in the Discipline course. Prerequisite: CHEM 221, CHEM 230, MATH 131, and PHYS 111 or 141 (may be taken concurrently). Not open to students who have taken CHEM 321.	
<b>CHEM 315</b>	<b>Biochemistry I</b>	3+3, 4 Cr.
	Structure and function of proteins, carbohydrates, nucleic acids, and lipids. Overview of metabolism with an emphasis on integration and control. Course includes a laboratory component. Prerequisite: Grade of C- or higher in CHEM 222. Recommended prerequisite: CHEM 230.	
<b>CHEM 316</b>	<b>Biochemistry II</b>	3 Cr.
	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: Grade of C- or higher in CHEM 315.	
<b>CHEM 321</b>	<b>Physical Chemistry I</b>	3+3, 4 Cr.
	A theoretical study of chemistry involving thermodynamics, kinetics, and modern structural concepts. Course includes a laboratory component. A Writing in the Discipline course. Prerequisites: CHEM 221, CHEM 230, MATH 132, PHYS 142. Recommended: MATH 270.	
<b>CHEM 322</b>	<b>Physical Chemistry II</b>	3+3, 4 Cr.
	A continuation of CHEM 321. Course includes a laboratory component. Prerequisite: Grade of C- or higher in CHEM 321.	
<b>CHEM 340</b>	<b>Forensic Chemistry</b>	2+3, 3 Cr.
	A study of the chemical fields associated with forensic science, including toxicology, illicit drug analysis, and trace evidence analysis. Course includes a laboratory component. The course will focus on procedures and instrumentation that are commonly employed in a forensic chemistry laboratory, such as evidence collection and preparation for analysis, spectrophotometry, chromatography, and microscopy. Prerequisite: CHEM 230.	
<b>CHEM 341</b>	<b>Environmental Chemistry</b>	3+0, 3 Cr.
	A study of chemistry associated with the environment, incorporating the composition of the natural environment and the processes of natural and anthropogenic chemicals in the environment. This includes chemistry of the stratosphere, troposphere and climate change; chemistry of fossil fuels and alternative energy sources; the chemical composition and properties of natural waters and impacts of pollutants; the treatment of water and wastewater and overall freshwater challenges; toxic organic chemicals, heavy metals and plastic waste in the environment, including food, soil and everyday materials. Prerequisite: Grade of C- or higher in CHEM 122 or CHEM 132.	
<b>CHEM 381</b>	<b>Cooperative Education in Chemistry I</b>	0.5-2 Cr.
	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.	
<b>CHEM 390</b>	<b>Topics in Chemistry</b>	1-4 Cr.
	A study of various topics in chemistry. May be repeated for credit, provided topics are different. Prerequisite: dependent upon the topic.	
<b>CHEM 417</b>	<b>Biochemistry Laboratory</b>	0+6, 2 Cr.
	An introduction to the experimental methods used to characterize biomolecules and biochemical reactions. Prerequisite: CHEM 315.	

<b>CHEM 421</b>	<b>Advanced Inorganic Chemistry</b>	3 Cr.
	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) or consent of the chair of the department.	
<b>CHEM 422</b>	<b>Inorganic Chemistry Laboratory</b>	0+6, 2 Cr.
	Experiments involving structures and reactions of inorganic compounds. Prerequisite: CHEM 421 (may be taken concurrently).	
<b>CHEM 430</b>	<b>Advanced Instrumental Analysis</b>	2+4, 3 Cr.
	In depth study of theory and practice of nuclear magnetic resonance, spectroscopy, chromatography, and electrochemistry. Course includes a laboratory component. Other topics include electronics (operational amplifiers) and computer interfacing. Prerequisite: CHEM 230 and (CHEM 311 or 321).	
<b>CHEM 440</b>	<b>Materials Chemistry</b>	3 Cr.
	An introduction to materials that fall into four broad classifications: electronic materials, polymers, ceramics, and metals, with an emphasis on synthetic and fabrication techniques. Prerequisite: CHEM 222.	
<b>CHEM 450</b>	<b>Advanced Organic Chemistry</b>	3 Cr.
	A study of physical organic chemistry and strategy in modern organic synthesis. Topics include linear free energy relationships, the Woodward-Hoffman rules, and semi-empirical quantum mechanical calculation techniques for organic molecules. Prerequisites: CHEM 222 and (311 or 321).	
<b>CHEM 482</b>	<b>Cooperative Education in Chemistry II</b>	0.5-2 Cr.
	Continuation of CHEM 381. Prerequisites: CHEM 381, satisfactory employer evaluation, and approval of the chair of the department. S/U grade only.	
<b>CHEM 483</b>	<b>Cooperative Education in Chemistry III</b>	0.5-2 Cr.
	Continuation of CHEM 482. Prerequisites: CHEM 381, satisfactory employer evaluation, and approval of the chair of the department. S/U grade only. May be repeated beyond 483 for additional credit.	
<b>CHEM 486</b>	<b>Internship in Chemistry</b>	0.5-2 Cr.
	Students gain experience in chemistry by working at industrial or government laboratories. Written report required. S/U grade only. May be repeated for additional credit. Prerequisite: consent of the chair of the department.	
<b>CHEM 490</b>	<b>The Scientific Endeavor</b>	3 Cr.
	(Also offered as NS 490 and PHYS 490.) An exploration of the scientific enterprise involving a study of foundational principles and assumptions of the scientific endeavor, its various methodologies, and its scope and limitations. This will include illustrations from historical case studies and "scientific revolutions." Students will also study the ethical and moral connections between their personal and professional science lives. Prerequisite: junior or senior standing. This course may not be used to fulfill the requirements of a science major. This course may be used to fulfill the Humanities: Philosophy requirement of the General Education Requirements when cross-listed with CC 300.	
<b>CHEM 494</b>	<b>Pre-Medical Arts Colloquium</b>	0 Cr.
	(Also offered as BIO 494.) All Pre-Medical Arts students are expected to register for this course every semester. May not be counted for a major or minor. S/U grade only.	
<b>CHEM 496</b>	<b>Directed Research in Chemistry</b>	0-2 Cr.
	A course in which each student conducts chemical research with the guidance of a Chemistry faculty member, by study of the literature and by work in the laboratory. When taken for credit, a written report is required as well as an oral report in CHEM 499. May be repeated for additional credit. S/U grade only. Prerequisite: consent of chair of the department.	
<b>CHEM 497</b>	<b>Honors Work in Chemistry</b>	3 Cr.
	See Honors Work, page 56.	
<b>CHEM 498</b>	<b>Honors Candidacy in Chemistry</b>	3 Cr.
	See Honors Work, page 56.	
<b>CHEM 499</b>	<b>Chemistry Colloquium</b>	0 Cr.
	All Chemistry majors are expected to register for this course every semester. Report required in this forum for all those registered for CHEM 496. S/U grade only.	

# Communication and Visual Arts

Learn more about the [Department of Communication and Visual Arts](#) at Valpo online.

**Associate Professors C. Anderson, Chikeleze, N. Corazzo, S. Jantzi, Steinwart (chair), Tomasek, Wolff, Wuerffel; Assistant Professors Bell, Krepp; Lecturer Oren**

The Communication and Visual Arts (CVA) Department educates students in one of the most integral aspects of human behavior—the development and expression of ideas through various modalities. The department offers three degree paths including art, communication, and digital media arts, with opportunities for students to customize their concentrations.

CVA students are encouraged to skillfully and ethically explore their ideas through creative thinking and problem-solving in a supportive environment surrounded by dedicated mentors and collaborators. Whether the preferred medium is writing, speaking, drawing, painting, design, photography, or cinema, students will find a home for their passion and creativity to flourish in our interdisciplinary program. By emphasizing both individual expression and creative collaboration, students learn to deliver exceptional content for a diverse audience.

While examining aspects of culture, persuasion, art, and media, to name a few, students will put theory into practice by serving our community through applied projects and hands-on internships. Cultural resources on campus—such as the outstanding collection of American art in Valparaiso University's Brauer Museum of Art—and in nearby Chicago are integral to the curricula. Majors may lead to a variety of careers or graduate study in fields such as journalism, public relations, broadcasting, branding, marketing, advertising, entertainment, museum curation, gallery sales, art education, and much more.

## Bachelor of Arts – Art Major (Minimum 30 Cr.)

CVA 101	Ancient to Medieval Art History	3 Cr.
CVA 102	Renaissance to Modern Art History	3 Cr.
CVA 121	Drawing	0+6, 3 Cr.
CVA 122	Painting	0+6, 3 Cr.
CVA 125	Ideation	3 Cr.
CVA 163	Photography	1+4, 3 Cr.
CVA 227	Figure Drawing	0+6, 3 Cr.
CVA 230	Graphic Design	1+4, 3 Cr.
<b>One course from the following:</b>		
MUS 405	Arts and Entertainment Administration	3 Cr.
CVA 472	Screenwriting	3 Cr.
<b>3 additional credits from the following:</b>		
CVA 222	Advanced Studio	0+6, 3 Cr.
CVA 292	Special Topics in Visual Arts	2+2, 3 Cr.
CVA 324	Video Art	2+2, 3 Cr.
CVA 327	Advanced Figure Drawing	0+6, 3 Cr.
CVA 330	Advanced Design	2+2, 3 Cr.
CVA 331	Web Design	2+2, 3 Cr.
CVA 386	Internship	3 Cr.
CVA 390	Topics in Communication and Visual Arts	3 Cr.
CVA 392	Special Topics in Visual Arts	2+2, 3 Cr.
CVA 490	Topics in Communication and Visual Arts	3 Cr.
CVA 491	Applied Topics in Visual Arts	0+6, 3 Cr.
CVA 492	Special Topics in Visual Arts	2+2, 3 Cr.
CVA 495	Independent Study	1-3 Cr.
CVA 497	Honors Work	3 Cr.
CVA 498	Honors Candidacy	3 Cr.
CVA 499	Capstone Senior Project	3 Cr.

## Bachelor of Arts – Communication Major (Minimum 33 Cr.)

CVA 100	Introduction to Media and Visual Arts	3 Cr.
CVA 145	Interpersonal and Small Group Communication	3 Cr.
CVA 243	Public Speaking	3 Cr.
CVA 265	Public Relations Principles	3 Cr.

**Communication and Visual Arts**

<b>CVA 302</b>	Intellectual Property and Communication Law	3 Cr.
<b>CVA 386</b>	Internship	3 Cr.
<b>CVA 499</b>	Capstone Senior Project	3 Cr.
<b>One of the following concentrations:</b>		
<b>General Communication</b>		
<b>One course from the following options:</b>		
<b>CVA 345</b>	Leadership Communication	3 Cr.
<b>CVA 366</b>	Negotiation and Conflict Resolution	3 Cr.
<b>CVA 315</b>	Intercultural Communication	3 Cr.
<b>One course from the following options:</b>		
<b>CVA 244</b>	Persuasion and Advocacy	3 Cr.
<b>CVA 361</b>	Advanced Journalism	3 Cr.
<b>CVA 472</b>	Screenwriting	3 Cr.
<b>6 additional CVA credits</b>		
<b>Journalism</b>		
<b>CVA 160</b>	Media Storytelling	2+2, 3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 261</b>	Foundations of Journalism	3 Cr.
<b>CVA 361</b>	Advanced Journalism	3 Cr.
<b>Public Relations</b>		
<b>CVA 261</b>	Foundations of Journalism	3 Cr.
<b>One course from the following options:</b>		
<b>CVA 345</b>	Leadership Communication	3 Cr.
<b>CVA 366</b>	Negotiation and Conflict Resolution	3 Cr.
<b>CVA 315</b>	Intercultural Communication	3 Cr.
<b>One course from the following options:</b>		
<b>CVA 244</b>	Persuasion and Advocacy	3 Cr.
<b>CVA 361</b>	Advanced Journalism	3 Cr.
<b>CVA 472</b>	Screenwriting	3 Cr.
<b>3 additional CVA credits from the following options:</b>		
<b>CVA 290</b>	Topics in Communication and Visual Arts	3 Cr.
<b>CVA 362</b>	Communication Cases and Campaigns	3 Cr.
<b>CVA 364</b>	Public Relations Writing	3 Cr.
<b>CVA 365</b>	Corporate Advocacy and Activist Communication	3 Cr.
<b>CVA 390</b>	Topics in Communication and Visual Arts	3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>CVA 490</b>	Topics in Communication and Visual Arts	3 Cr.

**Bachelor of Arts – Digital Media Arts Major (Minimum 36 Cr.)**

<b>CVA 100</b>	Introduction to Media and Visual Arts	3 Cr.
<b>CVA 163</b>	Photography	1+4, 3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 271</b>	Cinema Production	3 Cr.
<b>CVA 302</b>	Intellectual Property and Communication Law	3 Cr.
<b>CVA 386</b>	Internship	3 Cr.
<b>CVA 499</b>	Capstone Senior Project	3 Cr.
<b>One course from the following options:</b>		
<b>CVA 244</b>	Persuasion and Advocacy	3 Cr.
<b>CVA 361</b>	Advanced Journalism	3 Cr.
<b>CVA 472</b>	Screenwriting	3 Cr.
<b>MUS 405</b>	Arts and Entertainment Administration	3 Cr.
<b>Two courses from the following options:</b>		
<b>CVA 121</b>	Drawing	0+6, 3 Cr.
<b>CVA 125</b>	Ideation	3 Cr.
<b>CVA 160</b>	Media Storytelling	2+2, 3 Cr.
<b>CVA 243</b>	Public Speaking	3 Cr.
<b>CVA 272</b>	Lighting the Story	3 Cr.

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<b>CVA 300</b>	Podcasting	2+2, 3 Cr.
<b>CVA 331</b>	Web Design	2+2, 3 Cr.
<b>CVA 350</b>	Audio Production	3 Cr.
<b>Two additional courses from the following options:</b>		
<b>CVA 121</b>	Drawing	0+6, 3 Cr.
<b>CVA 125</b>	Ideation	3 Cr.
<b>CVA 160</b>	Media Storytelling	2+2, 3 Cr.
<b>CVA 251</b>	Studio Television Production	3 Cr.
<b>CVA 263</b>	Advanced Photography	2+2, 3 Cr.
<b>CVA 272</b>	Lighting the Story	3 Cr.
<b>CVA 270</b>	Introduction to Cinema Studies	3 Cr.
<b>CVA 291</b>	Topics in World Cinema	3 Cr.
<b>CVA 292</b>	Special Topics in Visual Arts	2+2, 3 Cr.
<b>CVA 300</b>	Podcasting	2+2, 3 Cr.
<b>CVA 322</b>	Sports Media Formats	3 Cr.
<b>CVA 324</b>	Video Art	2+2, 3 Cr.
<b>CVA 350</b>	Audio Production	3 Cr.
<b>CVA 351</b>	Documentary Production	2+2, 3 Cr.
<b>CVA 371</b>	Advanced Cinema Production	3 Cr.
<b>CVA 380</b>	Television Producing and Directing	3 Cr.
<b>CVA 390</b>	Topics in Communication and Visual Arts	3 Cr.
<b>CVA 392</b>	Special Topics in Visual Arts	2+2, 3 Cr.
<b>CVA 465</b>	Race, Class, and Gender in the Media	3 Cr.
<b>CVA 472</b>	Screenwriting	3 Cr.
<b>CVA 490</b>	Topics in Communication and Visual Arts	3 Cr.
<b>CVA 492</b>	Special Topics in Digital Media Arts	2+2, 3 Cr.
<b>CVA 497</b>	Honors Work	3 Cr.
<b>CVA 498</b>	Honors Candidacy	3 Cr.

## Art Minor (Minimum 15 Cr.)

<b>CVA 121</b>	Drawing	0+6, 3 Cr.
<b>CVA 122</b>	Painting	0+6, 3 Cr.
<b>One course from the following options:</b>		
<b>CVA 101</b>	Ancient to Medieval Art History	3 Cr.
<b>CVA 102</b>	Renaissance to Modern Art History	3 Cr.
<b>Two courses from the following options:</b>		
<b>CVA 125</b>	Ideation	3 Cr.
<b>CVA 163</b>	Photography	1+4, 3 Cr.
<b>CVA 222</b>	Advanced Studio	0+6, 3 Cr.
<b>CVA 227</b>	Figure Drawing	0+6, 3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 327</b>	Advanced Figure Drawing	0+6, 3 Cr.

## Communication Minor (Minimum 15 Cr.)

**From the Communication Major, take 3 credits from the 100-level, 6 credits from the 200-level, and 6 credits from the 300-level or higher.**

## Digital Media Arts Minor (Minimum 15 Cr.)

**From the Digital Media Arts Major, take 3 credits from the 100-level, 6 credits from the 200-level, and 6 credits from the 300-level or higher.**

## Journalism Minor (Minimum 15 Cr.)

<b>CVA 100</b>	Introduction to Media and Visual Arts	3 Cr.
<b>CVA 261</b>	Foundations of Journalism	3 Cr.
<b>CVA 361</b>	Advanced Journalism	3 Cr.

**Six additional CVA credits from the following options:**

## Communication and Visual Arts

<b>CVA 160</b>	Media Storytelling	2+2, 3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 251</b>	Studio Television Production	3 Cr.
<b>CVA 271</b>	Cinema Production	3 Cr.
<b>CVA 290</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.
<b>CVA 322</b>	Sports Media Formats	3 Cr.
<b>CVA 350</b>	Audio Production	3 Cr.
<b>CVA 390</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>CVA 490</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.

### **Public Relations Minor (Minimum 15 Cr.)**

<b>CVA 261</b>	Foundations of Journalism	3 Cr.
<b>CVA 265</b>	Public Relations Principles	3 Cr.

**9 additional CVA credits from the following options:**

<b>CVA 290</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.
<b>CVA 362</b>	Communication Cases and Campaigns	3 Cr.
<b>CVA 364</b>	Public Relations Writing	3 Cr.
<b>CVA 365</b>	Corporate Advocacy and Activist Communication	3 Cr.
<b>CVA 390</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>CVA 490</b>	Topics in Communication and Visual Arts (as approved for minor)	3 Cr.

### **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 57.

### **Cinema and Media Studies Minor**

The Department of Communication also offers several courses, including CVA 271, CVA 291, CVA 324, CVA 270, as well as certain CVA 390 and 490 classes that could count toward the interdisciplinary Cinema and Media Studies Minor. For further information, refer to Cinema and Media Studies Interdisciplinary Programs, page 352.

### **Degree**

Students completing one of the three department majors 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 and Visual Arts must have their schedules approved by their departmental advisor at the beginning of each semester.

## Special Opportunities

### Television/Radio Studio

The department teaches all television and audio classes in its two tele-production studios, digital sound suite, and digital video editing lab. The studios are fully equipped for all levels of video and audio production and provide a quality laboratory experience. Digital video and audio editing facilities interface with the studios and are available for student video and audio work. The Weather Studio features a WSI weather graphics satellite feed. Students also intern in area television, radio and cable stations, and at video production companies.

### Student Organizations

The department offers co-curricular opportunities with award-winning student-run campus media, including WVUR Radio – The Source 95.1, VUTV campus cable channel, *The Torch* weekly campus newspaper, and *The Beacon* annual yearbook. The department sponsors a chapter of the National Communication Association's Lambda Pi Eta honor society and has an active student chapter of the Public Relations Student Society of America (PRSSA).

## Special Studies Courses

<b>ART 498</b>	<b>Honors Candidacy in Art</b>	3 Cr.
See Honors Work, page 56.		

## Communication and Visual Arts Courses

<b>CVA 100</b>	<b>Introduction to Media and Visual Arts</b>	3 Cr.
This course provides an overview of the operations, regulation, history and impact of mass media and visual arts. Students take a critical approach to understanding the role of media and visual arts in society.		
<b>CVA 101</b>	<b>Ancient to Medieval Art History</b>	3 Cr.
A survey of art history from prehistoric times through the Gothic period. Field trip. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>CVA 102</b>	<b>Renaissance to Modern Art History</b>	3 Cr.
A survey of art history from the Renaissance to the 19th century. Field trip. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>CVA 110</b>	<b>History and Evolution of Internet Communication</b>	3 Cr.
This course introduces the history and development of the Internet as a communication medium. Taught online, but some on-campus sessions may be required.		
<b>CVA 121</b>	<b>Drawing</b>	0+6, 3 Cr.
A course in the fundamentals of drawing using various media and approaches. Field trip. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>CVA 122</b>	<b>Painting</b>	0+6, 3 Cr.
Problems in painting and other media. Emphasis on color theory and composition. Field trip. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>CVA 125</b>	<b>Ideation</b>	3 Cr.
Students will investigate and explore the creative process in order to generate ideas for art, design, media, and tech projects and more. Through hands-on practice, students will learn how ideation, research, prototyping, and evaluation can inspire and inform. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education requirements.		
<b>CVA 145</b>	<b>Interpersonal and Small Group Communication</b>	3 Cr.
This course provides a study of verbal and nonverbal communication at a variety of person-centered levels, including intrapersonal, dyadic, and small groups. Emphasis is on interactive skill development in both face-to-face and digital modalities, including strategies for self-presentation and relational development in personal and professional contexts.		

<b>CVA 160</b>	<b>Media Storytelling</b>	2+2, 3 Cr.
	Students will study traditional and innovative ways storytelling communicates local and global ideas and information to diverse audiences. Students will develop narrative storytelling capabilities using a variety of media. Students will hone skills relevant to communication and media arts professions by gathering, researching, curating, and editing stories for various audiences and platforms. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education requirements.	
<b>CVA 163</b>	<b>Photography</b>	1+4, 3 Cr.
	This course provides a practical, hands-on overview of photography. Students are introduced to techniques, history, and aesthetics of photography, including how images are made, seen, and valued. Students must have a working digital camera. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>CVA 222</b>	<b>Advanced Studio</b>	3 Cr.
	Continuation of Drawing and/or Painting problems and techniques with a focus on the process of developing informed and personal portfolios of studio artwork. May be repeated. Field trip. Prerequisite: CVA 121 or 122 and Sophomore standing.	
<b>CVA 227</b>	<b>Figure Drawing</b>	0+6, 3 Cr.
	A beginning course in drawing from the human figure. Emphasis is placed on the unique, formal, technical, and conceptual issues involved in the representation of the human form. Media used may include graphite, charcoal, conté crayon, or ink. Field trip. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>CVA 230</b>	<b>Graphic Design</b>	2+2, 3 Cr.
	Students learn the fundamentals of graphic design with a basis in typography and in context of graphic design history and current applications. In this class, students gain the knowledge and skills to use industry-standard tools and software needed to develop a brand and design marketing collateral. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education requirements.	
<b>CVA 243</b>	<b>Public Speaking</b>	3 Cr.
	This course develops speaking and listening skills in the context of various speaking scenarios. Students are introduced to fundamental concepts of effective public speaking, including audience analysis, outlining, research, delivery, critical listening, evaluation, and use of appropriate aides and technology. Students work both individually and in collaboration with the instructor and other students.	
<b>CVA 244</b>	<b>Persuasion and Advocacy</b>	3 Cr.
	Theory in argumentation, advocacy, and persuasion is applied in a variety of communication contexts, with an emphasis on written advocacy. Students prepare a comprehensive final project related to their field of study. A Writing in the Discipline course.	
<b>CVA 251</b>	<b>Studio Television Production</b>	3 Cr.
	Students are introduced to the practice, techniques, and concepts related to television studio production and project management. The course covers planning and producing live, studio-environment television programs, examines different roles and responsibilities of production personnel, and provides practice using terminologies associated with producing and directing studio television productions. In addition, students gain hands-on experience producing programs for VUTV.	
<b>CVA 261</b>	<b>Foundations of Journalism</b>	3 Cr.
	This course introduces students to basic concepts in journalism. Students learn and implement the inverted news pyramid while analyzing various writing styles. Emphasis is placed on copy editing and Associated Press style.	
<b>CVA 263</b>	<b>Advanced Photography</b>	2+2, 3 Cr.
	Advanced studies in techniques, history, and aesthetics of digital photography. Each student must have a working digital camera. Field trip. Prerequisite: CVA 163.	
<b>CVA 265</b>	<b>Public Relations Principles</b>	3 Cr.
	This course provides an overview of the key concepts in the field of public relations. The history, development, principles, and practices of Public Relations, including ethical considerations and societal impact, are examined.	
<b>CVA 270</b>	<b>Introduction to Cinema Studies</b>	3 Cr.
	(Also offered as ENGL 270.) This course introduces students to basic concepts in film analysis. Students employ these concepts in analyzing and describing the varied styles, functions, and social contexts of classical Hollywood, documentary, avant garde, and world art cinema. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	

<b>CVA 271</b>	<b>Cinema Production</b>	3 Cr.
	This course provides a practical, hands-on overview of single camera field production techniques, including preproduction, camera operation and aesthetics, lighting, sound recording, and non-linear editing. Emphasis is placed on the language of audio-visual storytelling through a series of individual projects. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>CVA 272</b>	<b>Lighting the Story</b>	3 Cr.
	Designed to complement a variety of art, photography, and digital media classes, this course provides students with hands-on experience using the essential tools required to complete professional location lighting projects.	
<b>CVA 286</b>	<b>Campus Media Practicum</b>	1 Cr.
	This practicum is designed to provide credit for substantive work in an approved position on the staff of the campus media outlets, including WVUR (the campus radio station), The Torch (the campus newspaper), VUTV (the campus cable channel), and the Beacon (the campus yearbook). Work may include news writing and editing, programming, traffic, production, promotion, design, and other approved assignments. Offered every semester. Prerequisite: consent of practicum supervisor. S/U grade only. May be repeated for a total of 3 credit hours.	
<b>CVA 290</b>	<b>Topics in Communication and Visual Arts</b>	3 Cr.
	The topics examined involve a particular subject in art, communication, or digital media arts and may change from semester to semester. May be repeated if topics are different. Prerequisite: Sophomore standing.	
<b>CVA 291</b>	<b>Topics in World Cinema</b>	3 Cr.
	(Also offered as CHIN 291, FREN 291, GER 291, GKRO 291, and SPAN 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.	
<b>CVA 292</b>	<b>Special Topics in Visual Arts</b>	2+2, 3 Cr.
	This course combines theory and practice in one or more visual arts. May be repeated when topics vary.	
<b>CVA 300</b>	<b>Podcasting</b>	2+2, 3 Cr.
	Students will develop hands-on production skills while simultaneously listening, reading, and reflecting on the increasingly popular field of podcasting, including related fields of documentary, sound art, journalism, oral history, and pop culture. Students study oral history storytelling methods and processes related to podcasting production and distribution. Prerequisite: Sophomore standing.	
<b>CVA 302/572</b>	<b>Intellectual Property and Communication Law</b>	3 Cr.
	This course explores legal issues related to communication and intellectual property, including rights arising from creative works. Emphasis is placed on copyright and trademark law, software and digital media protection, and rights to publicity. Prerequisite: Junior standing.	
<b>CVA 311/511</b>	<b>Organizational Communication</b>	3 Cr.
	This course explores communication theory and practice in complex organizations, including how language and technology shape the contemporary experience of work. A critical cultural perspective on communication allows students to explore how strategic communication and advocacy affect broader discourses about career issues and their resolution in modern life.	
<b>CVA 315/515</b>	<b>Intercultural Communication</b>	3 Cr.
	Students will explore the role of power, history, globalization, discourse, media, and language in intercultural communication, while critically investigating how cultural beliefs, values, and systems impact human interactions and identity development. Students will heighten cultural awareness and communication competence through discussions, presentations, and lectures. Prerequisite: Junior standing.	
<b>CVA 322/503</b>	<b>Sports Media Formats</b>	3 Cr.
	This course serves as an introduction to the sports media industry and focuses on the reporting, producing, and planning that goes into all forms of media. In addition to the how and why of sports media, the ethics of sports journalism, and the role of sports in society also will be examined. Prerequisite: Junior or Senior standing or consent of instructor.	
<b>CVA 324</b>	<b>Video Art</b>	2+2, 3 Cr.
	Students create video and audio art with an emphasis on developing experimental and non-narrative techniques. Students observe a portion of the history and aesthetics of film, video, and audio art. Prerequisite: CVA 163 or CVA 271.	

<b>CVA 327</b>	<b>Advanced Figure Drawing</b>	0+6, 3 Cr.
	Continuation of Figure Drawing problems with increased concentration on student's individual goals and interests. Students may use drawing, painting or sculpting mediums. May be repeated. Field trip. Prerequisite: CVA 227.	
<b>CVA 330</b>	<b>Advanced Design</b>	2+2, 3 Cr.
	Students explore advanced problems in visual communications and design while mastering traditional practices. Projects are focused on building community through design and can feature brand, package, publication, and web design and development. Field trip. Prerequisite: CVA 230. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>CVA 331</b>	<b>Web Design</b>	2+2, 3 Cr.
	Students plan, design, and build a professional website with an emphasis on communicating a consistent brand, responsiveness across multiple platforms, user experience (UX) and user interface (UI) design, search engine optimization (SEO), and analytics. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: CVA 230.	
<b>CVA 345/512</b>	<b>Leadership Communication</b>	3 Cr.
	This course examines the role of communication in leadership in a variety of global and multicultural contexts. Students study how leadership and followership influence an organization's internal communication as well as its external image and reputation. Prerequisite: Junior standing.	
<b>CVA 350</b>	<b>Audio Production</b>	3 Cr.
	This course provides students with hands-on experience recording and producing a range of audio projects, both as stand-alone creative works and as complements to visual imaging.	
<b>CVA 351</b>	<b>Documentary Production</b>	2+2, 3 Cr.
	This course introduces students to the process of documentary-style video production. Emphasis is placed on the production of video documentaries. Students practice preproduction, production, and postproduction. Prerequisite: CVA 271.	
<b>CVA 361</b>	<b>Advanced Journalism</b>	3 Cr.
	This course provides an in-depth look into reporting practices for various types of media. Research and interviewing styles are examined as well as the difference between hard and soft news. Prerequisite: CVA 261, Junior standing. A Writing in the Discipline course.	
<b>CVA 362/562</b>	<b>Communication Cases and Campaigns</b>	3 Cr.
	This course examines and evaluates real world examples of strategic communication and explores consequences for stakeholders in a variety of contexts, including public relations, corporate communication, organizational communication, and communication law. May involve researching and writing an original case study.	
<b>CVA 364</b>	<b>Public Relations Writing</b>	3 Cr.
	Students will learn how to gather and critically analyze information, find the story angle and write about it clearly and concisely for a variety of audiences. Students will master the basics of public relations writing through regular exercises and test those skills by creating current stories while learning about the real issues facing communications in the context of public relations. Prerequisite: Junior standing.	
<b>CVA 365</b>	<b>Corporate Advocacy and Activist Communication</b>	3 Cr.
	This course examines rhetorical and ethical implications of corporate image and issue management campaigns, including their influence on culture and governance. This course addresses both adversarial and collaborative approaches with activist groups, non-governmental organizations (NGOs), and other stakeholders.	
<b>CVA 366</b>	<b>Negotiation and Conflict Resolution</b>	3 Cr.
	This course examines the theory and process required to achieve favorable negotiation outcomes and to resolve conflicts. Significant emphasis is placed on applied learning and skill building while completing negotiation simulations.	
<b>CVA 371</b>	<b>Advanced Cinema Production</b>	3 Cr.
	This course focuses on single-camera field production and postproduction. Working in small crews, students will develop, produce, direct, shoot, and edit short movies in either the narrative or documentary style. Course may be repeated for credit. Prerequisite: CVA 271 or permission of instructor.	

<b>CVA 373/603</b>	<b>Legal Environment of Digital Media</b>	3 Cr.
	This course explores the legal decisions and government regulations which form the legal environment of digital media and communication. Topics include rights and restriction on the distribution of electronic media content, rights to privacy, copyright and trademark law, content licensing, and legal issues affecting designers and hosts of online digital media. Emerging topics in digital media creation and distribution also are discussed.	
<b>CVA 386</b>	<b>Internship</b>	1-3 Cr.
	This course includes supervised work experience with an organization related to the student's field of study. Students reflect on their experiences in an online collaborative environment and make a final oral presentation about the internship. Students must complete a minimum of 45 hours of work per credit hour. Prerequisite: consent of the department internship coordinator. Open to declared departmental majors or minors only. Students must adhere to internship requirements described on the department's web site. S/U grade only.	
<b>CVA 390</b>	<b>Topics in Communication and Visual Arts</b>	3 Cr.
	The topics examined involve a particular subject in art, communication, or visual arts and may change from semester to semester. May be repeated if topics are different. Prerequisite: Junior standing.	
<b>CVA 392</b>	<b>Special Topics in Visual Arts</b>	2+2, 3 Cr.
	This course combines theory and practice in one or more visual arts. May be repeated when topics vary. Prerequisite: Sophomore standing.	
<b>CVA 401/601</b>	<b>Social Media</b>	3 Cr.
	This course examines the history and development of social networking sites. Critiques of social networking objectives and ethical considerations form the core focus for this course. Prerequisite: Junior or Senior standing or consent of instructor.	
<b>CVA 465</b>	<b>Race, Class, and Gender in Media</b>	3 Cr.
	This course is designed to give students a theoretical, as well as practical, experience with issues of gender, race, class, and sexuality as they manifest in mediated artifacts of popular culture. The course is taught from a cultural studies perspective where students will gain skills in critical analysis and media literacy. Prerequisite: Junior standing. May be used to fulfill the Cultural Diversity or the Social Science course component of the General Education Requirements.	
<b>CVA 472</b>	<b>Screenwriting</b>	3 Cr.
	This course explores the relationship between the written script and the finished movie through creative work and critical analysis. With particular emphasis on creating entertainment for an audience, students concentrate on building fictional narratives through plot and character development. Prerequisite: Junior standing. A Writing in the Discipline course.	
<b>CVA 481</b>	<b>Cooperative Education in Communication I</b>	0.5-3 Cr.
	This course provides professional work experience with a cooperating employer. Written report required. Prerequisite: approval of the chair of the department.	
<b>CVA 482</b>	<b>Cooperative Education in Communication II</b>	0.5-3 Cr.
	Continuation of CVA 481. Prerequisite: CVA 481 and approval of the chair of the department. May be repeated beyond 483 for additional credit.	
<b>CVA 483</b>	<b>Cooperative Education in Communication III</b>	0.5-3 Cr.
	Continuation of CVA 482. Prerequisite: CVA 482 and approval of the chair of the department. May be repeated beyond 483 for additional credit.	
<b>CVA 490</b>	<b>Topics in Communication and Visual Arts</b>	3 Cr.
	The topics examined in this course involve an in-depth study of a particular subject in a field of art, communication, or media arts. Topics may vary from semester to semester. May be repeated for credit, provided topics are different. Prerequisite: Junior standing.	
<b>CVA 491</b>	<b>Applied Topics in Visual Arts</b>	0+6, 3 Cr.
	In this course students apply advanced concepts and techniques to the production of visual arts. May be repeated when topics vary. Prerequisite: Junior standing.	
<b>CVA 492</b>	<b>Special Topics in Visual Arts</b>	2+2, 3 Cr.
	This course combines theory and practice in one or more visual arts. May be repeated when topics vary. Prerequisite: Junior standing.	

<b>CVA 495</b>	<b>Independent Study</b>	1-3 Cr.
	Specific topics based on interests of students and faculty. Students must submit a successful proposal to an appropriate faculty member prior to registering for this course. May be repeated if topics are different.	
<b>CVA 497</b>	<b>Honors Work in Communication and Visual Arts</b>	3 Cr.
	For further information, see Honors Work, College of Arts and Sciences, page 56.	
<b>CVA 498</b>	<b>Honors Candidacy in Communication and Visual Arts</b>	3 Cr.
	For further information, see Honors Work, College of Arts and Sciences, page 56.	
<b>CVA 499</b>	<b>Capstone Senior Project</b>	3 Cr.
	This course provides students with either a team project that integrates communication and media arts or, with instructor approval, an individual in-depth project. It will incorporate theory and original research from the proposal stage through its execution and evaluation. Prerequisite: Senior standing.	

# Computing and Information Sciences

Learn more about the [Department of Computing and Information Sciences](#) at Valpo online.

**Professor Yayimli (chair); Associate Professors Glass, Rosasco; Lecturers Poposki, Streuber, Wainwright, Wichlinski.**

Computing and programmable devices permeate modern culture, and most intellectual disciplines have been transformed by computational thinking. Computer science thinks about problems in terms of the logical operations machines can perform; put more informally, computer science considers how to make machines do things. Students learn modern programming languages and environments, algorithms, professional practices, and computational reasoning. This understanding is useful for becoming a computing practitioner and understanding cyber security, as well as being able to engage with computational processes in other disciplines. Careers in computer science include systems programming, applications programming, cyber security, and data management.

In addition to the major and minor listed below, students are eligible to enroll in a 5-year program that leads to both a Bachelor of Science in Computer Science and a Master of Science in Cyber Security. For more information contact the chair of the department.

A student planning to major in Computer Science should begin taking both Computer Science and Mathematics courses in the freshman year.

## Bachelor of Arts – Computer Science Major (Minimum 32 Cr.)

<b>CS 157</b>	Algorithms and Programming	2+3, 3 Cr.
<b>CS 158</b>	Algorithms and Abstract Data Types	2+3, 3 Cr.
<b>CS 493</b>	Seminar in Professional Practices	2 Cr.

**At least 12 additional credits must be from Computer Science or allowed elective courses numbered 300 or above**

**Remaining credits must be from Computer Science or allowed elective courses numbered 200 or above**

### Additional Required Courses

<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 220</b>	Discrete Mathematics	3 Cr.

### One of the following:

<b>CE 202</b>	Statistical Applications in Civil Engineering	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.

**Bachelor of Science – Computer Science Major (Minimum 36 Cr.)**

<b>CS 157</b>	Algorithms and Programming	2+3, 3 Cr.
<b>CS 158</b>	Algorithms and Abstract Data Types	2+3, 3 Cr.
<b>CS 250</b>	Object Oriented Programming	2+3, 3 Cr.
<b>CS 493</b>	Seminar in Professional Practices	2 Cr.

**One course from the following options:**

<b>CS 358</b>	Software Design and Development	3+2, 4 Cr.
<b>CS 372</b>	Computability and Computational Complexity	4 Cr.

**At least 12 additional credits must be from Computer Science or allowed elective courses numbered 300 or above**

**Remaining credits must be from Computer Science or allowed elective courses numbered 200 or above**

**Additional Required Courses**

<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 220</b>	Discrete Mathematics	3 Cr.

**One of the following:**

<b>CE 202</b>	Statistical Applications in Civil Engineering	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.

**Computer Science Minor (Minimum 15 Cr.)**

<b>CS 157</b>	Algorithms and Programming	2+3, 3 Cr.
<b>CS 158</b>	Algorithms and Abstract Data Types	2+3, 3 Cr.

**Nine credits from Computer Science or allowed elective courses numbered 200 or above**

**Table of Non-CS Classes Allowed as CS Elective**

<b>DATA 151</b>	Introduction to Data Science	100-Level
<b>ECE 221</b>	Digital Logic Design	300-Level
<b>MATH 371</b>	Experimental Mathematics	300-Level
<b>DATA 433</b>	Data Mining and Applications	300-Level

**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 36-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 2.500 cumulative grade point average requirement, students must present a 2.500 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 57.

## Computer Science Courses

<b>CS 115</b>	<b>Computers and Computation</b>	3 Cr.
	A general survey of central topics in computer science with emphasis on the scientific aspects of computation, and demonstration of how computing relates to other disciplines. Topics include algorithms and their analysis, human-machine interfaces, artificial intelligence, software engineering, modeling of data, and serial and parallel computation. Students will perform computational experiments in a laboratory environment. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>CS 128</b>	<b>Introduction to Programming</b>	1-2 Cr.
	An introduction to computer problem-solving techniques using a high-level language. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 on the math placement exam.	
<b>CS 156</b>	<b>Fundamentals of Programming</b>	2+2, 3 Cr.
	A study of fundamental programming constructs, algorithms, data structures, and object orientation. An emphasis is placed on programming strategies and the application of computer algorithms to solve problems in engineering and mathematics. This course is currently listed only for the purposes of transfer credit equivalence. Students cannot receive credit for more than one of CS 156, CS 157, and ECE 251.	
<b>CS 157</b>	<b>Algorithms and Programming</b>	2+3, 3 Cr.
	A first course in problem solving through algorithm development and analysis, with an introduction to software design. Students design algorithms for the solution of elementary problems, and writes, documents, and debugs programs for the implementation of those algorithms. Students cannot receive credit for more than one of CS 156, CS 157, and ECE 251. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>CS 158</b>	<b>Algorithms and Abstract Data Types</b>	2+3, 3 Cr.
	A continuation of CS 157, with an emphasis on developing more skills in complex program development, data structures, and object orientation. Topics include stacks, queues and linked lists. Students design and write intermediate-sized programs. Students cannot receive credit for both CS 158 and ECE 252. Prerequisite: Grade of C or higher in one of CS 156, CS 157, or ECE 251.	
<b>CS 225</b>	<b>Programming Languages</b>	1+1, 2 Cr.
	A study of programming languages, and their differences and similarities. Topics include syntax, translation, execution, design, abstraction, activation, record stack, recursion, and different programming paradigms. Prerequisite: CS 158 or ECE 252.	
<b>CS 231</b>	<b>Introduction to Linux</b>	1+1, 2 Cr.
	This course is an introduction to the Linux operating system. Topics include the history of UNIX and Linux systems, use of GNU commands and utilities, Linux file system structure and file management, file creation and editing using vi, and use of and programming with the bash shell. Prerequisite: CS 157 or ECE 251.	
<b>CS 240</b>	<b>Assembly Language Programming</b>	1+1, 2 Cr.
	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. Prerequisite: CS 158 or ECE 252 (may be taken concurrently).	
<b>CS 245</b>	<b>C Programming</b>	1+1, 2 Cr.
	An introduction to the C programming language and the Unix operating system. Topics include syntax, dynamic memory allocation, concurrency, synchronization, pointers and addresses, Unix system calls, common mistakes unique to C. Prerequisite: CS 157, ECE 251, or consent of the instructor.	
<b>CS 250</b>	<b>Object Oriented Programming</b>	2+3, 3 Cr.
	A course on designing and building applications in an object-oriented language with an introduction to software engineering. Students will learn the philosophy of object-oriented programming software reuse strategies, and demonstrate effective programming practices. Prerequisite: CS 158 or ECE 252.	
<b>CS 260</b>	<b>Mobile Computing</b>	2+1, 3 Cr.
	Experience creating applications in a mobile device environment such as Android, IOS, or Windows Mobile. Topics include the model, view, controller paradigm, user interaction, hardware device interaction, and common patterns of application behavior. Prerequisite: CS 157, ECE 251, or consent of the instructor.	

<b>CS 285</b>	<b>Practicum in Computer Science</b>	0.5-3 Cr.
	Intensive professional experience and/or technical training in a computing related field. A written report is required. S/U grade only. Prerequisites: consent of chair of the department.	
<b>CS 290</b>	<b>Topics in Computer Science</b>	1-3 Cr.
	Topics will vary according to faculty and student interest. This course may be repeated for credit, provided that topics are different. Prerequisite: consent of the instructor.	
<b>CS 295</b>	<b>Independent Study in Computer Science</b>	1-3 Cr.
	The student studies a topic in Computer Science under the direction of a faculty member. Written work is required. Regular classes delivered in independent study format are offered under their regular catalog class number. Prerequisite: consent of the chair of the department.	
<b>CS 325/525</b>	<b>Simulation and Modeling</b>	3 Cr.
	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: MATH 131, either CS 157 or ECE 251, and one of STAT 140, 240, IDS 205, or CE 202.	
<b>CS 330/</b>		
<b>CYB 530</b>	<b>Operating Systems</b>	3+1, 2 Cr.
	An introduction to the concepts of modern operating systems. Topics include processes, scheduling, synchronization, virtual memory, file systems, shells, and security. Lab topics include common operating system utilities and commands, as well as programming to use OS facilities. Pre/corequisite: CS 240 or 245.	
<b>CS 335/</b>		
<b>IT 535</b>	<b>Networks</b>	2+1, 3 Cr.
	An introduction to the concepts of computer networks, with an emphasis on the current technologies and protocols. Topics include the design principles of the layered TCP/IP model and software defined networks, as well as deeper understanding of network services used every day. Lab component provides hands-on experience with a network analyzer, socket programming, and various network configuration tools. Prerequisite: CS 157 or ECE 251.	
<b>CS 340/</b>		
<b>IT 540</b>	<b>Web Programming</b>	2+1, 3 Cr.
	An introduction to web technology, covering a number of specific systems, such as html, php, SQL, javaScript, and XML. A laboratory component provides hands-on experience. Prerequisite: CS 157 or ECE 251 or consent of the instructor.	
<b>CS 342/</b>		
<b>CYB 542</b>	<b>Theory and Practice of Cryptography</b>	3 Cr.
	The course approaches the fundamental principles of cryptography and network security from both theoretical and applied perspectives. It considers classical goals of cryptography such as privacy, authenticity, and integrity. Topics include stream and block ciphers, symmetric and asymmetric encryption schemes, message authentication codes, public key encryption, and digital signatures. Additional topics include number theory, traffic analysis, and crypto-attacks. Prerequisite: CS 158 or ECE 252.	
<b>CS 345/545</b>	<b>Artificial Intelligence</b>	2+1, 3 Cr.
	An introduction to the concepts and computational techniques of artificial intelligence, including both modern techniques and techniques of historical interest. Topics include symbolic, neural, and numerical representations, along with their associated tools and algorithms for machine decision-making and machine learning. The interactions between current AI applications and society will be examined. Lab exercises include learning to use AI architectures and implementing fundamental algorithms. Prerequisites: CS 158 or ECE 252, and one of MATH 131, STAT 140, STAT 240, PSY 201, IDS 205, or CE 202.	
<b>CS 350</b>	<b>Database Management Systems</b>	3 Cr.
	A study of relational and object-oriented database management systems, data modeling, and database design. Both SQL and Non-SQL databases will be studied. Prerequisite: CS 157 or ECE 251.	
<b>CS 358/558</b>	<b>Software Design and Development</b>	3+2, 4 Cr.
	The specification, design, implementation, documentation, testing, and management of software systems. Intensive work on a group project, directed by the instructor, to design and develop a usable software system. Students will learn professional tools and practices for software project implementation and management. Prerequisite: CS 250.	

<b>CS 365/565</b>	<b>Interactive Computer Graphics</b>	3 Cr.
	A study of the fundamentals of interactive computer graphics systems and software. Topics include the representation and algorithms for manipulating graphics, such as geometric transformations, projections, lighting, textures, and rasterizing. Students will use graphics programming paradigms, such as graphics pipelines and ray tracing. Prerequisites: CS 158 or ECE 252, and MATH 131.	
<b>CS 372/572</b>	<b>Computability and Computational Complexity</b>	4 Cr.
	Emphasis on the limits to the power of computation and a systematic analysis of the algorithms that harness it. Topics include the Chomsky hierarchy, several automata and language models, and demonstrations of uncomputable problems, and various design strategies. Prerequisites: either CS 158 or ECE 252, either MATH 220 or MATH 131, and at least 10 credits in CS.	
<b>CS 374</b>	<b>Computational Linear Algebra</b>	2+2, 3 Cr.
	(Also offered as DATA 374 and MATH 374.) A survey of computational applications of linear algebra for solving science and engineering problems. Topics include linear systems in both equation and matrix form, row operations, inverses and determinants, eigenvalues, Gaussian elimination, matrix decomposition (including singular value and QR decompositions), sparse vs. dense matrices, and approximation. Topics are explored through applications to large data sets, with programming in both Python and MATLAB environments. Other advanced topics related to data mining may be covered. Prerequisites: one of CS 157 or DATA 151, and one of MATH 260 or MATH 264.	
<b>CS 381</b>	<b>Cooperative Education in Computer Science</b>	0.5-3 Cr.
	The application of computer science concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. S/U grade only. May be repeated for additional credit. Prerequisite: at least 10 credits in CS or consent of the chair of the department.	
<b>CS 458</b>	<b>Senior Project</b>	3 Cr.
	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.	
<b>CS 490</b>	<b>Advanced Topics in Computer Science</b>	1-3 Cr.
	An advanced course for computer science majors. Topics will vary according to faculty and student interest. This course is only offered when there is sufficient demand. May be repeated for credit, provided topics are different. Prerequisite: consent of the instructor.	
<b>CS 493/593</b>	<b>Seminar in Professional Practices</b>	2 Cr.
	Students and faculty discuss professionalism and ethical responsibilities in software development and human-computer interaction, and explore laws, risks and liabilities, codes of ethics, privacy, international and gender related issues, philosophical frameworks, and economic implications. Students will learn and develop oral presentation and research skills. A Writing in the Discipline course. Prerequisites: junior standing, at least 12 credits of CS courses numbered 200 or above, and a Writing Intensive Course.	
<b>CS 495</b>	<b>Independent Study in Computer Science</b>	1-3 Cr.
	The student studies an advanced topic in Computer Science under the direction of a faculty member. Written work is required. Regular classes delivered in independent study format are offered under their regular catalog class number. May be repeated for credit, provided topics are different. Prerequisite: consent of the chair of the department.	
<b>CS 496</b>	<b>Research in Computer Science</b>	0-3 Cr.
	Students undertake a research problem in Computer Science under the direction of a faculty member. Written and oral reports are required. S/U grade only. Prerequisite: consent of the Instructor or chair of the department.	
<b>CS 497</b>	<b>Honors Work in Computer Science</b>	3 Cr.
	See Honors Work, page 56.	
<b>CS 498</b>	<b>Honors Candidacy in Computer Science</b>	3 Cr.
	See Honors Work, page 56.	

# Data Science

Learn more about [Data Science](#) at Valpo online.

**Associate Professor Tiffany Kolba (director).**

## Administration

This program is administered by the Department of Mathematics and Statistics in consultation with the Department of Computing and Information Sciences.

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

Data Science is considered an interdisciplinary program. See page 349 for more information.

## Objectives

A data scientist analyzes complex systems and solves real world problems through the analysis of data, and in particular, very large sets of data. Many scientific disciplines, our economy, and even our providers of streaming entertainment increasingly rely on data. According to the Data Science Association, components of the field of Data Science include “predictive/prescriptive analytics, algorithm design and execution, applied machine learning, statistical modeling, and data visualization.”

Because of the interdisciplinary nature of Data Science, a student wishing to obtain a Bachelor of Science in Data Science must take courses in Data Science and from the partner disciplines of Statistics, Mathematics, and Computer Science. Additionally, students should explore an area of application through selection of one or more courses from an appropriate field, as described below. Students are strongly encouraged to take a minor or a second major in their applied field of interest.

## Bachelor of Science – Data Science Major (Minimum 41 Cr.)

Statistics Courses		9-10 Cr.
<b>One course from the following options:</b>		
STAT 140	General Statistics	3 Cr.
STAT 240	Statistical Analysis	3 Cr.
PSY 201	Statistical Methods	3 Cr.
IDS 205	Business Statistics	3 Cr.
CE 202	Statistical Applications in Civil Engineering	3 Cr.
<b>Note: The preferred statistics course is STAT 240.</b>		
<b>One course from the following options:</b>		
STAT 340	Statistics for Decision Making	3 Cr.
IDS 340	Statistics for Decision Making	3 Cr.
ECON 325	Econometrics	3 Cr.
<b>One course from the following options:</b>		
STAT 343	Time Series Analysis	3 Cr.
STAT 344	Stochastic Processes	3 Cr.
STAT 441	Probability	4 Cr.
Mathematics Courses		8-10 Cr.
MATH 131	Calculus I	3+2, 4 Cr.
MATH 220	Discrete Mathematics	3 Cr.
<b>One course from the following options:</b>		
MATH 260	Linear Systems and Matrices	1 Cr.
MATH 264	Linear Algebra	3 Cr.
Computer Science Courses		11-12 Cr.
CS 157	Algorithms and Programming	2+3, 3 Cr.
CS 158	Algorithms and Abstract Data Types	2+3, 3 Cr.
CS 350	Database Management Systems	2+3, 3 Cr.
<b>One course from the following options:</b>		
CS 225	Programming Languages	1+1, 2 Cr.
CS 325	Simulation and Modeling	3 Cr.
CS 345	Artificial Intelligence	2+1, 3 Cr.

## Data Science

<b>Data Science Courses</b>		<b>12 Cr.</b>
<b>DATA 151</b>	Introduction to Data Science	2+3, 3 Cr.
<b>DATA 299</b>	Data Science Colloquium I	1 Cr.
<b>DATA 399</b>	Data Science Colloquium II	1 Cr.
<b>DATA 433</b>	Data Mining and Applications	2+3, 3 Cr.
<b>DATA 499</b>	Data Science Capstone	1 Cr.
<b>One course from the following options:</b>		
<b>DATA 374</b>	Computational Linear Algebra	2+2, 3 Cr.
<b>DATA 375</b>	Scientific Visualization	3 Cr.
<b>DATA 490</b>	Advanced Topics in Data Science	3 Cr.
<b>ECON 473</b>	Applied Data Science	3 Cr.
<b>Application Area</b>		<b>1-3 Cr.</b>
<b>One course from the following options:</b>		
<b>BIO/MATH 321</b>	Mathematical Models of Infectious Diseases	3 Cr.
<b>GEO/MET 460</b>	Data Analysis	3 Cr.
<b>ECON 473</b>	Applied Data Science (if not taken above)	3 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>PSY 370</b>	Laboratory in Experimental Design and Analysis	3 Cr.
<b>Additional courses may be approved by the program director.</b>		

## **Data Science Minor (Minimum 15 Cr.)**

<b>DATA 151</b>	Introduction to Data Science	2+3, 3 Cr.
<b>One course from the following options:</b>		
<b>DATA 433</b>	Data Mining and Applications	2+3, 3 Cr.
<b>BUS 440</b>	Data Mining	3 Cr.
<b>One course from the following options:</b>		
<b>CS 350</b>	Database Management Systems	3 Cr.
<b>BUS 330</b>	Database Management Systems	3 Cr.
<b>One course from the following options:</b>		
<b>DATA 374</b>	Computational Linear Algebra	2+2, 3 Cr.
<b>DATA 375</b>	Scientific Visualization	3 Cr.
<b>DATA 490</b>	Advanced Topics in Data Science	3 Cr.
<b>At least 3 additional credits coming from courses with a DATA prefix or from the following options:</b>		
<b>BIO/MATH 321</b>	Mathematical Models of Infectious Diseases	3 Cr.
<b>CS 325</b>	Simulation and Modeling	3 Cr.
<b>CS 345</b>	Artificial Intelligence	2+1, 3 Cr.
<b>ECE 452</b>	Digital Signal Processing	3 Cr.
<b>ECON 473</b>	Applied Data Science	3 Cr.
<b>GEO/MET 460</b>	Data Analysis	3 Cr.
<b>ME 333</b>	Mechanical Measurements Laboratory	4 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>PSY 370</b>	Laboratory in Experimental Design and Analysis	3 Cr.
<b>STAT 343</b>	Time Series Analysis	3 Cr.
<b>STAT 361</b>	Introduction to R	1 Cr.
<b>STAT 363</b>	Introduction to SAS	3 Cr.

## Data Science Courses

<b>DATA 151</b>	<b>Introduction to Data Science</b>	2+3, 3 Cr.
	Introduction to the use of computer-based tools for the analysis of large data sets for the purpose of knowledge discovery. Students will learn to understand the Data Science process and the difference between deductive hypothesis-driven and inductive data-driven modelling. Students will have hands-on experience with appropriate on-line analytical processing and data mining software platforms, and will complete a project using real data. Pre/corequisite: one of STAT 140, STAT 240, IDS 205, or PSY 201.	
<b>DATA 299</b>	<b>Data Science Colloquium I</b>	1 Cr.
	Students read current media or journal articles involving data science, and present written and/or oral analyses. Students evaluate senior presentations given by students in DATA 499, and provide written feedback on project proposals from DATA 399. Guest speakers may be arranged to present on a variety of topics. A Writing in the Discipline course. Meets jointly with DATA 399 and DATA 499. Pre/corequisite: DATA 151.	
<b>DATA 374/ AMOD 574</b>	<b>Computational Linear Algebra</b>	2+2, 3 Cr.
	(Also offered as MATH 374 or CS 374.) A survey of computational applications of linear algebra for solving science and engineering problems. Topics include linear systems in both equation and matrix form, row operations, inverses and determinants, eigenvalues, Gaussian elimination, matrix decomposition (including singular value and QR decompositions), sparse vs. dense matrices, and approximation. Topics are explored through applications to large data sets, with programming in both Python and MATLAB environments. Other advanced topics related to data mining may be covered. Prerequisites: one of CS 157 or DATA 151, and one of MATH 260 or MATH 264.	
<b>DATA 375</b>	<b>Scientific Visualization</b>	3 Cr.
	Students are introduced to a variety of techniques for visualizing scientific data, with an emphasis on representing large datasets in informative ways. Data from a variety of disciplines is studied and taxonomies for viewing this data are developed. The interfaces used to manipulate views of such datasets in a virtual environment are also studied. Prerequisites: DATA 151 and CS 158.	
<b>DATA 381</b>	<b>Cooperative Education in Data Science</b>	0.5-3 Cr.
	The application of data science concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. S/U grade only. May be repeated for additional credit. Prerequisite: Data Science major and approval of the director of the Data Science program.	
<b>DATA 386</b>	<b>Internship in Data Science</b>	1-3 Cr.
	Opportunities for students to have direct, supervised experience in public agencies or private industry, such as scientific, technical, or financial firms. S/U grade only. Prerequisites: Data Science major and approval of the director of the Data Science program.	
<b>DATA 399</b>	<b>Data Science Colloquium II</b>	1 Cr.
	Students will present an ethical case study on an analytical or statistical data topic. Students will propose and design a capstone project integrating their mathematical, statistical, computational and applied knowledge. Guest speakers may be arranged to present on a variety of topics. A Writing in the Discipline course. Meets jointly with DATA 299 and DATA 499. Prerequisite: DATA 299 and a WIC course.	
<b>DATA 433</b>	<b>Data Mining and Applications</b>	2+2, 3 Cr.
	Data mining is a broad area that integrates techniques from several fields, including machine learning, statistics, pattern recognition, artificial intelligence, and database systems, for the analysis of large volumes of data. This course gives a wide exposition of these techniques and their software tools. Prerequisite: DATA 151 or CS 157 and one of STAT 140, STAT 240, IDS 205, PSY 201, or CE 202. Students may not receive credit for both DATA 433 and BUS 440.	
<b>DATA 490/590</b>	<b>Advanced Topics in Data Science</b>	3 Cr.
	An intensive study of selected topics, methods, techniques, and problems in Data Science. Only offered when there is sufficient demand. May be repeated for credit, provided topics are different. Prerequisites will depend on the content.	

<b>DATA 495</b>	<b>Independent Study in Data Science</b>	1-3 Cr.
	Students study advanced topics in data science under the supervision of a faculty member. Written work is required. May be repeated for credit. Prerequisite: consent of the chair of the department.	
<b>DATA 496</b>	<b>Research in Data Science</b>	0-3 Cr.
	Students undertake a research problem in data science under the direction of a faculty member. Written and oral reports are required. S/U grade only. May be repeated for credit. Prerequisite: Consent of the instructor or chair of the department.	
<b>DATA 497</b>	<b>Honors Work in Data Science</b>	3 Cr.
	See Honors Work, page 56.	
<b>DATA 498</b>	<b>Honors Candidacy in Data Science</b>	3 Cr.
	See Honors Work, page 56.	
<b>DATA 499</b>	<b>Data Science Capstone</b>	1 Cr.
	Students will undertake a capstone project integrating their applied domain knowledge and general data-science coursework. The project will culminate in a final paper and presentation. Guest speakers may be arranged to present on a variety of topics. Meets jointly with DATA 299 and DATA 399. Prerequisite: DATA 399.	

# Economics

Learn more about the [Department of Economics](#) at Valpo online.

**Associate Professors Beck, Devaraj (chair), Gundersen; Assistant Professor Hsu.**

Economics provides a logical ordered 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 regulation 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, an international economics honor society.

## Bachelor of Arts – General Economics Major (Minimum 27 Cr.)

<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>ECON 321</b>	Intermediate Microeconomic Theory	3 Cr.
<b>ECON 322</b>	Intermediate Macroeconomic Theory	3 Cr.
<b>ECON 325</b>	Econometrics	3 Cr.
<b>Twelve credits of Electives in Economics</b>		<b>12 Cr.</b>
<b>Additional Requirements:</b>		
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>One course from the following options:</b>		
<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.

**Note: A minimum of two of the four economics electives must be at the 300 level or higher.**

ECON 136 and ECON 486 will not count towards fulfilling the minimum major requirements.

## Bachelor of Arts – Economics and Computer Analysis Major (Minimum 27 Cr.)

<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>ECON 321</b>	Intermediate Microeconomic Theory	3 Cr.
<b>ECON 322</b>	Intermediate Macroeconomic Theory	3 Cr.
<b>ECON 325</b>	Econometrics	3 Cr.
<b>Twelve credits of Electives in Economics</b>		<b>12 Cr.</b>
<b>Additional Requirements:</b>		
<b>CS 157</b>	Algorithms and Programming	2+3, 3 Cr.
<b>CS 325</b>	Simulation and Modeling	3 Cr.
<b>Mathematics Minor including the following courses:</b>		
<b>One course from the following options:</b>		
<b>MATH 124</b>	Finite Mathematics	4 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>One course from the following options:</b>		
<b>MATH 122</b>	Applied Calculus	4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>MATH 320</b>	Dynamical Systems (or an approved alternative)	3 Cr.

**Note: A minimum of two of the four economics electives must be at the 300 level or higher.**

ECON 136 and ECON 486 will not count towards fulfilling the minimum major requirements.

**General Economics Minor (Minimum 18 Cr.)**

<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.

**One course from the following options:**

<b>ECON 321</b>	Intermediate Microeconomic Theory	3 Cr.
<b>ECON 322</b>	Intermediate Macroeconomic Theory	3 Cr.
<b>ECON 325</b>	Econometrics	3 Cr.

**One additional course at the 300 level or above**

Additional credits in ECON as required

**Additional Requirements:**

<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
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ECON 136 and ECON 486 will not count towards fulfilling the minimum minor requirements.

**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.

**Economics Courses**

<b>ECON 136</b>	<b>The Economics of Health, Education, and Welfare</b>	3 Cr.
	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 to fulfill the Cultural Diversity or the Social Science course component of the General Education Requirements.	
<b>ECON 210</b>	<b>Environmental Economics and Policy</b>	3 Cr.
	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.	
<b>ECON 221</b>	<b>Principles of Microeconomics</b>	3 Cr.
	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.	
<b>ECON 222</b>	<b>Principles of Macroeconomics</b>	3 Cr.
	An introduction to macroeconomic analysis with emphasis on national income, consumer spending, investment, government, and monetary aspects.	
<b>ECON 233</b>	<b>The Economics of Race and Gender</b>	3 Cr.
	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 to fulfill the Cultural Diversity or the Social Science course component of the General Education Requirements.	
<b>ECON 236</b>	<b>Contending Economic Theories</b>	3 Cr.
	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: ECON 221 or ECON 222.	
<b>ECON 290</b>	<b>Topics in Economics</b>	3 Cr.
	A course in which a special topic in economics is given intensive study. Topics, descriptions, and prerequisites will be announced in advance. May be repeated for credit if topics are different. Prerequisites vary by topic.	
<b>ECON 321</b>	<b>Intermediate Microeconomic Theory</b>	3 Cr.
	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 and MATH 131.	

<b>ECON 322</b>	<b>Intermediate Macroeconomic Theory</b>	3 Cr.
	A critical examination of theories of national income determination and of techniques for measuring and analyzing aggregate economic activity. Prerequisite: ECON 222. Prerequisite or Corequisite: MATH 111 or placement higher than MATH 111 in the Math Placement process.	
<b>ECON 325/525</b>	<b>Econometrics</b>	3 Cr.
	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, ECON 222, MATH 131 and one of the following: STAT 140, STAT 240, PSY 201, or IDS 205.	
<b>ECON 326</b>	<b>International Economics</b>	3 Cr.
	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 ECON 222.	
<b>ECON 336/536</b>	<b>Economics of Developing Nations</b>	3 Cr.
	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 ECON 222, and junior standing. May be used to fulfill the Cultural Diversity or the Social Science course component of the General Education Requirements.	
<b>ECON 337/537</b>	<b>Public Economics</b>	3 Cr.
	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 and ECON 222.	
<b>ECON 338/538</b>	<b>Economics of Financial Markets</b>	3 Cr.
	A focus on financial markets and their relationship to the economy. Topics include modern portfolio theory, the capital asset pricing model, arbitrage pricing theory, and the efficient market hypothesis. The valuations of fixed income, equity, and derivative securities are also explored. Prerequisites: ECON 221, ECON 222, and junior standing.	
<b>ECON 339/539</b>	<b>Money and Banking</b>	3 Cr.
	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.	
<b>ECON 367/567</b>	<b>Sports Economics</b>	3 Cr.
	A study of the issues in sports from an economics perspective. The course will apply economic theory to decisions pertaining to the sports industry that have implications for broadcast revenues, merchandise sales and advertising revenues. The course will also cover topics such as the market structure of sports leagues and organizations, collective bargaining and athlete compensations, and public policies pertaining to the sports industry. Prerequisite: ECON 221.	
<b>ECON 370</b>	<b>The History of Economic Thought</b>	3 Cr.
	Economic thought in its historical development from the Mercantilists to the present day. Prerequisite: ECON 221 or ECON 222.	
<b>ECON 390/590</b>	<b>Topics in Economics</b>	3 Cr.
	A course in which a special topic in economics is given intensive study. Topics, descriptions, and prerequisites will be announced in advance. May be repeated for credit if topics are different. Prerequisite: ECON 221 and ECON 222.	

<b>ECON 473/573</b>	<b>Applied Data Science</b>	3 Cr.
	A focus on data management, business analytics, predictive analytics, and econometric modeling. Logistic regression, instrumental variables estimation, and other estimation techniques are discussed. Prerequisite: ECON 325 or STAT 340, ECON 221, and ECON 222.	
<b>ECON 486</b>	<b>Internship in Economics</b>	1-3 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency requiring the use of a student's economics knowledge. Some internships are in conjunction with off-campus programs such as the Washington Semester Program. Prerequisite: consent of the chair of the department. ECON 486 will not count towards fulfilling the minimum major or minor requirements.	
<b>ECON 495</b>	<b>Independent Study in Economics</b>	1-3 Cr.
	Independent study to be approved by the chair and the economics advisor.	
<b>ECON 497</b>	<b>Honors Work in Economics</b>	3 Cr.
	See Honors Work, page 56.	
<b>ECON 498</b>	<b>Honors Candidacy in Economics</b>	3 Cr.
	See Honors Work, page 56.	

# **Education**

Learn more about the [Department of Education](#) at Valpo online.

## **Professor Gary;; Assistant Professors Bartels, Boche.**

The Education Department at Valparaiso University prepares teachers for Lutheran, public, and private schools. The major program of study leads to Indiana licensure for elementary teaching.

### **Accreditation**

Valparaiso University is accredited by the Indiana Department of Education as a teacher education institution to meet Indiana licensure requirements, and by the Council for the Accreditation of Educator Preparation (CAEP) at both undergraduate and graduate levels to prepare elementary teachers; Valparaiso University is also a member of the American Association of Colleges for Teacher Education (AACTE) and the Indiana Association of Colleges for Teacher Education (IACTE).

### **Licensure**

Students must meet Indiana state teacher licensure and education program requirements. Please note that the requirements for licensure in Indiana are subject to change by the state and may affect education student requirements at any time.

The mere completion of the prescribed courses outlined by the Education Department does not guarantee that the student will be recommended for licensure or a teaching position.

For a listing of all programs offered, see page 52 or the Indiana Department of Education website  
[www.doe.in.gov/student-services/licensing](http://www.doe.in.gov/student-services/licensing).

### **Elementary Education**

Students who seek licensure as an elementary teacher must complete the requirements of the Bachelor of Science in Education degree with a major in Elementary Education and either a Rules for Educator Preparation and Accountability (REPA) content area minor or a REPA content area major approved for certification by the Indiana Department of Education (IDOE).

## Elementary Education (Grades K-6)

Completion of the degree requirements with a major in Elementary Education leads to the Bachelor of Science in Education degree. The General Education Requirements for this degree are found on page 49. The education and other requirements are listed below.

<b>Education Requirements</b>		<b>67 Cr.</b>
<b>ED 206</b>	School and Society	3 Cr.
<b>ED 210</b>	Communication for Engagement, Instruction, and Classroom Management	3 Cr.
<b>ED 215</b>	Technology in the Classroom	1 Cr.
<b>ED 220</b>	Educational Psychology	3+0, 3 Cr.
<b>ED 290</b>	Investigations in Contemporary Science	3 Cr.
<b>ED 310</b>	Foundations in Emergent and Early Literacy	4 Cr.
<b>ED 323</b>	Methods of Science Education in the Elementary School	4 Cr.
<b>ED 324</b>	Methods of Teaching Mathematics in the Elementary School	4 Cr.
<b>ED 327</b>	Methods of Teaching Social Studies in the Elementary School	4 Cr.
<b>ED 329</b>	Literacy in the Elementary School	4 Cr.
<b>ED 330</b>	Methods of Teaching Fine Arts in the Elementary School	3 Cr.
<b>ED 335</b>	Methods of Teaching Physical Education in the Elementary School	1 Cr.
<b>ED 357</b>	Designing Curriculum, Assessment, and Learning Plans	3 Cr.
<b>ED 445</b>	Seminar: Efficacy in Professional Practice	3 Cr.
<b>ED 465</b>	Literacy in Socio-Cultural Contexts	3 Cr.
<b>ED 467</b>	English Language Learning Methods	3 Cr.
<b>ED 470</b>	Diversity, Equity, and Education	3 Cr.
<b>SPED 440</b>	Differentiated Instructional Practices	3 Cr.
<b>One course from the following options:</b>		
<b>ED 439</b>	Supervised Teaching in the Elementary Grades	12 Cr.
<b>SPED 449</b>	Supervised Teaching in General and Special Education	12 Cr.

<b>Other Course Requirements</b>		<b>9 Cr.</b>
<b>ENGL 200</b>	Literary Studies	3 Cr.
<b>MATH 213</b>	Mathematics for Elementary Teachers I	3 Cr.
<b>MATH 214</b>	Mathematics for Elementary Teachers II	3 Cr.

## **Elementary Concentrations**

Elementary Education students are required to complete two areas of concentration in addition to the requirements for the major. The required concentration, Multicultural Literacy, is embedded in required literacy courses. The second concentration should be fulfilled with the completion of a minor or major approved for certification by the Indiana Department of Education (IDOE). Minors or majors in academic content areas other than those listed below must be appropriate for future elementary teachers and must be approved by the education department chairperson or the director of licensure prior to beginning courses in those minors or majors.

- A. **Concentration 1:** Multicultural Literacy (included as part of required courses)
- B. **Concentration 2:** Select one of the following minors or majors:

Art  
Biology  
Chemistry  
Christian Education  
English  
French

German  
History  
Mathematics  
Music  
Physical Education  
Physics  
Social Work  
Spanish  
Special Education Minor  
STEM  
Teaching of English to Speakers of other Languages (TESOL) Minor

In addition to the above requirements, the student must present sufficient electives to earn the 124 credit hours required for graduation.

## **Four-Year Planning for Elementary Education**

Elementary education courses must be carefully sequenced. Each semester Elementary education students must consult with their academic advisor to ensure courses are taken at the right time. Students who would like to attend a study abroad semester should plan their course of study in close collaboration with the Education Department advisor from the beginning of their first semester at Valparaiso University. No additional coursework is permitted during the student teaching semester due to the rigor of the curriculum requirements.

<b>Year One: Semester 1</b>		<b>3 Cr.</b>
ED 206	School and Society	3 Cr.
<b>Year One: Semester 2</b>		<b>3 Cr.</b>
ED 220	Educational Psychology	3+0, 3 Cr.
<b>Year Two: Semester 1</b>		<b>6 Cr.</b>
ED 210	Communication for Engagement, Instruction, and Classroom Management	3 Cr.
MATH 213	Mathematics for Elementary Teachers I	3 Cr.
<b>Year Two: Semester 2</b>		<b>7 Cr.</b>
ED 215	Technology in the Classroom	1 Cr.
ED 290	Investigations in Contemporary Science	3 Cr.
MATH 214	Mathematics for Elementary Teachers II	3 Cr.
<b>Year Three: Semester 1</b>		<b>14 Cr.</b>
ED 310	Foundations in Emergent and Early Literacy	4 Cr.
ED 327	Methods of Teaching Social Studies in the Elementary School	4 Cr.
ED 357	Designing Curriculum, Assessment, and Learning Plans	3 Cr.
ED 330	Methods of Fine Arts	3 Cr.
<b>Year Three: Semester 2</b>		<b>13 Cr.</b>
ED 329	Literacy in the Elementary School	4 Cr.
ED 323	Methods of Science Education in the Elementary School	4 Cr.
ED 324	Methods of Teaching Mathematics in the Elementary School	4 Cr.
ED 335	Methods of Teaching Physical Education in the Elementary School	1 Cr.
<b>Year Four: Semester 1</b>		<b>12 Cr.</b>
ED 465	Literacy in Socio-Cultural Contexts	3 Cr.
ED 470	Diversity, Equity, and Education	3 Cr.
SPED 440	Differentiated Instructional Practices	3 Cr.
ED 467	English Language Learning Methods	3 Cr.
<b>Year Four: Semester 2</b>		<b>15 Cr.</b>
ED 445	Seminar: Efficacy in Professional Practice	3 Cr.
<b>One course from the following options:</b>		
ED 439	Supervised Teaching in Elementary Grades	12 Cr.
SPED 449	Supervised Teaching in General and Special Education	12 Cr.

### Additional Teaching Content Areas

Students who are interested in specific information about the requirements for additional content areas should contact the Education Department licensure officer.

### Christian Education Minor (Minimum 15 Cr.)

The Christian Education minor is for education majors who are interested in teaching in Christian schools, teaching religion, and exploring faith formation.

THEO 200	Christian Traditions	3 Cr.
THEO 311	Old Testament	3 Cr.
ED 389*	Christian Education: Methods	3 Cr.
<b>Two elective courses in Ethics or Global Religion (THEO 325, 340-349, 360-369)</b>		<b>6 Cr.</b>

\*Prerequisites for ED 389 include ED 206, ED 210, ED 220, and ED 357.

## Special Education Minor (Minimum 19 Cr.)

To earn a minor in Special Education, students must earn a minimum of 19 credit hours in SPED classes to earn K-12 licensure in special education. Supervised teaching (SPED 449) includes one half semester in a general education classroom and the other half in a special education setting. SPED 440 does not count toward this minor because it is a required course for all pre-service teachers. Since this minor leads to K-12 licensure in the mild intervention content area and several required teacher performance standards are embedded in additional education courses, the special education minor is open to education majors only.

Courses must include:

<b>SPED 347</b>	Characteristics of Individuals with Mild Disabilities	3 Cr.
<b>SPED 441</b>	Assistive Technology	1 Cr.
<b>SPED 444</b>	Assessment in Special Education	3 Cr.
<b>SPED 445</b>	Teaching the Student with Mild Disabilities	3 Cr.
<b>SPED 450</b>	Models of Collaboration and Consultation in Special Education	3 Cr.
<b>SPED 451</b>	Applied Behavior Analysis	3 Cr.
<b>SPED 466</b>	Teaching Reading to Students with Disabilities: Elementary	3 Cr.

## The Teacher Education Program

The Teacher Education Pathway to Professional Licensure (PPL) provides three checkpoints that education students progress through toward program completion and licensure. Please note that degree completion is not the same as licensure. You must have a degree AND complete licensure.

### PPL Checkpoint 1: Entry into the Practice

PPL Checkpoint 1 is the first of three checkpoints in the Teacher Education Pathway to Professional Licensure (PPL) and is your formal request for entrance into the Teacher Education program. Students will apply to the Teacher Education program. Transfer students should contact the Education Department to obtain an application and information. Transfer credits will be evaluated by the licensing director. The application process may take one semester.

The criteria for admission to education are:

#### A. Grade point average

Must have a minimum of 12 credit hours at Valparaiso University, a cumulative grade point average of 3.000 or higher in all coursework taken at Valparaiso University, and a grade of C+ or better in all required education coursework

#### B. Grades in Foundations Education Course Work

Grade of C+ or better in all required Foundations coursework: ED 206, ED 210, ED 220, ED 215

#### C. Dispositions

Must demonstrate the professional dispositions necessary for success in the teaching profession

Dispositions are the “habits of professional action and moral commitments that underlie an educator’s performance.”

Each semester, students’ dispositions are assessed formally and informally by VU Education faculty and staff, field experience supervisors and cooperating teachers. Dispositional concerns, as they arise, are communicated directly to the student and, if necessary, remediation steps are outlined. Persistent dispositional concerns (e.g. excessive absences, poor communication) may result in probation or dismissal from the program.

#### D. Declared Major or Complementary Major

Must declare one of the following majors in the Office of the Registrar: Elementary Education or Music Education **E. Continuation of Teacher Education Program**

Continuation in the Teacher Education program at Valparaiso University is contingent upon meeting all university and teacher education requirements listed above. Teacher education candidates should pay particular attention to the following:

- a. Earning a cumulative GPA of 3.0 or higher in all course work taken at Valparaiso University and
- b. Earning a minimum C+ or higher in every required education course. If a teacher candidate does not earn the minimum grade of C+ in a required education class, they will be allowed to take that course one additional time. If a C+ or higher is not earned the second time the course is taken, this will result in the teacher candidate being dismissed from the teacher education program. The teacher candidate should immediately contact the education department and content area advisor to discuss additional degree options.
- c. Maintaining consistent, positive professional dispositions necessary for success in the teaching profession. Dispositional concerns (e.g. excessive absences, poor communication) may result in probation or dismissal from the program.

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## PPL Checkpoint 2: Entry into the Professional Semester

Completion of the Checkpoint 2 requirements are necessary prior to your professional/student teaching semester.

The criteria for admission to the Professional Semester in education are:

**A. Official admission to the Teacher Education Program**

Must have already successfully completed PPL Checkpoint 1

**B. Grade Point Average**

Must have a minimum cumulative grade point average of 3.000 in both the content and Education major, and maintain a grade of C+ or higher in all education coursework

**C. Senior standing**

Must be within two semesters and one summer of graduation

**D. Dispositions**

Must demonstrate the professional dispositions necessary for success in the teaching profession. Each semester, students' dispositions are assessed formally and informally by VU Education faculty and staff, field experience supervisors and cooperating teachers. Dispositional concerns, as they arise, are communicated directly to the student and, if necessary, remediation steps are outlined. Persistent dispositional concerns (e.g. excessive absences, poor communication) may result in probation or dismissal from the program.

**E. Certification/Training**

Must complete CPR, Heimlich, and AED certification as well as suicide prevention training prior to starting the professional semester

This is subject to change with state requirements.

**F. Content Area Licensure Examinations**

Must take and pass the appropriate Indiana Department of Education licensure examinations at the required times. Each semester, the coordinator of licensure will communicate key deadlines for licensure exams. Before the professional semester, teacher candidates must take and pass their content exam. Each teacher candidate must take both of the required content and pedagogy tests by the deadlines set by the Education Department each semester.

**G. Continuation in the Teacher Education Program**

Continuation in the teacher education program at Valparaiso University is contingent upon meeting all university and teacher education requirements listed above. Teacher Education candidates should pay particular attention to the following:

- a. Earning the cumulative GPA of 3.0 or higher in all course work taken at Valparaiso University; and
- b. Earning a minimum C+ or higher grade in every required education class. If a teacher candidate does not earn the grade of C+, they will be allowed to take the course one additional time. If a C+ or higher is still not earned the second time the course is taken this will result in the teacher candidate being dismissed from the teacher education program. The teacher candidate should immediately contact the education department advisor, content area advisor, and field work director to discuss degree and program options. Failure to address GPA or grade concerns in a timely manner could result in the inability to student teach and/or graduate as scheduled.
- c. Maintaining consistent, positive professional dispositions necessary for success in the teaching profession. Dispositional concerns (e.g. excessive absences, poor communication) may result in probation or dismissal from the program.

## PPL Checkpoint 3: Entry in the Profession

Required of all candidates who wish to be recommended for an initial teaching license, this semester includes coursework, student teaching, and submission of the PPL Checkpoint 3 requirements.

1. Completion of Student Teaching & ED 445 Seminar

Must earn a S grade in student teaching and C+ or higher in ED 445 Seminar

2. Completion of edTPA

Successful submission of edTPA. Scores of 2 or better in each rubric and/or remediation plan

3. Complete application for Initial Teaching License

## **Placement in Field Experiences/Student Teaching**

The Teacher Education Program involves coursework that requires significant amounts of field experience. The placement and direction of all practicum experiences are the responsibility of the Director of Field Placement. Teacher candidates may not receive any compensation for work done in a school while receiving University course credit for the work.

A criminal background check is required annually prior to the first day of any fieldwork in the department. Discovery of a criminal record may delay or preclude field assignments. Students are responsible for arranging their own transportation to assigned schools. Note: Students are responsible for signing the student transportation form at the onset of the Education program.

## **Placement of Graduating Teachers**

The Field Placement Office assists beginning and experienced teacher candidates who have completed requirements for licensure. 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 the completion of the licensure program.

## **Appeal Process**

Students may appeal PPL Checkpoint decisions to the chair of the Education Department. The appeal must be made in writing within 2 weeks of the decision with explanation, rationale for appeal, and attachment of all related forms and correspondence.

## **Education Courses**

<b>ED 206</b>	<b>School and Society</b>	3 Cr.
	This course provides an overview of the complex relationships between schools and the societies they serve. It is for teacher education students as well as for those who are interested in important issues and problems related to education. This course provides students with an historic overview of the cultural and economic forces that have shaped the purposes and practices of schooling in the United States and considers their impact on contemporary issues in education. ED 206 may be used to partially fulfill the Social Science component of the General Education requirements.	
<b>ED 210</b>	<b>Communication for Engagement, Instruction, and Classroom Management</b>	3 Cr.
	This course focuses on the role of communication as a foundation for learners' academic and social- emotional growth. Teacher candidates are introduced to best practices in instructional communication, student engagement, and classroom management.	
<b>ED 215</b>	<b>Technology in the Classroom</b>	1 Cr.
	This course prepares teacher candidates to integrate technology into K-12 classrooms to advance student learning.	
<b>ED 220</b>	<b>Educational Psychology</b>	3+0, 3 Cr.
	This course focuses on human learning in the educational setting. Students will explore theories of child development, learning, and motivation. Course includes a field experience in an elementary, middle, or secondary school setting.	
<b>ED 290</b>	<b>Investigation of Contemporary Topics in Science</b>	2+2, 3 Cr.
	This course includes modules focused on issues in contemporary science that develop basic understandings of multiple disciplines, including biology, chemistry, earth/space science, and physics. The class explores interdisciplinary science issues. Prerequisite: Admission to Elementary Education program.	
<b>ED 310/510</b>	<b>Foundations in Emergent and Early Literacy</b>	4 Cr.
	This course focuses on the emergent and beginning stages of literacy development. This course introduces teacher candidates to the foundations of literacy by defining key concepts, exploring instructional strategies, and examining theoretical frameworks of literacy instruction in elementary classrooms within a comprehensive program reaching all children, including English Language Learners. A field experience is required. Prerequisites: Admission to Teacher Education, ED 206and ED 220. Corequisites: ED 327, ED 330, and ED 357.	
<b>ED 323/523</b>	<b>Methods of Teaching Science in the Elementary School</b>	4 Cr.
	This course is designed to build fundamental knowledge of elementary science teaching and learning including standards-based lesson planning and research-based teaching strategies. This course focuses on developing inquiry-based lessons for children to investigate science, integrating other subject matter areas with science, designing lessons that include diverse students in learning science, and assessing student understanding of science and the nature of science. The teacher candidates will plan and teach lessons for children to learn science, observe children learning, and conduct research on children's learning. Prerequisites: Admission to Teacher Education, ED 290, and ED 357. Corequisites: ED 324, ED 335, and ED 329.	

<b>ED 324/524</b>	<b>Methods of Teaching Mathematics in the Elementary School</b>	4 Cr.
	Topics include sequencing, diagnostic and remediation strategies, and appropriate use of concrete materials in planning, organizing, implementing, and evaluating instructional practice. This course includes assessment practices for mathematics education and a field component. Prerequisite: Admission to Teacher Education, MATH 213, MATH 214, and ED 357. Corequisites: ED 323, ED 329, and ED 335.	
<b>ED 327/527</b>	<b>Methods of Teaching Social Studies in the Elementary School</b>	4 Cr.
	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. This course includes assessment practices for social studies education and a field component. Prerequisites: Admission to Teacher Education and ED 357. Corequisites: ED 310, ED 330, and ED 330.	
<b>ED 329/529</b>	<b>Literacy in the Elementary School</b>	4 Cr.
	With a focus on the relationship between assessment, instruction, and curriculum, this course presents evidence-based paradigms for planning a classroom environment for developmental literacy learning with an emphasis on reading and writing, designing diagnostic teaching sequences for individual learners, documenting responsiveness to intervention, and supporting literacy development for all learners in a diverse elementary classroom setting. A field experience is required. Prerequisites: Admission to Teacher Education, ED 310, and ED 357. Corequisites: ED 327, ED 324, and ED 335.	
<b>ED 330</b>	<b>Methods of Teaching Fine Arts in the Elementary School</b>	3 Cr.
	This course is designed to teach the objectives, procedures, resources, and activities related to fine arts education for the culturally responsive and creative elementary classroom. Emphasis is on content knowledge and student growth and achievement connected to self-motivation, emotional well-being and active engagement. Prerequisite: Admission to Teacher Education program. Corequisites: ED 310, ED 327, and ED 357.	
<b>ED 335</b>	<b>Methods of Physical Education in the Elementary School</b>	1 Cr.
	This course focuses on the foundations of elementary physical education and the integration of inquiry, creative thinking and problem-solving. The course also addresses physical education standards, curriculum, instruction and assessment for diverse classrooms, including English Language Learners and students with special needs. Prerequisite: Admission to Teacher Education. Corequisites: ED 323, ED 324, and ED 329.	
<b>ED 357</b>	<b>Designing Curriculum, Assessment, and Learning Plans</b>	3 Cr.
	This course prepares teacher candidates to design curricula that develop students' understanding and ability to transfer their learning by identifying the desired results of instruction, determining what assessments constitute evidence of learning, and crafting learning experiences in support of these pedagogical aims. Prerequisite: Admission to Teacher Education, and C+ or higher in ED 206, ED 210, ED 215, and ED 220. Corequisites: ED 310, ED 327, and ED 330.	
<b>ED 360/560</b>	<b>Literacies Across the Content Areas</b>	3 Cr.
	This course provides teacher candidates with the sociocultural and cognitive theoretical frameworks and practical strategies to support the developing disciplinary literacies of their students. Pre/corequisite ED 357.	
<b>ED 389</b>	<b>Christian Education: Methods</b>	3 Cr.
	This course is for education majors who are interested in teaching in Christian schools, teaching religion, and exploring faith formation. This course introduces and practices developmentally appropriate methods and strategies of integrating and teaching the Christian religion and faith development in PK-12 settings. Additionally this course provides an overview of the history and unique characteristics of parochial schools and explores the concept of vocation for Christian educators. Field work required. Prerequisites: THEO 200, 311, 312; ED 357.	
<b>ED 439</b>	<b>Supervised Teaching in the Elementary Grades</b>	12 Cr.
	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 14 weeks during the semester of full-time classroom observations, classroom teaching, and related activities. Prerequisites: senior standing and admission to the Professional Semester. See Admission to the Professional Semester above for conditions of eligibility. S/U grade.	
<b>ED 445</b>	<b>Seminar: Efficacy in Professional Practice</b>	3 Cr.
	The primary aim of this seminar is to help teacher candidates integrate their student teaching experience with University coursework and educational research. Course readings, assignments, and activities structure students' evaluation of their own teaching practice more broadly through collaborative, critical inquiry. The class supports development of the summative assessment for the education program. Corequisite: ED 439, ED 459, or SPED 449.	

<b>ED 465/565</b>	<b>Literacy in Socio-Cultural Contexts</b>	3 Cr.
This course focuses on genre study, diversity and culturally responsive practices in literacy education. It presents a process for engaging actively and deeply in literature and writing study. Students will learn frameworks for studying multicultural literature, using authentic texts. Practice in designing, teaching and reflecting on an array of assessment-informed reading and writing lessons for use with elementary students will also be facilitated. Corequisites: ED 470 and SPED 440.		
<b>ED 467/567</b>	<b>English Language Learning Methods</b>	3 Cr.
Grounded in current theory and practice in second language acquisition, this course enables teacher candidates to create learning environments and opportunities that enable their culturally and linguistically diverse students to develop high levels of language and content knowledge, skills, and understandings. This course includes a field experience. Prerequisite: C+ or higher in ED 357.		
<b>ED 470/570</b>	<b>Diversity, Equity, and Education</b>	3 Cr.
This course focuses on creating meaningful and relevant teaching and learning for culturally and linguistically diverse students. A social justice perspective is used to examine ways that prejudice, culture, language diversity, and socioeconomic factors influence the student's academic success within the current system and under the current policies. The cultures of students are studied and used in planning and cultivating culturally responsive learning/instruction and an asset-based view of family and community relations. Field experience is required. All students admitted to the teacher education program must take this course. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Prerequisite: ED 357.		
<b>ED 490/590</b>	<b>Topics in Education</b>	1-3 Cr.
An intensive study of an area of education. Subtitles, amount of credit, and content depend on instructor's choice and student interest. May be repeated for credit, provided topics are different. Prerequisite: Admission to Teacher Education.		
<b>ED 495</b>	<b>Independent Study in Education</b>	1-3 Cr.
Independent work to be done in a specific area of education as agreed upon by the student and faculty advisor. Proposals must be approved by the chair of the department. Prerequisite: Admission to Teacher Education.		
<b>ED 497</b>	<b>Honors Work in Education</b>	3 Cr.
See Honors Work, page 56.		
<b>ED 498</b>	<b>Honors Candidacy in Education</b>	3 Cr.
See Honors Work, page 56.		

## Special Education Courses

**SPED  
347/547**

### **Characteristics of Individuals with Mild Disabilities**

3 Cr.

This course is designed to provide information on academic, cognitive, social, behavioral, and emotional characteristics of individuals with mild disabilities. Topics include federal and state laws governing special education; processes involved in identifying students as having one of the disabilities considered "mild"; specific characteristics of students who have mild disabilities in various areas of development or functioning; characteristics of various education service delivery systems; and introduction to interventions for students with mild disabilities in grades 1-12. The course also includes a field component in an elementary, middle school, or high school special education setting.

**SPED  
440/540**

### **Differentiated Instructional Practices**

3 Cr.

This course introduces teacher candidates to legislation that governs the provisions for current special education services, special education practices, and response to intervention requirements. Major components of the course also include differentiation of methods and materials according to students' needs and other assessment information, the importance of collaboration with parents and school personnel, and practical strategies for educating all students in the least restrictive environment and culturally diverse environments. A field experience is required. A Writing in the Discipline course. Prerequisite: admission to the Teacher Education Program, ED 357, and a Writing Intensive course.

**SPED  
441/541**

### **Assistive Technology**

1 Cr.

This course provides an overview of Assistive Technology (AT) that supports or enhances learning for students with special needs. Emphasis will be on developing an awareness of the diverse AT devices and software readily available which, when used according to the principles of universal design, may improve learning for all students.

**SPED  
443/543**

### **Teaching Reading to Students With Disabilities: Secondary and Middle School**

3 Cr.

This course introduces the reading assessments and interventions required to meet the needs of a range of middle and secondary students with reading disabilities, including dyslexia. Prerequisite: ED 310 or ED 360.

**SPED 444**

### **Assessment in Special Education**

3 Cr.

This course is designed to develop test administration and test interpretation skills in teacher candidates for the types of tests used in the identification of various disabilities and tests used to plan instruction programs. Psychometric properties of tests are also addressed. Tests/types of assessments addressed in this course include intelligence tests, achievement tests, adaptive behavior and other behavior rating scales, psychological process tests, learning capacity and aptitude instruments, observational assessment, and curriculum-based assessment. Prerequisite or Corequisite: SPED 347. Required of all special education minors.

**SPED 445**

### **Teaching the Student with Mild Disabilities**

3 Cr.

This course provides teacher candidates with knowledge of various compensatory, corrective, and remedial instructional strategies in curriculum areas addressed in grades K-12 including reading/language arts, mathematics, social studies, and science content areas, social skills, study skills, vocational skills, and adaptive behaviors. Course experiences emphasize effective, research-based teaching methods, diagnostic-prescriptive teaching techniques, and individual education/transition planning for students with mild disabilities at the elementary, middle school, and secondary levels. Includes a field experience with students with mild disabilities at one of the developmental levels. Prerequisite: SPED 347.

**SPED 449**

### **Supervised Teaching in General and Special Education**

12 Cr.

This course combines into one semester the experience of observation, classroom teaching, and participation in related early/middle childhood, early adolescent, and adolescent/young adult special education settings. Under the direction of the cooperating teachers and University field instructors, the teacher candidate will have appropriate experiences at a particular developmental level in both general and special education setting. Prerequisites: senior standing and SPED 445. Corequisite: admission to the professional semester. S/U grade.

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**SPED  
450/550****Models of Collaboration and Consultation in Special Education**

3 Cr.

The provision of effective services for students with disabilities requires school-based professionals to work with each other, external agencies, parents, and the students themselves. This course is designed to address the knowledge, skills, and dispositions required of education professionals in the collaborative delivery of these services in various educational settings. Topics include models of collaboration and consultation, skills required for effective collaboration and consultation, conflict management, and methods to address roadblocks to collaboration. Prerequisite or Corequisite: SPED 347 or consent of the instructor.

**SPED  
451/551****Applied Behavior Analysis**

3 Cr.

Many students with mild disabilities exhibit social, learning, and/or behavioral problems that must be addressed in order to provide the students with appropriate educational programming. This course will provide education professionals with knowledge and experiences assessing behavior through various assessment techniques including functional assessment, planning behavioral interventions, and implementing behavior and classroom management procedures using best practice techniques. Information on legal mandates related to behavior management is also included. Prerequisite or Corequisite: SPED 347 or consent of the instructor.

**SPED  
466/566****Teaching Reading to Students with Disabilities: Elementary**

3 Cr.

This course introduces the organization of formal and informal reading assessment, planning, and instruction required to meet the needs of a range of K-12 students with reading disabilities, including dyslexia. Primary emphasis in this course is on elementary students' reading problems, assessments and interventions. A field component is included. Prerequisite: ED 310 or ED 360.

**SPED  
490/590****Topics in Special Education**

1-3 Cr.

An intensive study of an area of special education. Subtitles, amount of credit, and content depend on instructor's choice and student interest. May be repeated for credit, provided topics are different.

**SPED 495****Independent Study in Special Education**

1-3 Cr.

Independent work to be done in a specific area of special education as agreed upon by the student and faculty advisor. Proposals must be approved before registration by the chair of the department.

# English

Learn more about the [Department of English](#) at Valpo online.

**Professors Belanger, Buinicki, Byrne, Hanson, Ruff; Associate Professors S. Anderson, Burow-Flak, Danger, Potter, Schuette, Sévère (chair); Assistant Professor Kamperman.**

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, sensitively and effectively. A major in English studies also helps students to develop their capacities to enjoy and understand imaginative literature. Relatively small class sizes allow students to cultivate a close relationship with professors and to sharpen their analytical and expressive skills through writing and discussion. In addition to preparing a student for graduate work or for teaching, 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. Businesses, not-for-profit agencies, and government offices 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 English studies 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 education majors may join the Valparaiso University affiliate of the National Council of Teachers of English.

## Bachelor of Arts – English Major (Minimum 33 Cr.)

<b>ENGL 180</b>	Gateways to Interpretation	3 Cr.
<b>ENGL 208</b>	Methods of Literary Criticism and Research	3 Cr.
<b>ENGL 493</b>	Seminar in English Literature	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 200</b>	Literary Studies	3 Cr.
<b>ENGL 201</b>	Introduction to Creative Writing	3 Cr.
<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>ENGL 270</b>	Introduction to Cinema Studies	3 Cr.
<b>ENGL 296</b>	Traditions of Giving and Serving in American Life	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 309</b>	Literature of the Medieval Period	3 Cr.
<b>ENGL 320</b>	Literature of the Sixteenth and Seventeenth Centuries	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 330</b>	Literature of the Restoration and Eighteenth Century	3 Cr.
<b>ENGL 350</b>	British Literature of the Nineteenth Century	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 370</b>	Modern and Contemporary Fiction	3 Cr.
<b>ENGL 372</b>	Modern and Contemporary Drama	3 Cr.
<b>ENGL 375</b>	Modern and Contemporary Poetry	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 312</b>	American Literature I	3 Cr.
<b>ENGL 313</b>	American Literature II	3 Cr.
<b>One course from the following options:</b>		
<b>ENGL 311</b>	New Literacies, Technologies, and Cultures of Writing	3 Cr.
<b>ENGL 341</b>	History of the English Language	3 Cr.
<b>ENGL 342</b>	Grammar, Style, Editing	3 Cr.
<b>ENGL 343</b>	Introduction to Linguistics	3 Cr.
<b>ENGL 344</b>	Sociolinguistics	3 Cr.
<b>ENGL 368</b>	TESOL: Theory and Methods	3 Cr.
<b>ENGL 369</b>	TESOL: Theory and Practice	3 Cr.
<b>ENGL 431</b>	Advanced Writing and Rhetoric	3 Cr.
<b>ENGL 440</b>	Multimedia Writing and Design	3 Cr.

**One course from the following options:**

<b>ENGL 260</b>	Cross-Cultural Narratives	3 Cr.
<b>ENGL 360</b>	Cross-Cultural Engagement in English Studies	3 Cr.

**One course from the following options:**

<b>ENGL 410</b>	Shakespeare	3 Cr.
<b>ENGL 456</b>	The Novel	3 Cr.
<b>ENGL 478</b>	Literature for Children	3 Cr.
<b>ENGL 479</b>	Young Adult Literature	3 Cr.
<b>ENGL 480</b>	Topics in Writing	3 Cr.
<b>ENGL 484</b>	Topics in Language	3 Cr.
<b>ENGL 486</b>	Internship in English	3 Cr.
<b>ENGL 490</b>	Topics in Literature	3 Cr.
<b>ENGL 495</b>	Independent Study in English	3 Cr.
<b>ENGL 497</b>	Honors Work in English	3 Cr.

**Bachelor of Arts – Creative Writing Major (Minimum 33 Cr.)**

<b>ENGL 180</b>	Gateways to Interpretation	3 Cr.
<b>ENGL 201</b>	Introduction to Creative Writing	3 Cr.
<b>ENGL 492</b>	Seminar in Creative Writing	3 Cr.

**One course from the following options:**

<b>ENGL 260</b>	Cross-Cultural Narratives	3 Cr.
<b>ENGL 360</b>	Cross-Cultural Engagement in English Studies	3 Cr.

**Three courses from the following options:**

<b>ENGL 323</b>	Short Story Writing	3 Cr.
<b>ENGL 324</b>	Poetry Writing	3 Cr.
<b>ENGL 325</b>	Creative Nonfiction	3 Cr.

**One of the following options:**

<b>CVA 472</b>	Screenwriting	3 Cr.
<b>ENGL 326</b>	Playwriting	3 Cr.
<b>THTR 252</b>	Writing for Stage and Screen	3 Cr.

**One course from the following options:**

<b>ENGL 370</b>	Modern and Contemporary Fiction	3 Cr.
<b>ENGL 372</b>	Modern and Contemporary Drama	3 Cr.
<b>ENGL 375</b>	Modern and Contemporary Poetry	3 Cr.

**One course from the following options:**

<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>ENGL 296</b>	Traditions of Giving and Serving in American Life	3 Cr.
<b>ENGL 311</b>	New Literacies, Technologies, and Cultures of Writing	3 Cr.
<b>ENGL 440</b>	Multimedia Writing and Design	3 Cr.
<b>ENGL 486</b>	Internship in English	3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.

**Six additional credits from English courses numbered 200 or above**

**Bachelor of Arts – Public and Professional Writing Major (Minimum 33 Cr.)**

<b>ENGL 180</b>	Gateways to Interpretation	3 Cr.
<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>ENGL 342</b>	Grammar, Style, and Editing	3 Cr.
<b>ENGL 431</b>	Advanced Writing and Rhetoric	3 Cr.
<b>ENGL 440</b>	Multimedia Writing and Design	3 Cr.

**At least one course from the following options:**

<b>ENGL 344</b>	Sociolinguistics: Language Across Cultures	3 Cr.
<b>ENGL 360</b>	Cross-Cultural Engagement in English Studies	3 Cr.

**At least one course from the following options:**

<b>ENGL 486</b>	Internship in English	3 Cr.
<b>ENGL 491</b>	Seminar in Professional Writing	3 Cr.

**12 credits from the following options:**

<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 330</b>	Advanced Design	0+6, 3 Cr.
<b>ENGL 205</b>	Writing in the Health Sciences	3 Cr.
<b>ENGL 256</b>	Editing a Literary Journal	1 Cr.
<b>ENGL 296</b>	Traditions of Giving and Serving in American Life	3 Cr.
<b>ENGL 311</b>	New Literacies, Technologies, and Cultures of Writing	3 Cr.
<b>ENGL 341</b>	History of the English Language	3 Cr.

**Any English course numbered 300 or above****English Minor (Minimum 15 Cr.)**

<b>ENGL 180</b>	Gateways to Interpretation	3 Cr.
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**One course from the following options:**

<b>ENGL 309</b>	Literature of the Medieval Period	3 Cr.
<b>ENGL 320</b>	Literature of the Sixteenth and Seventeenth Centuries	3 Cr.
<b>ENGL 330</b>	Literature of the Restoration and Eighteenth Century	3 Cr.
<b>ENGL 350</b>	British Literature of the Nineteenth Century	3 Cr.

**One course from the following options:**

<b>ENGL 370</b>	Modern and Contemporary Fiction	3 Cr.
<b>ENGL 372</b>	Modern and Contemporary Drama	3 Cr.
<b>ENGL 375</b>	Modern and Contemporary Poetry	3 Cr.
<b>ENGL 312</b>	American Literature I	3 Cr.
<b>ENGL 313</b>	American Literature II	3 Cr.

**Three additional credits from English courses numbered 200 or above****Three additional credits from English courses numbered 300 or above****Creative Writing Minor (Minimum 15 Cr.)**

<b>ENGL 201</b>	Introduction to Creative Writing	3 Cr.
<b>ENGL 492</b>	Seminar in Creative Writing	3 Cr.

**At least two courses selected from the following options:**

<b>ENGL 323</b>	Short Story Writing	3 Cr.
<b>ENGL 324</b>	Poetry Writing	3 Cr.
<b>ENGL 325</b>	Creative Nonfiction	3 Cr.

**One of the following options:**

<b>CVA 472</b>	Screenwriting	3 Cr.
<b>ENGL 326</b>	Playwriting	3 Cr.
<b>THTR 252</b>	Writing for Stage and Screen	3 Cr.

**At least one course from the following options:**

<b>ENGL 370</b>	Modern and Contemporary Fiction	3 Cr.
<b>ENGL 372</b>	Modern and Contemporary Drama	3 Cr.
<b>ENGL 375</b>	Modern and Contemporary Poetry	3 Cr.

## Public and Professional Writing Minor (Minimum 15 Cr.)

<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>ENGL 342</b>	Grammar, Style, and Editing	3 Cr.
<b>ENGL 440</b>	Multimedia Writing and Design	3 Cr.

**Two courses from the following options:**

<b>ENGL 180</b>	Gateways to Interpretation	3 Cr.
<b>ENGL 205</b>	Writing in the Health Sciences	3 Cr.
<b>ENGL 221</b>	Advanced Writing and Rhetoric	3 Cr.
<b>ENGL 311</b>	New Literacies, Technologies, and Cultures of Writing	3 Cr.
<b>ENGL 341</b>	History of the English Language	3 Cr.
<b>ENGL 344</b>	Sociolinguistics: Language Across Cultures	3 Cr.
<b>ENGL 486</b>	Internship in English	3 Cr.
<b>ENGL 491</b>	Seminar in Professional Writing	3 Cr.

**Note: At least one course of the 15 credits required for the minor must be designated as a diversity course in English.**

With the chair's approval, students may apply cooperative education toward fulfillment of the minor.

## Teaching of English to Speakers of other Languages (TESOL) Minor (Minimum 15 Cr.)

**One course from the following options:**

<b>ENGL 343</b>	Introduction to Linguistics	3 Cr.
<b>ENGL 333</b>	Introduction to Linguistics for P-12 Educators	3 Cr.

**One course from the following options:**

<b>ENGL 344</b>	Sociolinguistics: Language Across Cultures	3 Cr.
<b>ENGL 334</b>	Sociolinguistics: Language Across Cultures for P-12 Educators	3 Cr.

**One course from the following options:**

<b>ENGL 368</b>	Teaching of English to Speakers of Other Languages: Theory and Methods	3 Cr.
<b>ENGL 358</b>	Teaching of English to Speakers of Other Languages: Theory and Methods for P-12 Educators	3 Cr.

**One course from the following options:**

<b>ENGL 369</b>	Teaching of English to Speakers of Other Languages: Methods and Practices	3 Cr.
<b>ENGL 359</b>	Teaching of English to Speakers of Other Languages: Methods and Practices for P-12 Educators	3 Cr.

**One course from the following options:**

<b>ENGL 384</b>	Observation in TESOL	1 Cr.
<b>ENGL 374</b>	Observation in P-12 English Language Learner Education	1 Cr.

**One course from the following options:**

<b>ENGL 487</b>	Practicum in TESOL	2 Cr.
<b>ENGL 477</b>	Practicum in English Learner Education	3 Cr.

Students seeking Indiana state English Learner (EL) licensure must complete designated versions of TESOL courses for P-12 educators in the categories listed above. Students must also complete the appropriate program of study in Education. Enrollment in the P-12-focused versions of TESOL courses is restricted to Education students and students with a P-12 teaching license.

### 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 Cultural Diversity General Education Requirement. Representative topics include American Ethnic Literature and African-American Literature.

**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. The chair will explain the offerings and programs of the department and direct each student to additional resources. All students taking a major or minor in English must have their schedules approved by their English advisor before registration.

**Advising**

The chair of the department will introduce all students to the professors who will be their advisors as long as they remain majors in the department. It is the student's responsibility to confer regularly with the advisor about course selection, internships, career planning, and related matters. It is the advisor'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 57.

**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.

***English Courses***

<b>ENGL 100</b>	<b>College Composition</b>	3 Cr.
	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.	
<b>ENGL 101</b>	<b>Introductory Reading and Writing for Non-Native English Speakers</b>	4 Cr.
	An intensive course in reading and in writing organized and coherent paragraphs and short academic essays, with special attention to grammar and vocabulary. Open only to students whose native language is not English. Students recommended for this course, generally as the result of a placement exam, may not take the course at the same time as any other English course.	
<b>ENGL 102</b>	<b>Intermediate Reading and Writing for Non-Native English Speakers</b>	4 Cr.
	An intermediate course in reading and writing skills with special attention to essay structure and genre. This course also provides a review of English grammar and of vocabulary learning skills. Open only to students whose native language is not English. Prerequisite: completion of ENGL 101 or placement by exam.	
<b>ENGL 103</b>	<b>Advanced Academic Skills for Non-Native English Speakers</b>	3 Cr.
	An advanced course in academic skills with attention to a variety of forms of academic communication. This course addresses issues of advanced grammar and its relationship to genre and rhetorical moves in reading, writing, listening, and speaking. Assignments include writing thesis-driven essays, giving oral presentations, and participating in academic discussions. Open only to students whose native language is not English. Prerequisite: ENGL 101 or placement by exam.	
<b>ENGL 180</b>	<b>Gateways to Interpretation</b>	3 Cr.
	This course introduces modes of interpretation central to several fields that make up English studies, including literature, creative writing, and professional writing. The course presents a sequence of in-depth case studies, focusing on texts in a variety of genres chosen for the key questions they raise. Students will learn modes of textual, cultural, and reader-based analysis, begin to read literary and rhetorical criticism, conduct research, and respond critically and creatively to the texts and contexts under consideration.	

<b>ENGL 200</b>	<b>Literary Studies</b>	3 Cr.
	Topics are variable. Literary Studies includes a variety of readings on a specific issue, theme, or literary type, and provides practice in writing critically and analytically about imaginative literature. Possible offerings include Utopian/Dystopian Literature, Video Games and Storytelling, Seven Deadly Sins, Banned Books and Novel Ideas, Into the Wild, Horrible Husbands-Wicked Wives. May be used to fulfill the Humanities: Literature component of the General Education Requirements. Some sections of this course may be used to fulfill the Writing Intensive General Education Requirement. May not be repeated for credit.	
<b>ENGL 201</b>	<b>Introduction to Creative Writing</b>	3 Cr.
	This course examines the process and product of creative writing. Topics include stages of creative writing from invention and imagination to description and dramatization. Attention focuses on the elements of fiction, poetry, drama, nonfiction and their forms, their differences and the reasons for distinguishing among them; and the ways in which they have contributed to one another as boundaries between them have blurred. Students will practice writing in the various genres. Assignments also address issues such as the relations of authors' autobiographies to their art, and the need to craft concrete metaphors to represent abstract ideas. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>ENGL 203</b>	<b>Middle Eastern Literatures</b>	3 Cr.
	A survey of literature in translation from the Middle East and North Africa, with attention to major authors, genres, movements, and stylistic developments. May be used to fulfill the Cultural Diversity component of the General Education Requirement. Some sections may be used to fulfill the Writing Intensive Course General Education Requirement. Prerequisite: sophomore standing.	
<b>ENGL 204</b>	<b>Middle Eastern Cinemas</b>	3 Cr.
	A survey of modern and contemporary films from the Middle East and North Africa, with attention to major directors, genres, movements, and stylistic developments. May be used to fulfill the Cultural Diversity component of the General Education Requirement. Some sections may be used to fulfill the Writing Intensive Course General Education Requirement.	
<b>ENGL 205</b>	<b>Writing for Health Sciences</b>	3 Cr.
	A study of writing practices in nursing and the health professions. Students analyze health science genres, develop critical and reflective reading practices, and produce research-based writing and presentations. The course emphasizes audience analysis, organizational strategies, style, APA formatting, document design and delivery, and advanced work in information literacy in the health sciences. Fulfills the Writing Intensive Course General Education Requirement. Prerequisite: CORE 110 and CORE 115 or equivalent.	
<b>ENGL 208</b>	<b>Methods of Literary Criticism and Research</b>	3 Cr.
	Designed to give students practical experience in the theories and methods of modern literary scholarship and criticism. The course aims to acquaint students with the presuppositions about literature which underlie critical writing and thus to provide standards for evaluating critical and scholarly works. It also provides intensive training in the analysis of literary texts. Required for English majors. Prerequisite: ENG 180 or junior standing.	
<b>ENGL 210</b>	<b>Introduction to Business and Professional Writing</b>	3 Cr.
	An introduction to writing and speaking practices for effective communication in business, industry, and not-for-profit organizations. Practice in composing messages in formats such as emails, social media posts, letters, memoranda, reports, proposals, and oral presentations. Emphasizes audience analysis, organizational strategies, persuasive appeals, style and language choice, format, and appearance. Teamwork, collaboration, writing technologies, peer review, information literacy, and a recursive revision process involving multiple drafts are emphasized. Prerequisite: sophomore standing. May fulfill the Writing Intensive Course General Education Requirement.	
<b>ENGL 256</b>	<b>Editing A Literary Journal</b>	1 Cr.
	This course offers a practicum in the process of editing a national literary journal, including such aspects as reading submissions, evaluating works, deciding upon acceptances or rejections, corresponding with authors, proofreading manuscripts, and preparing text for publication. Instructor's approval is required.	
<b>ENGL 260</b>	<b>Cross-Cultural Narratives</b>	3 Cr.
	In this survey course for majors and non-majors, students will study works of literature, film, or rhetoric by members of historically under-represented groups. Topics and reading lists for sections will vary, and placing the works in larger cultural contexts will be a priority. A related priority will be to study how such works challenged or redefined existing cultural narratives and perspectives. This course fulfills the Cultural Diversity General Education Requirement.	

<b>ENGL 270</b>	<b>Introduction to Cinema Studies</b>	3 Cr.
	(Also offered as CVA 270.) This course introduces students to basic concepts in film analysis. Students will employ these concepts in analyzing and describing the varied styles, functions, and social contexts of classical Hollywood, documentary, avant-garde, and world art cinema. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>ENGL 296</b>	<b>Traditions of Giving and Serving in American Life</b>	3 Cr.
	Selected readings in the nature and purpose of charity and service in American culture. Texts include classic works from American literature and social history that raise questions of ethics, stewardship, and the common good. The course also explores how these issues are relevant in the current non-profit sector, with guest speakers and a real-world experience in making an informed gift.	
<b>ENGL 306</b>	<b>World Literature in English</b>	3 Cr.
	A survey of literature in English from the Global South from the twentieth century to the present, including major authors, genres, and movements. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 309/509</b>	<b>Literature of the Medieval Period</b>	3 Cr.
	A survey of medieval English lyric, ballad, narrative, drama, and romance (including Chaucer), with attention to intellectual, religious, and social background materials. A Writing in the Discipline course. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 310/511</b>	<b>Introduction to Technical Writing</b>	3 Cr.
	This course teaches engineering and science students to write and talk about design and research problems in terms that satisfy a specialist and also enable a non-specialist to understand what the problem is and how it was (or can be) solved.	
<b>ENGL 311/512</b>	<b>New Literacies, Technologies, and Cultures of Writing</b>	3 Cr.
	A course in theory and practice that examines how media of expression shape texts and their interpretations. Course readings include literature and theories of textual studies in print and electronic formats. Readings emphasize the history of the book and evolving electronic new media. The course requires written papers and projects in electronic format. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 312</b>	<b>American Literature I</b>	3 Cr.
	A study of selected works of major American writers (including minority and women writers) from the Colonial period to the Civil War. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 313</b>	<b>American Literature II</b>	3 Cr.
	A study of selected works of major American writers (including minority and women writers) from the Civil War to the present day. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 315</b>	<b>Writing and Rhetoric for Professionals</b>	3 Cr.
	Intermediate-level study of professional communication in business, industry, and not-for-profit organizations. Emphasizes theory and practice of effective rhetoric in organizations. Practice in composition, audience analysis, document design, digital writing, research, and information literacy skills needed to explore, analyze and respond effectively to diverse professional and workplace writing situations. Prerequisite: Junior standing and a Writing Intensive Course.	
<b>ENGL 320/520</b>	<b>Literature of the Sixteenth and Seventeenth Centuries</b>	3 Cr.
	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. A Writing in the Discipline course. Fulfills the Humanities: Literature General Education Requirement. Prerequisite: ENGL 180 or junior standing.	

<b>ENGL</b> <b>323/523</b>	<b>Short Story Writing</b>	3 Cr.
	A workshop in the various techniques of writing short fiction. English majors (not writing majors or minors), as well as other students, may take this course on the S/U basis. A Writing in the Discipline course. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: ENGL 201.	
<b>ENGL</b> <b>324/524</b>	<b>Poetry Writing</b>	3 Cr.
	A workshop in the various techniques of writing poetry. English majors (not writing majors or minors), as well as other students, may take this course on the S/U basis. A Writing in the Discipline course. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: ENGL 201.	
<b>ENGL</b> <b>325/525</b>	<b>Creative Nonfiction</b>	3 Cr.
	A workshop in various techniques of writing creative nonfiction, a genre that explores how the essay generates new forms when it borrows the techniques of fiction, poetry, and/or drama. A Writing in the Discipline course. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: ENGL 201.	
<b>ENGL 326</b>	<b>Playwriting</b>	3 Cr.
	A workshop for the study of the forms and techniques of playwriting in which students practice and share their craft and provide constructive criticism within a community of playwrights. A Writing in the Discipline course.	
<b>ENGL</b> <b>330/530</b>	<b>Literature of the Restoration and Eighteenth Century</b>	3 Cr.
	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. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL</b> <b>333/533</b>	<b>Introduction to Linguistics for P-12 Educators</b>	3 Cr.
	An introduction to the theory and methodology of linguistics and its applications, including applications in p-12 contexts. 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 with attention to applications of linguistic awareness in p-12 contexts. Prerequisite: Education major or instructor approval.	
<b>ENGL</b> <b>334/534</b>	<b>Sociolinguistics: Language Across Cultures for P-12 Educators</b>	3 Cr.
	This course considers intersections of language, social structure, and culture, with emphasis on the study of linguistic and cultural diversity, and language variation cross-culturally on a global scale and in the U.S. Attention is given to the significance of linguistic and cultural diversity in applied contexts, with special attention to p-12 settings. May be used to fulfill the Cultural Diversity component or part of the Social Science component of the General Education Requirements. Prerequisite: Education major or instructor permission.	
<b>ENGL</b> <b>341/541</b>	<b>History of the English Language</b>	3 Cr.
	An introduction to the development of modern English from Indo-European with emphasis upon structure and vocabulary. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL</b> <b>342/542</b>	<b>Grammar, Style, and Editing</b>	3 Cr.
	This course explores the rules and patterns of English grammar. Students will develop a more thorough understanding of English grammar and apply this knowledge to study literary style, to strengthen their own writing and editing, and to teach English grammar. The focus is on Present-Day English with attention to how grammatical variation may reflect disciplinary or genre conventions and rhetorical considerations. Prerequisite: ENGL 180 or junior standing.	

<b>ENGL 343/543</b>	<b>Introduction to Linguistics</b>	3 Cr.
	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. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 344/544</b>	<b>Sociolinguistics: Language Across Cultures</b>	3 Cr.
	This course considers intersections of language, social structure, and culture, with emphasis on the study of linguistic and cultural diversity, and language variation cross-culturally on a global scale and in the U.S. Attention is given to the significance of linguistic and cultural diversity in applied contexts, such as language use in educational settings. May be used to fulfill the Cultural Diversity component or part of the Social Science component of the General Education Requirements.	
<b>ENGL 350/550</b>	<b>British Literature of the Nineteenth Century</b>	3 Cr.
	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. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 358/558</b>	<b>Teaching of English to Speakers of Other Languages: Theory and Methods for P-12 Educators</b>	3 Cr.
	A study of the theoretical and historical background of second language teaching as well as theories of second language acquisition, with special attention to different cultural backgrounds. Topics include practical application of theories through methods of teaching speaking, listening, and grammar with a focus on p-12 contexts. The course will employ readings, activities, and class discussions among students from various linguistic and cultural traditions, and require them to observe a p-12 ELL class or tutoring program, as well as develop and teach an English language lesson. May be used to fulfill the Cultural Diversity course component of the General Education requirements. Prerequisite: Education major or instructor approval.	
<b>ENGL 359/559</b>	<b>Teaching of English to Speakers of Other Languages: Methods and Practices for P-12 Educators</b>	3 Cr.
	A study of practical applications of language learning involved in methods of teaching vocabulary, reading, and writing in p-12 contexts, with special attention to different cultural backgrounds. The course will employ readings, activities, and class discussions among students from various linguistic and cultural traditions. Students will observe a p-12 ELL class or tutoring program, as well as develop and teach an English language lesson. May be used to fulfill the Cultural Diversity course component of the General Education requirements. Prerequisite: Education major or instructor approval.	
<b>ENGL 360</b>	<b>Cross-Cultural Engagement in English Studies*</b>	3 Cr.
	In this course, students will encounter texts, language, and media by authors from historically underrepresented groups who in the exercise of their art add something significant—oftentimes challenging—to understandings of what it means to be human. Texts will be engaged critically, creatively, rhetorically, and/or linguistically, in order to examine pressing cross-cultural issues as they present themselves in local and/or global communities. This course fulfills the Cultural Diversity General Education requirement.	
<b>ENGL 365/565</b>	<b>Studies in American Literature*</b>	3 Cr.
	A study of a significant movement in American literature, such as Transcendentalism, Romanticism, Naturalism, and Realism, or a group of writers related regionally, ethnically, or in some other special way. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 368/568</b>	<b>Teaching of English to Speakers of Other Languages: Theory and Methods</b>	3 Cr.
	A study of the theoretical and historical background of second language teaching as well as theories of second language acquisition, with special attention to different cultural backgrounds. Topics include practical application of theories through methods of teaching, speaking, listening, and grammar. The course will employ readings, activities, and class discussions among students from various linguistic and cultural traditions, and require them to observe an ESL class, as well as develop and teach an English language lesson. May be used to fulfill the Cultural Diversity course component of the General Education requirements.	

<b>ENGL 369/569</b>	<b>Teaching of English to Speakers of Other Languages: Methods and Practices</b>	3 Cr.
	A study of practical applications of language learning involved in methods of teaching vocabulary, reading, and writing, with special attention to different cultural backgrounds. The course will employ readings, activities, and class discussions among students from various linguistic and cultural traditions. Students will observe an ESL class, as well as develop and teach an English language lesson. May be used to fulfill the Cultural Diversity course component of the General Education requirements. Prerequisite: sophomore standing.	
<b>ENGL 370/570</b>	<b>Modern and Contemporary Fiction</b>	3 Cr.
	Readings of significant works by British, American, and Anglophone fiction writers since 1900, as well as some possible attention to related influential writings from other time periods or languages. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180, ENGL 201, or junior standing.	
<b>ENGL 372/572</b>	<b>Modern and Contemporary Drama</b>	3 Cr.
	Readings of significant works by British, American, and Anglophone playwrights since 1900, as well as some possible attention to related influential writings from other time periods or languages. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180, ENGL 201, or junior standing.	
<b>ENGL 374</b>	<b>Observation in P-12 English Learner Education</b>	1 Cr.
	Observation of teaching English Learners in a US public school. Students spend approximately 45 hours in observation. Prerequisite: Education major or instructor approval.	
<b>ENGL 375/575</b>	<b>Modern and Contemporary Poetry</b>	3 Cr.
	Readings of significant works by British, American, and Anglophone poets since 1900, as well as some possible attention to related influential writings from other time periods or languages. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180, ENGL 201, or junior standing.	
<b>ENGL 384</b>	<b>Observation in TESOL</b>	1 Cr.
	Observation of teaching English to non-native English speakers. Students spend approximately 30 hours in observation. Prerequisite: ENGL 368 and ENGL 369.	
<b>ENGL 410/510</b>	<b>Shakespeare</b>	3 Cr.
	Close readings of representative plays: histories, comedies, and tragedies. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 431/531</b>	<b>Advanced Writing and Rhetoric</b>	3 Cr.
	A course for students who have developed fundamental writing and rhetorical skills and are prepared to study more sophisticated writing processes, rhetorical analysis, and strategies for adapting persuasive writing to particular audiences, purposes, genres, and publication venues. A Writing in the Discipline course. Fulfills the Humanities: Fine and Performing Arts General Education Requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 440</b>	<b>Multimedia Writing and Design</b>	3 Cr.
	This course will help students improve their use of electronic tools often used in the workplace, learn the rules of design, integrate content, analyze audience needs and expectations, create readable and inviting documents, and use multimedia authoring software to write for various audiences. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 456/556</b>	<b>The Novel</b>	3 Cr.
	A study of representative English novels of the eighteenth and nineteenth centuries, with discussion of the social background. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 477</b>	<b>Practicum in English Learner Education</b>	3 Cr.
	Exposure to and guidance in the practical work of teaching and assessing English Language Learners at the primary and secondary levels in US public schools. Students spend approximately 100 hours working with p-12 English Language Learners, divided equally between a primary and secondary school setting. Prerequisite: Instructor approval.	

<b>ENGL 478/578</b>	<b>Literature for Children</b>	3 Cr.
	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. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or Junior standing.	
<b>ENGL 479/579</b>	<b>Young Adult Literature</b>	3 Cr.
	This course surveys literature suitable for students in middle and secondary schools with emphasis on young adult literature and the development of analytical and evaluative techniques. The course includes an introduction to current research in the field. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 or junior standing.	
<b>ENGL 480/580</b>	<b>Topics in Writing</b>	3 Cr.
	An open topics course, which may involve intensive writing in a particular genre (for example, the personal essay, dramatic poetry, longer fiction), or writing for a particular audience (for example, writing for children and young adults). Prerequisite: ENGL 180, ENGL 201, or junior standing.	
<b>ENGL 481</b>	<b>Cooperative Education in English I</b>	0.5-3 Cr.
	Professional work experience which education. Written report required. Prerequisite: approval of the chair of the department.	
<b>ENGL 482</b>	<b>Cooperative Education in English II</b>	0.5-3 Cr.
	Continuation of ENGL 481. Prerequisite: ENGL 481.	
<b>ENGL 483</b>	<b>Cooperative Education in English III</b>	0.5-3 Cr.
	Continuation of ENGL 481. Prerequisite: ENGL 481. May be repeated beyond 483 for additional credit.	
<b>ENGL 484/594</b>	<b>Topics in Language</b>	3 Cr.
	An open-topic course, which may concern a single issue in language or linguistics (e.g. Language and Gender, Lexicography: Dictionaries and Dictionary Writing, Genre Analysis: Culture and Rhetoric, Exploring English for Academic Purposes).	
<b>ENGL 486</b>	<b>Internship in English</b>	0.5-3 Cr.
	Students gain experience working for organizations or agencies in which skills in effective writing, critical thinking, or literary scholarship are essential. A written report is required. Prerequisite: approval of the chair of the department.	
<b>ENGL 487</b>	<b>Practicum in TESOL</b>	1-2 Cr.
	Exposure to and guidance in the practical work of teaching English to non-native English speakers. Students spend approximately 45 hours per credit in preparation of lessons, teaching, and reflection. Prerequisite: ENGL 368 and ENGL 369. Course may be repeated for credit.	
<b>ENGL 488</b>	<b>Internship in the Writing Center</b>	1-3 Cr.
	This internship introduces the theory and practice of tutoring writing and explores the unique pedagogical opportunities afforded by working individually with student writers. Through ongoing Writing Center observations and tutoring as well as regular meetings, this internship introduces students to current writing center theory and addresses a range of practical issues, such as negotiating goals during writing tutorials, structuring sessions, and providing feedback. Prerequisite: sophomore standing.	
<b>ENGL 490/590</b>	<b>Topics in Literature*</b>	3 Cr.
	An open-topic course, which may concern a single writer or group of writers; a literary type or theme (e.g., Politics and Literature, Novel of Social Criticism, Sacred Tales, Black Spiritual Narratives); a contemporary art form (e.g., Contemporary Poetry); or an aspect of modern popular culture. Fulfills the Humanities: Literature General Education requirement. May be repeated for credit, provided topics are different. Prerequisite: ENGL 180 or junior standing.	

<b>ENGL</b>	<b>Seminar in Professional Writing</b>	3 Cr.
<b>491/591</b>	Students will reflect critically on the meaning of certain writing tasks in the cultures of working society. They will become more 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 210 and ENGL 431, or approval of the chair of the department.	
<b>ENGL</b>	<b>Seminar in Creative Writing</b>	3 Cr.
<b>492/592</b>	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 201 and one of ENGL 323, ENGL 324, ENGL 325, or ENGL 431, and senior standing, or approval of the chair of the department.	
<b>ENGL 493</b>	<b>Seminar in English Literature</b>	3 Cr.
	Designed for seniors interested in active participation, the seminar encourages independent thought and research, and relies on discussion rather than lectures. Some recent topics include Literary Modernism, and Women and Victorian Print Culture. Enrollment limited to 15 students. Required for English majors. Fulfills the Humanities: Literature General Education requirement. Prerequisite: ENGL 180 and senior standing.	
<b>ENGL 495</b>	<b>Independent Study in English</b>	3 Cr.
	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.	
<b>ENGL 497</b>	<b>Honors Work in English Literature</b>	3 Cr.
	See Honors Work, page 56.	
<b>ENGL 498</b>	<b>Honors Candidacy in English Literature</b>	3 Cr.
	See Honors Work, page 56.	

# Environmental Science

Learn more about the [Environmental Science](#) program at Valpo online.

**Administrative Committee:** Professors Aljobeh (Civil and Environmental Engineering), Devaraj (Economics), Eberhardt (Biology), Ganesh Babu (Geography and Meteorology), Iceman (Chemistry), Longan (Geography and Meteorology), McCool (Geography and Meteorology), Peller (Chemistry), Raridon (Sociology).

## Objectives

The Environmental Science Program, through collaboration with faculty in multiple disciplines who demonstrate excellence in teaching and scholarship of environmental merit, gives its students the requisite scientific background necessary for assessing environmental systems, along with philosophical, pedagogical, and social reflection on environmental issues. The core curriculum includes perspectives on scientific knowledge, field work, and communication skills. Elective courses expose students to a wide range of environmental topics from a variety of disciplines, providing both an engaging curriculum that promotes interest in and passion for environmental issues, and opportunities for cross-disciplinary interaction. An Environmental Science major positions the student to enter into graduate work in environmental science or policy, or into the professions of environmental management and protection.

## Degree

Students who complete the Environmental Science program will fulfill the major field requirements for the Bachelor of Science degree. Students who complete the Environmental Science Complementary Major of 32 credits with a first major in a disciplinary science field (astronomy, biology, chemistry, computer science, engineering, geography, mathematics, meteorology, physics, psychology) will also have fulfilled the major field requirements for the Bachelor of Science degree. Students who complete the Environmental Science Complementary Major of 32 credits with a first major in a non-science field, including the B.A. option in geography, will have fulfilled the major field requirements for the Bachelor of Arts degree.

## Bachelor of Science – Environmental Science Major (Minimum 52 Cr.)

Environmental Science Core		30 Cr.
GEO 260	Environmental Conservation	3 Cr.
BIO 171	Unity of Life	3+3, 4 Cr.
BIO 172	Diversity of Life	3+3, 4 Cr.
CHEM 121	General Chemistry I	3+3, 4 Cr.
CHEM 122	General Chemistry II	3+3, 4 Cr.
GEO 104	Introduction to Geomorphology in Earth System Science	3+3, 4 Cr.
GEO 215	Introduction to Geographic Information Systems	3+2, 4 Cr.
One of the following:		
IDS 205	Business Statistics	3 Cr.
GEO/MET 460	Data Analysis	3 Cr.
PSY 201	Statistical Methods	3 Cr.
STAT 140	General Statistics	3 Cr.
STAT 240	Statistical Analysis	3 Cr.
Environment and Society Elective		3 Cr.
One course from the following options:		
GEO 265	Sustainability: Environment, Economy, Society	3 Cr.
GEO 321	Urban and Regional Planning	3 Cr.
ECON 210	Environmental Economics and Policy	3 Cr.
SOC 240	Food Systems	3 Cr.
Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee		
Environmental Meanings and Values Elective		3 Cr.
One course from the following options:		
GEO 475	Culture, Nature, Landscape	3 Cr.
PHIL 230	Environmental Philosophy and Ethics	3 Cr.
Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee		

**Environmental Science Electives 14 Cr.****Minimum of 14 credit hours from the following options, including at least one****Writing in the Discipline (WID) course (marked with \*):**

<b>BIO 215</b>	Fundamental Microbiology for Engineers	3+3, 4 Cr.
<b>BIO 350</b>	Field Biology: Spring	2+4, 3 Cr.
<b>BIO 430</b>	Plant Biology*	3+3, 4 Cr.
<b>BIO 435</b>	Insect Biology*	3+3, 4 Cr.
<b>BIO 440</b>	Ecology*	3+4, 4 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 230</b>	Quantitative Analysis	3+3, 4 Cr.
<b>CHEM 341</b>	Environmental Chemistry	3+0, 3 Cr.
<b>CE 364</b>	Environmental Engineering I*	3+3, 4 Cr.
<b>ENVS 290</b>	Topics in Environmental Science	1-3 Cr.
<b>ENVS 490</b>	Advanced Topics in Environmental Science	1-3 Cr.
<b>GEO 264</b>	Soils and the Environment	2+2, 3 Cr.
<b>GEO 266</b>	River Systems and Landforms	2+2, 3 Cr.
<b>GEO 304</b>	Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
<b>GEO 365</b>	Biogeography	3 Cr.
<b>GEO 385</b>	Field Study (when an environmental field study)	0+4, 1-3 Cr.
<b>GEO 415</b>	Advanced Geographic Information Systems	3 Cr.
<b>GEO/MET 240</b>	Introduction to Climate Change	3 Cr.
<b>MET 440</b>	Global Climate Change	3 Cr.

**Or any new or topic course approved by the coordinator of the Environmental Science Administrative Committee****These must include at least 11 hours at a level of 300 or higher.**

<b>Capstone Experience</b>	<b>2-4 Cr.</b>
<b>ENVS 499</b>	Colloquium on Environmental Science and Management
<b>One additional course from the following options (ENVS 495 and ENVS 499 can be repeated for credit):</b>	
<b>ENVS 381</b>	Cooperative Education in Environmental Science
<b>ENVS 386</b>	Internship in Environmental Science
<b>ENVS 495</b>	Independent Research in Environmental Science
<b>ENVS 499</b>	Colloquium on Environmental Science and Management

**Complementary Environmental Science Major (Minimum 32 Cr.)**

A student with a first major that is not an interdisciplinary major is eligible to take the Environmental Science complementary major. A minimum of 32 credit hours must be taken according to the following requirements and in accordance with the Restrictions for Interdisciplinary Majors from the Interdisciplinary Programs section of this catalog (see page 349).

<b>Environmental Science Core</b>	<b>14 Cr.</b>
<b>GEO 260</b>	Environmental Conservation
<b>Minimum of 11 credit hours from the following options:</b>	
<b>BIO 171</b>	Unity of Life
<b>BIO 172</b>	Diversity of Life
<b>CHEM 121</b>	General Chemistry I
<b>CHEM 122</b>	General Chemistry II
<b>GEO 104</b>	Introduction to Geomorphology in Earth System Science
<b>GEO 215</b>	Introduction to Geographic Information Systems
<b>One of the following:</b>	
<b>IDS 205</b>	Business Statistics
<b>GEO/MET 460</b>	Data Analysis
<b>PSY 201</b>	Statistical Methods
<b>STAT 140</b>	General Statistics
<b>STAT 240</b>	Statistical Analysis

## Environmental Science

<b>Environment and Society Elective</b>	<b>3 Cr.</b>
<b>One course from the following options:</b>	
GEO 265 Sustainability: Environment, Economy, and Society	3 Cr.
GEO 321 Urban and Regional Planning	3 Cr.
ECON 210 Environmental Economics and Policy	3 Cr.
SOC 240 Food Systems	3 Cr.
<b>Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee</b>	
<b>Environmental Meanings and Values Elective</b>	<b>3 Cr.</b>
<b>One course from the following options:</b>	
GEO 475 Culture, Nature, Landscape	3 Cr.
PHIL 230 Environmental Philosophy and Ethics	3 Cr.
<b>Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee</b>	
<b>Environmental Science Electives</b>	<b>10 Cr.</b>
<b>Minimum of 10 credit hours from the following options, including at least one WID course (marked with *):</b>	
BIO 215 Fundamental Microbiology for Engineers	3+3, 4 Cr.
BIO 350 Field Biology: Spring	2+4, 3 Cr.
BIO 430 Plant Biology*	3+3, 4 Cr.
BIO 435 Insect Biology*	3+3, 4 Cr.
BIO 440 Ecology*	3+4, 4 Cr.
CHEM 221 Organic Chemistry I	3+3, 4 Cr.
CHEM 222 Organic Chemistry II	3+3, 4 Cr.
CHEM 230 Quantitative Analysis	3+3, 4 Cr.
CHEM 341 Environmental Chemistry	3+0, 3 Cr.
CE 364 Environmental Engineering I*	3+3, 4 Cr.
ENVS 290 Topics in Environmental Science	1-3 Cr.
ENVS 490 Advanced Topics in Environmental Science	1-3 Cr.
GEO 264 Soils and the Environment	2+2, 3 Cr.
GEO 266 River Systems and Landforms	2+2, 3 Cr.
GEO 304 Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
GEO 365 Biogeography	3 Cr.
GEO 385 Field Study (when an environmental field study)	0+4, 1-3 Cr.
GEO 415 Advanced Geographic Information Systems	3 Cr.
GEO/MET 240 Introduction to Climate Change	3 Cr.
MET 440 Global Climate Change	3 Cr.
<b>Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee</b>	
<b>These must include at least 7 credit hours at a level of 300 or higher.</b>	
<b>Capstone Experience</b>	<b>2-4 Cr.</b>
ENVS 499 Colloquium on Environmental Science and Management	1 Cr.
<b>One additional course from the following options (ENVS 495 and ENVS 499 can be repeated for credit):</b>	
ENVS 381 Cooperative Education in Environmental Science	1-2 Cr.
ENVS 386 Internship in Environmental Science	0.5-3 Cr.
ENVS 495 Independent Research in Environmental Science	0.5-3 Cr.
ENVS 499 Colloquium on Environmental Science and Management	1 Cr.

## Environmental Studies Minor

The Environmental Studies minor is described in the Interdisciplinary Programs section, page 352.

## **Environmental Science Courses**

<b>ENVS 290</b>	<b>Topics in Environmental Science</b>	1-3 Cr.
	Topical studies in Environmental Science. Topics might include water resources, air pollution, environmental restoration, sustainable energy, or other topics of interest. May be repeated for credit when the topic is different. Prerequisite: certain topics may have specific course requirements.	
<b>ENVS 381</b>	<b>Cooperative Education in Environmental Science</b>	1-2 Cr.
	Experience in environmental research or management with a cooperating employer. Midterm and final written reports required. Credit hours assigned per College of Arts and Sciences guidelines. S/U grade only. May be repeated for additional credit. Prerequisites: Environmental Science major or minor and consent of the coordinator of Environmental Science.	
<b>ENVS 386</b>	<b>Internship in Environmental Science</b>	0.5-3 Cr.
	Professional experience in cooperating public or private organizations such as state environmental agencies or environmental consulting firms. Final report required. May be repeated for up to 6 credits. S/U grade only. Prerequisites: Environmental Science major or minor and consent of the coordinator of Environmental Science.	
<b>ENVS 490</b>	<b>Advanced Topics in Environmental Science</b>	1-3 Cr.
	Advanced topical studies in Environmental Science. Topics might include water resources, air pollution, environmental restoration, sustainable energy, or other topics of interest. May be repeated for credit when the topic is different. Prerequisite: certain topics may have specific course requirements.	
<b>ENVS 495</b>	<b>Independent Research in Environmental Science</b>	0.5-3 Cr.
	Students work on a project of environmental and scientific merit under the guidance of a faculty sponsor. Final report required. S/U grade only. May be repeated for additional credit. Prerequisites: Environmental Science major or minor, consent of the coordinator of Environmental Science and consent of the faculty sponsor.	
<b>ENVS 499</b>	<b>Colloquium on Environmental Science and Management</b>	0-1 Cr.
	This course contains (1) presentations by students, faculty, and guest speakers on current topics in environmental research, issues, policy, and management; (2) reading and discussion of items of interest in the environmental literature; and (3) occasional workshops on topics such as public communication or technical and grant writing skills. Specific content will vary based on interests of students and faculty. S/U grade only. May be repeated for credit.	

# Geography and Meteorology

Learn more about the [Department of Geography and Meteorology](#) at Valpo online.

**Professors Bals-Elsholz (chair), C. Clark, Kilpinen, Longan, Wolf; Associate Professors Ganesh Babu, Goebbert; Assistant Professor McCool.**

## Geography

Geography studies the Earth and its diverse people and environments. It seeks to understand how humans perceive and transform places and landscapes around the world. Geographers also explore and analyze the spatial organization of natural and social phenomena by creating and analyzing maps with computerized geographic information systems (GIS). Geography students learn to integrate knowledge from the natural sciences, social sciences, and humanities in order to understand humanity's relationship with the Earth. Geography uniquely combines a strong liberal arts education with marketable professional skills.

The major integrates dynamic classroom instruction with field and professional experience to prepare students for a wide variety of careers. Students completing the major may go on to careers in environmental management, urban planning, geospatial technology, cartography, location planning, real estate, tourism, marketing, demography, natural disaster preparation and recovery, international business, emergency management, social studies education, or earth science education to name just a few areas. Combining geography with a second major or pursuing graduate study in geography can enhance a student's opportunities. Geography majors also pursue graduate study in other areas including urban planning, architecture, landscape architecture, environmental science, resource management, climatology, oceanography, geology, archaeology, anthropology, law, or medicine.

The Geography major at Valparaiso University emphasizes practical experience through field and laboratory based courses, internships, and opportunities to work with faculty on original research. Students taking physical geography courses visit a variety of nearby regional locations from the Indiana Dunes National Park to the local fields and streams, applying their classroom knowledge of landforms, taking observations, and bringing measurements and samples back into the lab for analysis. Students studying urban geography and planning take a short train ride into Chicago to experience the dynamism of the downtown Loop and to observe everyday life in its diverse neighborhoods. In field courses, students use the environment as their classroom; following the Oregon Trail while learning about physical and cultural geography of the western landscape of Yellowstone, or traversing the National Parks and cultural aspects of the desert southwest in Peaks and Pueblos. Most geography students complete a paid or unpaid internship with national parks, urban planning agencies, environmental organizations, county and city governments, non-profit organizations, or businesses. Many geography students also complete one of Valparaiso University's study abroad programs. Motivated students may arrange to work with a faculty member on original research problems or work as a lab assistant for physical geography and GIS courses.

Outside the classroom, students share their love for geography through the Geography Club, which organizes professional and social activities, weekend field excursions, and guest speakers. Students who distinguish themselves by high scholarship may be elected to membership in Gamma Theta Upsilon, the international geography honor society. The Alpha Xi Chapter of Gamma Theta Upsilon was installed at Valparaiso University in 1950.

The geography program at Valparaiso University has access to state-of-the-art facilities including the F.P. Kallay Geographic Applications Laboratory, an extensive map library located in the Christopher Center, media-equipped classrooms in Kallay– Christopher Hall and an expanding collection of instrumentation in the physical geography lab.

### Bachelor of Arts - Geography Major (Minimum 32 Cr.)

Geography Core		14 Cr.
<b>Take one of the following courses:</b>		
GEO 101	World Human Geography	3 Cr.
GEO 102	Globalization and Development	3 Cr.
GEO 104	Introduction to Geomorphology in Earth System Science	3+3, 4 Cr.
GEO 215	Introduction to Geographic Information Systems	3+2, 4 Cr.
<b>Take one of the following courses:</b>		
GEO 301	Regional Geographies of the World	3 Cr.
GEO 320	Urban Geography	3 Cr.
GEO 321	Urban and Regional Planning	3 Cr.
GEO 420	Rural Geography	3 Cr.
GEO 470	Political Geography	3 Cr.
GEO 474	Historical Geography of the United States	3 Cr.
GEO 475	Culture, Nature, Landscape	3 Cr.

<b>Geography Electives</b>		<b>18-19 Cr.</b>
<b>Take one of the following courses:</b>		
GEO 304	Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
GEO 315	Environmental Applications of GIS	3 Cr.
GEO 316	Internet Mapping and Web GIS	3 Cr.
GEO 330	Remote Sensing of the Environment	3 Cr.
GEO 365	Biogeography	3 Cr.
GEO 415	Advanced Geographic Information Systems	3 Cr.
GEO 460	Data Analysis	3 Cr.
<b>Take one additional 200-level course</b>		<b>3 Cr.</b>
<b>Take three additional 300-level (or higher) courses</b>		<b>9 Cr.</b>
<b>Take any additional geography course(s)</b>		<b>3 Cr.</b>
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		
Human/Cultural Geography		
Note: The department maintains detailed information sheets on these concentrations, including course listings, internship recommendations, and career options at its website <a href="http://valpo.edu/geography-meteorology/geography">valpo.edu/geography-meteorology/geography</a> . Contact the chair of the department for details.		

**Bachelor of Arts – Geography Education Major (Minimum 48 Cr.)**

GEO 101	World Human Geography	3 Cr.
GEO 102	Globalization and Development	3 Cr.
GEO 104	Introduction to Geomorphology in Earth System Science	3+3, 4 Cr.
GEO 215	Introduction to Geographic Information Systems	3+2, 4 Cr.
GEO 260	Environmental Conservation	3 Cr.
GEO 280	Geography of Cyberspace	3 Cr.
MET 103	Introduction to Meteorology	3+2, 4 Cr.
<b>One of the following courses:</b>		
GEO 301	Regional Geographies of the World	3 Cr.
GEO 470	Political Geography	3 Cr.
<b>One of the following courses:</b>		
GEO 320	Urban Geography	3 Cr.
GEO 420	Rural Geography	3 Cr.
<b>At least three credits from the following courses:</b>		
GEO 304	Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
GEO 365	Biogeography	3 Cr.
GEO 385	Field Study	0+4, 1-3 Cr.
<b>One of the following courses:</b>		
GEO 474	Historical Geography of the United States	3 Cr.
GEO 475	Culture, Nature, Landscape	3 Cr.
<b>Additional courses required:</b>		
ECON 222	Principles of Macroeconomics	3 Cr.
HIST 110	The World in the Twentieth Century	3 Cr.
POLS 120	The Government of the United States	3 Cr.
SOC 275	Systems of Social Stratification	3 Cr.
Note: Courses may also fulfill General Education requirements where appropriate.		

**Bachelor of Science – Geography Major (Minimum 40 Cr.)****Geography Core****14 Cr.****Take one of the following options:**

<b>GEO 101</b>	World Human Geography	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>GEO 104</b>	Introduction to Geomorphology in Earth System Science	3+3, 4 Cr.
<b>GEO 215</b>	Introduction to Geographic Information Systems	3+2, 4 Cr.

**Take one of the following options:**

<b>GEO 301</b>	Regional Geographies of the World	3 Cr.
<b>GEO 320</b>	Urban Geography	3 Cr.
<b>GEO 321</b>	Urban and Regional Planning	3 Cr.
<b>GEO 420</b>	Rural Geography	3 Cr.
<b>GEO 470</b>	Political Geography	3 Cr.
<b>GEO 474</b>	Historical Geography of the United States	3 Cr.
<b>GEO 475</b>	Culture, Nature, Landscape	3 Cr.

**Environmental Core****11-13 Cr.**

<b>GEO 304</b>	Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
<b>GEO 365</b>	Biogeography	3 Cr.
<b>GEO 496</b>	Research in Geography (when physical geography)	1-3 Cr.

**Take one of the following courses:**

<b>GEO 264</b>	Soils and the Environment	2+2, 3 Cr.
<b>GEO 266</b>	River Systems and Landforms	2+2, 3 Cr.

**Geographic Tools****6 Cr.****Take two of the following courses:**

<b>GEO 130</b>	Earth From Above	3+2, 4 Cr.
<b>GEO 225</b>	Cartography and Map Design	3 Cr.
<b>GEO 315</b>	Environmental Applications of GIS	3 Cr.
<b>GEO 316</b>	Internet Mapping and Web GIS	3 Cr.
<b>GEO 330</b>	Remote Sensing of the Environment	3 Cr.
<b>GEO 415</b>	Advanced Geographic Information Systems	3 Cr.
<b>GEO 460</b>	Data Analysis	3 Cr.

**Professional Experience****3 Cr.****At least three credits from the following courses:**

<b>GEO 385</b>	Field Study in Geography	0+3, 1-3 Cr.
<b>GEO 486</b>	Internship in Geography	3 Cr.
<b>MET 385</b>	Field Study in Meteorology	3 Cr.

**Electives****6 Cr.****At least six credits from the following courses:**

<b>GEO 204</b>	National Parks and Public Lands	3 Cr.
<b>GEO 240</b>	Introduction to Climate Change	3 Cr.
<b>GEO 260</b>	Environmental Conservation	3 Cr.
<b>GEO 265</b>	Sustainability: Environment, Economy, Society	3 Cr.
<b>GEO 285</b>	Natural Hazards	2+2, 3 Cr.
<b>GEO 490</b>	Selected Topics in Geography	1-3 Cr.
<b>GEO 495</b>	Independent Study	1-4 Cr.
<b>MET 216</b>	Introduction to Meteorological Observation and Analysis	3 Cr.
<b>MET 319</b>	Tropical Meteorology	3 Cr.

**An additional Geographic Tools, Professional Experience course, or Geography Core course at the 300-level or higher**

**Additional courses required:**

<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MET 103</b>	Introduction to Meteorology	3+2, 4 Cr.
<b>MET 215</b>	Climatology	2+2, 3 Cr.

**Note: Students opting for a Meteorology science minor or second major to complete the Geography B.S. degree may not use courses with the MET prefix to fulfill the Electives requirement of the Geography B.S.**

## Geography Minor (Minimum 16 Cr.)

Geography courses are chosen by the student in consultation with his or her advisor and must include the following:

**One 100-level course**

**One 200-level course**

**Two 300-level (or higher) courses**

## Geographic Information Systems Minor (Minimum 16 Cr.)

**One course from the following options:**

<b>GEO 101</b>	World Human Geography	3 Cr.
<b>GEO 104</b>	Introduction to Geomorphology in Earth System Science	3+3, 4 Cr.
<b>GEO 215</b>	Introduction to Geographic Information Systems	3+2, 4 Cr.
<b>GEO 330</b>	Remote Sensing of the Environment	3 Cr.
<b>GEO 415</b>	Advanced Geographic Information Systems	3 Cr.

**At least three credits from the following options:**

<b>GEO 225</b>	Cartography and Map Design	3 Cr.
<b>GEO 285</b>	Natural Hazards	2+2, 3 Cr.
<b>GEO 315</b>	Environmental Applications of GIS	3 Cr.
<b>GEO 316</b>	Internet Mapping and Web GIS	3 Cr.
<b>GEO 486</b>	Internship in Geography.	1-6 Cr.

**Note: If selecting GEO 486, the internship must involve GIS, remote sensing, or cartography.**

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, world language, history, sociology/anthropology, and political science. The Kallay Laboratory is 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 or visit the department's web page at [valpo.edu/geography-meteorology](http://valpo.edu/geography-meteorology).

## Meteorology

The atmospheric science course of study at Valparaiso University leads to a Bachelor of Science degree in Meteorology. The science of meteorology draws heavily on the fields of mathematics, physics, computer science, and chemistry. As such, students should possess a strong mathematics and science background. The required major courses prepare every student in the foundations of atmospheric science. The elective courses reflect the diverse nature of the science, enrich each student's academic experience, and prepare them for post-graduate careers.

The job market in meteorology, like the field itself, is rich and diverse. Many graduates enter employment with airlines, private forecasting and environmental consulting firms, emergency management offices, or the National Weather Service. Others pursue professional opportunities with the U.S. Air Force through the University's Air Force ROTC program (see page 364). Still others pursue careers in research and academia, which require graduate training. Valparaiso University graduates have gone on to many of the finest meteorology graduate programs in the country.

Broadcast meteorology represents another promising career sector, and many meteorology graduates have achieved success in this field. There is considerable demand nationwide for trained professionals able to communicate meteorological information effectively and accurately, either through the broadcast media (cable, television, and radio) or in association with various consulting firms. Students prepare for this field through hands-on training and experience in broadcasting in the VUTV studios in Schnabel Hall and through internships at a variety of broadcast stations across the country, including WGN-TV in Chicago. Those interested in careers in broadcast meteorology should complete a Bachelor of Science degree in meteorology and a Digital Media Arts Minor through the Department of Communication and Visual Arts (see page 78).

Students interested in extracurricular learning opportunities are encouraged to participate in the student chapter of the American Meteorological Society/National Weather Association, with the Valparaiso University Storm Intercept Team (VUSIT), and avail themselves of the program's field course opportunities, including the Severe Convective Storms Field Study. The local chapter of Chi Epsilon Pi meteorology honor society promotes excellence and further training in meteorology. Internships and cooperative education experiences are also available to qualified students. The department maintains a high-tech weather center with individual work stations, access to UNIDATA and GEMPAK analysis tools and data retrieval, as well as to the department's instrumentation data sets for Valparaiso University's dual polarization Doppler radar, weather instrumentation tower, and radiosonde launching systems.

**Bachelor of Science - Meteorology Major (Minimum 32 Cr.)**

<b>MET 103</b>	Introduction to Meteorology	3+2, 4 Cr.
<b>MET 130</b>	Weather Technology	3 Cr.
<b>MET 215</b>	Climatology	2+2, 3 Cr.
<b>MET 216</b>	Introduction to Meteorological Observation and Analysis	3 Cr.
<b>MET 369</b>	Atmospheric Thermodynamics	3 Cr.
<b>MET 372</b>	Atmospheric Dynamics I	3+2, 4 Cr.
<b>MET 373</b>	Atmospheric Dynamics II	3+2, 4 Cr.
<b>MET 480</b>	Synoptic Scale Analysis and Forecasting	3+2, 4 Cr.
<b>MET 481</b>	Mesoscale Analysis and Forecasting	3+2, 4 Cr.

**Additional Required Courses**

<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.

**Progression**

In order to remain in the major, students must maintain a combined minimum grade point average of 2.300 in all Valparaiso University meteorology courses and in those mathematics and physics courses required for meteorology. Students will be reviewed initially at the end of their second semester on campus and each academic year thereafter.

**Meteorology Minor (Minimum 16 Cr.)****One course from the following options:**

<b>MET 103</b>	Introduction to Meteorology	3+2, 4 Cr.
<b>MET 190</b>	Topics in Weather and Climate	3+2, 4 Cr.
<b>MET 215</b>	Climatology	2+2, 3 Cr.
<b>MET 216</b>	Introduction to Meteorological Observation and Analysis	3 Cr.

**Two courses from the following options<sup>4</sup>:**

<b>MET 130</b>	Weather Technology	3 Cr.
<b>MET 240</b>	Introduction to Climate Change	3 Cr.
<b>MET 271</b>	Aviation Meteorology	3 Cr.
<b>MET 279</b>	Severe Storm Prediction and Nowcasting	3 Cr.
<b>MET 319</b>	Tropical Meteorology	3 Cr.
<b>MET 350</b>	Boundary Layer Meteorology	3 Cr.
<b>MET 430</b>	Numerical Weather Prediction	3 Cr.
<b>MET 435</b>	Radar Meteorology	3 Cr.
<b>MET 440</b>	Global Climate Change	3 Cr.

**Degree**

Completion of the degree requirements of the College of Arts and Sciences with a major in Geography or Geography Education leads to the Bachelor of Arts degree. Completion of the degree requirements of the College of Arts and Sciences with a major in Geography, or Meteorology leads to the Bachelor of Science degree.

<sup>4</sup> Students may not take both MET 240 and MET 440 to fulfill this requirement

## **Geography**

### **Social Science Courses**

The following courses may be used to fulfill part of the Social Science component of the General Education Requirements. No course can meet more than one General Education Requirement.

<b>GEO 101</b>	<b>World Human Geography</b>	3 Cr.
	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. May be used to partially fulfill the Social Science component of the General Education requirements.	
<b>GEO 102</b>	<b>Globalization and Development</b>	3 Cr.
	A regional survey of the developing countries, with an emphasis on their economic, social, and political development in the context of growing global interconnectedness. The course will explore issues of colonization, cultural change, ethnic conflict, and environmental modification. May be used to fulfill the Cultural Diversity course component of the General Education Requirements or to partially fulfill the Social Science component of the General Education requirements.	
<b>GEO 200</b>	<b>American Ethnic Geography</b>	3 Cr.
	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. May be used to fulfill the Cultural Diversity course component of the General Education Requirements or to partially fulfill the Social Science component of the General Education requirements.	
<b>GEO 201</b>	<b>Economic Geography</b>	3 Cr.
	An analysis of the location of economic activities as parts of a system. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: sophomore standing or above.	
<b>GEO 212</b>	<b>Introduction to Archaeology</b>	3 Cr.
	This course is an introduction to the science of studying human, biological, and material remains in order to reconstruct past cultures and societies. The class introduces students to the study and practice of archaeology, and its relationships with associated disciplines and fields, especially geography. Students will learn about the methods, goals, and theoretical concepts of archaeology with its role in our understanding of the past. Diverse cultures from hunter-gather societies to empires are used to illustrate how archaeologists go from dirty bits of broken bones, pots, or wall foundations to understand how people lived and how cultures changed over time. May be used to partially fulfill the Social Science component of the General Education requirements.	
<b>GEO 265</b>	<b>Sustainability: Environment, Economy, Society</b>	3 Cr.
	An introduction to principles and practices of sustainability which seek to integrate environmental stewardship, economic development, and social justice. May be used to partially fulfill the Social Science component of the General Education requirements. May be used to fulfill the Writing-Intensive Course of General Education requirements.	
<b>GEO 280</b>	<b>Geography of Cyberspace</b>	3 Cr.
	A course exploring the geographical dimensions of the Internet, media, and telecommunications. Includes consideration of urban telecommunication, online community, and virtual spaces. May be used to partially fulfill the Social Science component of the General Education requirements. May be used to fulfill the Writing-Intensive Course of General Education requirements.	
<b>GEO 301/501</b>	<b>Regional Geographies of the World</b>	3 Cr.
	A geographic interpretation of the environmental, cultural, political, and economic patterns of one of the world's major regions, such 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 be used to fulfill the Cultural Diversity course component of the General Education Requirements or may be used to partially fulfill the Social Science component of the General Education Requirements. Prerequisite: junior standing.	

<b>GEO 320</b>	<b>Urban Geography</b>	3 Cr.
	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. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: junior standing.	
<b>GEO 321</b>	<b>Urban and Regional Planning</b>	3 Cr.
	A course treating the nature, purposes, and objectives of modern community planning for the promotion of social and economic wellbeing. Field trip. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: junior standing.	
<b>GEO 420</b>	<b>Rural Geography</b>	3 Cr.
	This course examines the changing geography of rural areas. Topics include globalization and the transformation of rural economies, agriculture, rural environmental issues, tourism, rural cultures and identities, and the geography of country music. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: junior standing.	
<b>GEO 470/570</b>	<b>Political Geography</b>	3 Cr.
	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. May be used to partially fulfill the Social Science component of the General Education requirements.	
<b>GEO 474/574</b>	<b>Historical Geography of the United States</b>	3 Cr.
	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. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: junior standing. May be of particular interest to history majors.	
<b>GEO 475/575</b>	<b>Culture, Nature, Landscape</b>	3 Cr.
	An advanced course in cultural geography exploring the integration of culture and nature in both material landscapes and their representation in art, literature, or other media. The examination of culture includes consideration of race, ethnicity, gender, and nationality. Field trip. May be used to partially fulfill the Social Science component of the General Education requirements. Prerequisite: junior standing.	

## ***Environmental and Geographic Information Science Courses***

<b>GEO 104</b>	<b>Introduction to Geomorphology in Earth System Science</b>	3+3, 4 Cr.
	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 on selected Saturdays. Course includes a laboratory component. May be used to partially fulfill the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and GEO 104.	
<b>GEO 130</b>	<b>Earth From Above</b>	3+2, 4 Cr.
	An introduction to earth observation from a distance. A study of land, life, water, human presence, and changes on the surface of the Earth using aerial photographs and satellite imagery. Students will learn essential skills in interpreting as well as measuring earth surface features and processes from various remotely sensed data. This course includes a laboratory component. May be used to partially fulfill the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and GEO 130.	
<b>GEO 204</b>	<b>National Parks and Public Lands</b>	3 Cr.
	A study of the development, management, and geography of national parks, monuments, and other areas controlled by the U. S. Park Service in the context of the federal public lands system. Includes discussion of physical, cultural, and historic features of selected parks, career opportunities in the park service, and comparisons with national parks in other countries. Field trip may be included.	

<b>GEO 215</b>	<b>Introduction to Geographic Information Systems</b>	3+2, 4 Cr.
	An introduction to the theory and practical use of geographic information systems. These powerful research tools combine computer mapping and databases to provide diverse combinations of spatial information and modeling capabilities to enhance decision-making processes and 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, or health sciences. Course includes a laboratory component.	
<b>GEO 225</b>	<b>Cartography and Map Design</b>	3 Cr.
	An introduction to the art and science of drafting accurate and visually interesting maps. This course offers practical training in elements of data acquisition and compilation, map projections, scales, design, layout, typography, color, semiotics, as well as statistical methods for mapping geographically referenced information. The role of cartography in geography, public health, engineering, business, environment, and society will be discussed.	
<b>GEO 240</b>	<b>Introduction to Climate Change</b>	3 Cr.
	(Also offered as MET 240.) An exploration of past climate changes and the issue of contemporary, anthropogenic, greenhouse warming. Students will gain an understanding of the major forcing mechanisms behind climate change, as well as the feedbacks that are important in the climate system. Not open to students who have received credit for MET 440. Prerequisites: MET 103.	
<b>GEO 260</b>	<b>Environmental Conservation</b>	3 Cr.
	A study of American and International resource problems and environmental issues, the institutions and attitudes involved, and solutions for correcting them.	
<b>GEO 264</b>	<b>Soils and the Environment</b>	2+2, 3 Cr.
	This course focuses on the role of soils in the environment and society with an emphasis on their methods of study in an earth system science context. A focus of the course is on the role of soils as part of interrelated human-environmental systems and the effects of human action on issues such as erosion, water quality, ecosystems and climate change. Course includes a laboratory component. Field trips are required. May be used to partially fulfill the Natural Science component of the General Education Requirements.	
<b>GEO 266</b>	<b>River Systems and Landforms</b>	2+2, 3 Cr.
	This course is a focused study of river systems and landforms in an earth system science context, with particular emphasis on remote and on-site hydrologic assessment, landform identification using remote and field techniques, issues related to watershed management, and sediment analysis approaches. Focus is on building students' range of skills with digital data and fieldwork. Course includes a laboratory component. Field trips are required. May be used to partially fulfill the Natural Science component of the General Education Requirements.	
<b>GEO 285</b>	<b>Natural Hazards</b>	2+2, 3 Cr.
	An investigation of the physical causes, geographic distribution, and human threats of a wide range of environmental hazards, including earthquake, volcano, tsunami, landslide, hurricane, tornado, and flood disasters. The course will make abundant use of GIS and remote sensing technology.	
<b>GEO 290</b>	<b>Topics in Geography</b>	1-3 Cr.
	This course is designed to examine current geographic topics. These may include American minority settlement patterns and communities, cultural ecology, geographic techniques, travel and tourism, medical geography, and problems associated with the physical environment. May be repeated when the topic is different.	
<b>GEO 304</b>	<b>Process Geomorphology and Terrain Analysis</b>	3+3, 4 Cr.
	A study of landscapes as the result of systems which balance driving forces, such as climate, gravity, or internal heat flow, and the resisting framework created by lithology and the structure of near-surface earth materials. Students will enhance their knowledge of earth surface processes and resultant topographic forms through laboratory exercises and local investigations. The course develops students' ability to conceptually engage geomorphic systems (e.g. system variables, feedback and response mechanisms, spatial and temporal scale variability) through critical assessment of morphology and process measurement. Analytical approaches learned through lab exercises build upon conceptual topics gained through lecture and reading materials. Course includes a laboratory component. Required 4-day field trip. Prerequisite: GEO 104.	
<b>GEO 315</b>	<b>Environmental Applications of GIS</b>	3 Cr.
	This course addresses environmental problems using geographic information systems and focuses on principles, methods, and techniques relevant for problem solving in environmental science and management. Emphasis is on handling environmental data and building environmental models for tackling real-world issues. A course component involves field mapping with the use of GPS technology and the novel creation of spatial data. Prerequisite: GEO 215.	

<b>GEO 316</b>	<b>Internet Mapping and Web GIS</b>	3 Cr.
	A technical course intended to extend GIS use, analysis and presentation onto web-based platforms. Students engage in the production of web-mapping products using both publicly available and individually published data. Students produce web apps for the consumption and use of geospatial data across multiple platforms. Prerequisite: GEO 215.	
<b>GEO 318</b>	<b>Field Study in European Geography</b>	3 Cr.
	Overseas Study Program only.	
<b>GEO 330</b>	<b>Remote Sensing of the Environment</b>	3 Cr.
	This course develops technical and methodological skills needed to analyze digital remote sensing data to study Earth's environments. Topics will include image processing, classification, feature extraction, band indices (e.g. NDVI), and change analysis for mapping and modeling. Emphasis will be placed on applications, culminating in a project and presentation. No prior remote sensing experience is needed.	
<b>GEO 365</b>	<b>Biogeography</b>	3 Cr.
	This course introduces students to an important interdisciplinary bridge between biology and geography. Biogeography is the study of inferring ecological and evolutionary relationships between living organisms and their physical environment from the analysis of their spatial and temporal distribution patterns. Students will learn to assess patterns of variation across physical gradients such as latitude, climate, elevation, and isolation in relation to the distribution of plant and animal species on the earth. The course will also discuss human activities such as domestication, habitat alteration, species introduction and extinctions, and global environmental changes.	
<b>GEO 385/585</b>	<b>Field Study</b>	0+4, 1-3 Cr.
	A course designed to develop methods and techniques of geographic field work. May include a week of intensive work at a field site at a time when the University is not in session, possibly in late summer. Additional fees may be charged to cover expenses. Prerequisite: consent of the department chair.	
<b>GEO 415/515</b>	<b>Advanced Geographic Information Systems</b>	3 Cr.
	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.	
<b>GEO 460/560</b>	<b>Data Analysis</b>	3 Cr.
	(Also offered as MET 460.) This course will examine the analysis methods used in the geosciences, with a focus on environmentally collected data sets. The course emphasizes visualization of data, as well as applications ranging from basic model building to regression and introductory time series analysis. The primary tool for analysis is R, an open source software package that runs on virtually any platform. Prerequisites: at least junior standing in Meteorology or Geography programs.	
<b>GEO 486</b>	<b>Internship in Geography</b>	1-6 Cr.
	Students gain experience by working in public or private agencies, such as planning firms, national parks, and map companies. Prerequisites: geography major or minor and consent of internship coordinator. S/U grade only.	
<b>GEO 490/590</b>	<b>Selected Topics in Geography</b>	1-3 Cr.
	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 standing.	
<b>GEO 495</b>	<b>Independent Study</b>	1-4 Cr.
	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 standing and consent of the chair of the department.	
<b>GEO 496</b>	<b>Research in Geography</b>	1-3 Cr.
	Students working individually or as part of a research group conduct original research in geography under the direction of a faculty member. Students collect and analyze data and report their results in both writing and in an oral presentation. Open to all students regardless of class standing. S/U grade. Prerequisite: consent of the instructor.	
<b>GEO 497</b>	<b>Honors Work in Geography</b>	3 Cr.
	See Honors Work, page 56.	
<b>GEO 498</b>	<b>Honors Candidacy in Geography</b>	3 Cr.
	See Honors Work, page 56.	

## Meteorology Courses

<b>MET 103</b>	<b>Introduction to Meteorology</b>	3+2, 4 Cr.
	An introductory course providing a general overview of atmospheric science with emphasis on mid-latitude cyclones and anticyclones, air masses, atmospheric stability, precipitation processes, and convection. Course includes a laboratory component. May be used to partially fulfill the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and MET 103.	
<b>MET 130</b>	<b>Weather Technology</b>	3 Cr.
	A course designed to give students experience using available weather technology. Students will be introduced to the Linux operating system, computer software specifically used in meteorology, and plotting meteorological charts. Introduction of simple shell scripting and map making will play a large role in the course. Additionally, students will be introduced to formal map analysis and mid-latitude weather systems. Prerequisite: MET 103.	
<b>MET 190</b>	<b>Topics in Weather and Climate</b>	3+2, 4 Cr.
	This course provides general-education studies in atmospheric science, with potential topics including severe and unusual weather, Great Lakes weather and climate, and climate change. This course is designed for non-majors interested in learning about weather and climate and includes a laboratory component. May be used to fulfill the Natural Science component of the General Education Requirements. Prerequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Students may register concurrently for MATH 110 and MET 190.	
<b>MET 215</b>	<b>Climatology</b>	2+2, 3 Cr.
	A study of the scope and controls of climate and an investigation at the global, regional, and local scales. Included are climate classification, climate models, and climate change. Course includes a laboratory component. Prerequisite: MET 103.	
<b>MET 216</b>	<b>Introduction to Meteorological Observation and Analysis</b>	3 Cr.
	Introduces atmospheric structures, conceptual models, and the basic techniques of meteorological analysis. Upper-air and surface observation codes, NCEP operational products, and atmospheric observing systems, including Doppler radar, wind profilers, satellites, and ASOS are discussed. Prerequisite: MATH 131 and either MET 103 or consent of the instructor.	
<b>MET 240</b>	<b>Introduction to Climate Change</b>	3 Cr.
	(Also offered as GEO 240.) An exploration of past climate changes and the issue of contemporary, anthropogenic, greenhouse warming. Students will gain an understanding of the major forcing mechanisms behind climate change, as well as the feedbacks that are important in the climate system. Not open to students who have received credit for MET 440. Prerequisites: MET 103.	
<b>MET 271</b>	<b>Aviation Meteorology</b>	3 Cr.
	Introduction to analysis and forecasting of weather phenomena related to the aviation industry including aircraft icing, turbulence, wind shear, and severe storms. Other topics include the history of aviation forecasting, advanced METAR coding, Terminal Aerodrome Forecasts (TAFs), and an introduction to related software packages, including BUFKIT. Prerequisite: MET 216.	
<b>MET 279</b>	<b>Severe Storm Prediction and Nowcasting</b>	3 Cr.
	Examines the historical development of severe storm research, forecasting, and watch/ warning methodologies. Morphologies of supercell and multi-cell thunderstorms and tornadoes, as well as synoptic or mesoscale case studies are investigated. Prerequisite: MET 216.	
<b>MET 290</b>	<b>Topics in Meteorology</b>	1-3 Cr.
	Seminar in selected meteorological topics appropriate for more intensive investigation at the intermediate level, with an emphasis on the relationship between meteorology and other disciplines. Topics may include remote sensing, natural hazards, and meteorology in the humanities or social sciences. May be repeated for credit if the topic is different. Prerequisite: MET 103.	
<b>MET 291</b>	<b>Professional Perspectives</b>	1 Cr.
	A seminar course aimed at preparing students for scholarships, internships, and postgraduate life in atmospheric science. Career paths in atmospheric science will be explored. In preparation for graduate school or employment, students will create resumes, cover letters, and personal essays. Interview techniques, professional expectations, and concerns will be reviewed. Topics including professional ethics and responsibilities of scientists will be discussed. Prerequisite: MET 103.	

<b>MET 292</b>	<b>Lake Effect Snow Analysis and Forecasting</b>	1 Cr.
	This course examines the analysis and forecasting of lake effect snow. In addition to reading journal articles covering several aspects of lake effect snow, students explore case studies from each of the Great Lakes. The class format is a combination of student presentations, discussion, and lecture. Prerequisite: MET 103.	
<b>MET 319</b>	<b>Tropical Meteorology</b>	3 Cr.
	Introduction to the synoptics 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.	
<b>MET 330</b>	<b>Meteorological Computer Applications</b>	3 Cr.
	An introduction to computing in an atmospheric science context. This course introduces students to the FORTRAN and Python programming languages in a LINUX environment and is used to analyze and visualize meteorological data in a variety of contexts. Additional programming languages may be included as appropriate. Prerequisite: sophomore standing.	
<b>MET 335</b>	<b>Meteorological Instruments</b>	3 Cr.
	An introduction to meteorological instrumentation and measurements of common meteorological variables. The physical principles of each instrument will be introduced with attention paid to the limits of atmospheric measurements, data quality and control, and sources of error. Students will work with a number of different instruments throughout the course including, temperature sensors, radiosonde packages, and barometers. Prerequisite: MET 216.	
<b>MET 350</b>	<b>Boundary Layer Meteorology</b>	3 Cr.
	A study of the physical processes of the earth's boundary layer and microclimate. Topics will include turbulent transfer in the boundary layer, the surface energy balance, turbulent fluxes of heat, moisture, and momentum, evapotranspiration, and the modification of weather and climate due to surface and boundary layer conditions. Prerequisite: MET 216.	
<b>MET 369/569</b>	<b>Atmospheric Thermodynamics</b>	3 Cr.
	Survey of the atmospheric system, including basic characteristics and variables; radiation thermodynamics; vertical temperature structures; stability concepts, and evaluation; physics of clouds and precipitation processes. Prerequisites: Meteorology majors only, MATH 253 and MET 216.	
<b>MET 372/572</b>	<b>Atmospheric Dynamics I</b>	3+2, 4 Cr.
	A general survey of the fundamental forces and laws that govern atmospheric processes. Emphases are on the derivations and applications of the basic equations of motion, atmospheric thermodynamics, gradient and geostrophic flow, and the general circulation. Course includes a laboratory component. Meteorology majors only. Prerequisites: MATH 253, PHYS 141, and MET 216.	
<b>MET 373/573</b>	<b>Atmospheric Dynamics II</b>	3+2, 4 Cr.
	Second semester dynamics course emphasizing quasi-geostrophic dynamics, wave motions, barotropic and baroclinic instabilities; cyclone structure, jet streaks, and secondary thermal circulations. Laboratory case studies and exercises. Prerequisite: MET 372.	
<b>MET 385/585</b>	<b>Field Study in Meteorology</b>	0+4, 3 Cr.
	Field work emphasizing aspects of meteorological analysis and forecasting. Topics include severe storm prediction, spotting and interception, and aviation meteorology. May be repeated for credit if the topics are different. Additional fees charged to cover expenses. Prerequisite: consent of the instructor.	
<b>MET 430/530</b>	<b>Numerical Weather Prediction</b>	3 Cr.
	An introduction to numerical modeling techniques and weather prediction models: model fundamentals, structures, dynamics, physical parameterization, and model forecast diagnostics. Students will gain experience running simple codes and study different aspects and intelligent use of weather models. Prerequisite: MET 330.	

**MET  
435/535****Radar Meteorology**

3 Cr.

Examines the theoretical and operational principles of meteorological Doppler radar, including dual polarization methodologies. Atmospheric refractivity and its impact on wave propagation, data quality, and algorithms are discussed. Prerequisites: MET 216 and MATH 253.

**MET  
440/540****Global Climate Change**

3 Cr.

An examination of the physical processes of global climate change, both past and future. The emphasis will be on the issues of future climate change, including greenhouse forcing and important atmospheric and oceanic feedback mechanisms. The course will also investigate local and regional climate changes resulting from land use, such as deforestation and desertification. In addition to discussing relevant literature, students will explore several climate data sets. Prerequisite: MET 215 and MATH 131.

**MET  
460/560****Data Analysis**

3 Cr.

(Also offered as GEO 460.) This course will examine the analysis methods used in the geosciences, with a focus on environmentally collected data sets. The course emphasizes visualization of data, as well as applications ranging from basic model building to regression and introductory time series analysis. The primary tool for analysis is R, an open source software package that runs on virtually any platform. Prerequisites: at least junior standing in Meteorology or Geography programs.

**MET 471****Advanced Aviation Meteorology**

2 Cr.

An intensified focus on real-time applications and real-world scenarios related to the interpretation and forecasting of meteorological phenomena for the aviation industry. Topics will include computer-based activities including advanced TAF creation and amendment, generation of turbulence forecast products, advanced aircraft icing, BUFKIT and RAOB software functionality, oral briefing techniques and an introduction to space weather/physics. Prerequisite: MET 271.

**MET  
480/580****Synoptic Scale Analysis and Forecasting**

3+2, 4 Cr.

A capstone course that applies the principles of atmospheric dynamics and thermodynamics to describe the formation, organization, and evolution of mid-latitude weather systems. Topics include historical aspects of extratropical cyclone theory, scales of atmospheric motion, development and movement of mid-latitude cyclones from a quasi-geostrophic, potential vorticity, and energy perspective, synoptic satellite applications and interpretation, Rossby wave theory, basics of numerical weather predictions models, basic forecast methods, and forecast verification. Students present their forecasts in oral and written formats, and serve in the Valparaiso University weather center to issue local forecasts and answer public inquiries. Course includes a laboratory component. Prerequisites: MET 373.

**MET  
481/581****Mesoscale Analysis and Forecasting**

3+2, 4 Cr.

A capstone course applying principles of atmospheric dynamics and thermodynamics to the processes that focus and organize mesoscale weather systems. Topics include mechanically and thermally driven circulations such as land/sea breezes, lake-effect snow, slope/valley flows, mountain waves, and polar lows. Atmospheric stability, convection theory, atmospheric discontinuities, severe convention, MCCs, and analysis and forecast methods are examined. Course includes a laboratory component. Prerequisite: MET 480.

**MET  
486/586****Internship in Meteorology**

1-6 Cr.

Students gain experience by working in National Weather Service offices, government laboratories, private consulting firms, or media and broadcasting stations. Prerequisites: meteorology major and consent of internship coordinator. S/U grade only.

**MET  
490/590****Selected Topics in Meteorology**

1-3 Cr.

Advanced studies in applied and theoretical meteorology. Topics such as weather systems analysis, micrometeorology, and atmospheric observing systems may be considered. May be repeated when topic is different. Prerequisite: MET 216.

**MET 495****Independent Study**

1-3 Cr.

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.

<b>MET 496</b>	<b>Research in Meteorology</b>	1-3 Cr.
	Students working individually or in a small group conduct original research in meteorology under the direction of a faculty member. Students collect and analyze data and report their results in both writing and in an oral presentation. Open to all students regardless of class standing. Consent of the instructor required. S/U grade.	
<b>MET 497</b>	<b>Honors Work in Meteorology</b>	3 Cr.
	See Honors Work, page 56.	
<b>MET 498</b>	<b>Honors Candidacy in Meteorology</b>	3 Cr.
	See Honors Work, page 56.	

# History

Learn more about the [Department of History](#) at Valpo online.

**Professors Ostoyich, Schaefer; Associate Professor Seguin (chair); Assistant Professors Curtis, Kelley.**

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 operates under the assumption that the past is of fundamental importance in today's decision-making and in formulating 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 Fundamentals of 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 a time to explore a variety of subjects.

## Bachelor of Arts – History Major (Minimum 30 Cr.)

<b>HIST 100</b>	European History	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.
<b>HIST 300</b>	Historiography and Methods	3 Cr.
<b>HIST 493</b>	Research Seminar	3 Cr.

**Twelve credits from 300 or 400-level courses (at least one course in each of the following fields):**

History of the Americas

European History

Non-Western History

**Note: HIST 390 or HIST 492 may be used to fulfill a field requirement if the topic is appropriate.**

Students who plan on graduate work in history are strongly urged to acquire reading proficiency in at least one modern world language.

## History Minor (Minimum 18 Cr.)

<b>HIST 100</b>	European History	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.

**Nine credits from 300 or 400-level courses (at least one course in each of the following fields):**

History of the Americas

European History

Non-Western History

## History Education Major (Minimum 51 Cr.)

<b>HIST 100</b>	European History	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.
<b>HIST 120</b>	The American Experience to 1877	3 Cr.
<b>HIST 121</b>	The American Experience in the Modern World	3 Cr.
<b>HIST 300</b>	Historiography and Methods	3 Cr.

**One course from the following options:**

<b>HIST 310</b>	Greek Civilization and Culture	3 Cr.
<b>HIST 311</b>	Roman Civilization and Culture	3 Cr.
<b>HIST 493</b>	Research Seminar	3 Cr.

**Fifteen credits from 300 or 400-level courses (at least one course in each of the following fields):**

History of the Americas

European History

Non-Western History

**Note: HIST 390 or HIST 492 may be used to fulfill a field requirement if the topic is appropriate.**

**Additional courses required<sup>5</sup>:**

<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>GEO 280</b>	Geography of Cyberspace	3 Cr.
<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.

### 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 100 and 110 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.

Credit for HIST 120 and 121 may be earned through the College Level Examination Program subject examination in American History or through the Advanced Placement examination offered by the College Entrance Examination Board.

### Approval of Schedules

Each class of majors is assigned to a member of the department for advising. The chair advises minors.

**Note:** Any 3-credit history course may be used to fulfill the Humanities: History component of the General Education Requirements. Certain History courses may be used to fulfill the Cultural Diversity course component of the General Education Requirements; see course descriptions for details.

## Middle East Studies

### Objectives

The Middle East Studies minor is an interdisciplinary program that will introduce students to a range of Middle Eastern cultures, languages, and viewpoints, from the classical to the contemporary periods. While fluency in Arabic or Hebrew is not required, language study is a requirement for the Middle East Studies minor. In addition to language study, the minor requires courses in theology, the social sciences, and the humanities to present students with a range of perspectives and methodologies relevant to the study of the Middle East. Study Abroad in the Middle East is recommended.

<sup>5</sup> May also be used to fulfill General Education requirements, where appropriate.

**Middle East Studies Minor (Minimum 18 Cr.)****One of the following groups:****Arabic**

<b>WLC 290</b>	Topics in International Studies: Beginning Arabic I	3 Cr.
<b>WLC 290</b>	Topics in International Studies: Beginning Arabic II	3 Cr.

**Hebrew**

<b>HEB 101</b>	First Semester Hebrew	4 Cr.
<b>HEB 102</b>	Second Semester Hebrew	4 Cr.
<b>HIST 355</b>	Modern Middle East History	3 Cr.
<b>THEO 362</b>	Islamic Religion & Culture	3 Cr.
<b>ENGL 203</b>	Middle Eastern Literatures	3 Cr.

**One courses from the following options:**

<b>CVA 291</b>	Topics in World Cinema (when Middle Eastern)	3 Cr.
<b>ENGL 204</b>	Middle Eastern Cinemas	3 Cr.
<b>ENGL 490</b>	Topics in English (when Middle Eastern)	3 Cr.
<b>HEB 495</b>	Supervised Reading and Research in Hebrew	1-2 Cr.
<b>HIST 390</b>	Topics in History (when Middle Eastern)	3 Cr.
<b>WLC 390</b>	Advanced Topics in International Studies	3 Cr.
<b>WLC 486</b>	World Languages and Cultures Internship	3 Cr.
<b>POLS 334</b>	Politics of the Middle East	3 Cr.
<b>THEO 368</b>	Topics in Abrahamic Religions (when Middle Eastern)	3 Cr.
<b>THEO 490</b>	Topics in Theology (when Middle Eastern)	3 Cr.

**Relevant Study Abroad course in the Middle East****History Courses**

<b>HIST 100</b>	<b>European History</b>	3 Cr.
A study of the social, intellectual, cultural, and political history of Europe from the Middle Ages to World War I.		
<b>HIST 110</b>	<b>The World in the Twentieth Century</b>	3 Cr.
A survey of modern Western and non-Western history. Particular emphasis is placed on the development of the various world civilizations in recent centuries and on the interaction that has occurred among them.		
<b>HIST 120</b>	<b>The American Experience to 1877</b>	3 Cr.
A survey of American history from the Columbian exchange through the end of Reconstruction, with emphasis on cultural contact, democratic ideals and realities, western expansion, and sectional conflict.		
<b>HIST 121</b>	<b>The American Experience in the Modern World</b>	3 Cr.
A survey of American history from Reconstruction to the present, with emphasis on industrialization, reform movements, immigration, civil rights, and global wars.		
<b>HIST 140</b>	<b>Introduction to East Asian Culture</b>	3 Cr.
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 Cultural Diversity course component of the General Education Requirements.		
<b>HIST 215</b>	<b>Medieval Europe</b>	3 Cr.
A survey of Europe in the Middle Ages with particular emphasis on feudalism, chivalry, religion and religious persecution, early state formation, and the Black Death.		
<b>HIST 225</b>	<b>Alternative Perspectives of United States History</b>	3 Cr.
An examination of oppression, resistance, and identity formation in African American, American Indian, Latino, or Asian American culture. 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. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.		
<b>HIST 232</b>	<b>Latin American History and Society</b>	3 Cr.
A survey of Latin American history from indigenous civilizations through the Spanish colonial period and modern national histories, with emphasis on enduring patterns in the region's cultures and societies. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.		

<b>HIST 235</b>	<b>Modern Mexico: Competing Visions of the Nation</b>	3 Cr.
	The primary focus of the course will be on consolidation of the nation state, including the nineteenth-century clash of Liberal and Conservative visions of modernity, the Revolution of 1910 and its aftermath, the emergence of civil society, and the uprising in Chiapas in the 1990s. Students explore competing definitions of Mexican identity and their role in hindering or facilitating national unity. Emphasis is placed on the role of regionalism and popular activism. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>HIST 250</b>	<b>African History and Society</b>	3 Cr.
	A survey of pre-colonial and colonial African history that highlights the diversity of African societies. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>HIST 300</b>	<b>Historiography and Methods</b>	3 Cr.
	Developments in American, European, and Non-western historiography will be studied. In addition, this course offers a practicum in historical research methods as well as opportunities to formulate your own historiographic interpretations. Restricted to history majors. Prerequisites: HIST 100 and HIST 110.	
<b>HIST 351</b>	<b>Survey of English History and Culture</b>	3 Cr.
	A survey of English life from Roman times to the present, emphasizing broad movements, themes, and institutions. Cambridge Center only.	

**Note:** The courses listed below require at least sophomore standing or consent of the chair of the department.

## *European History Courses*

<b>HIST 304/504</b>	<b>European Imperialism and the Colonial Experience</b>	3 Cr.
	A study of European theories of imperialism will be investigated as they were implemented in specific colonies throughout the Americas, Africa, Eurasia, and Asia. Particular attention will be given to the historical and psychological experience of being colonial master or servant by drawing on film, novels, and post-colonialist literature. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>HIST 310/510</b>	<b>Greek Civilization and Culture</b>	3 Cr.
	(Also offered as GKRO 310.) A study of Greek civilization from the late Bronze Age through the Hellenistic period, with emphasis on cultural, social, and political developments. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: History component of General Education Requirements. Prerequisite: sophomore standing or consent of the chair of the department.	
<b>HIST 311/511</b>	<b>Roman Civilization and Culture</b>	3 Cr.
	(Also offered as GKRO 311.) A study of Roman civilization from the 8th century B.C. to the Council of Nicea in A.D. 325, with emphasis on cultural, social, and political developments. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: History component of General Education Requirements. Prerequisite: sophomore standing or consent of the chair of the department.	
<b>HIST 312/512</b>	<b>Reformation Europe</b>	3 Cr.
	(Also offered as THEO 329/529.) A study of the political, socioeconomic, and religious conditions in Europe during the Reformation movements of the sixteenth century, with emphasis on popular piety, gender relations, and missionary activity.	
<b>HIST 313/513</b>	<b>History of Modern Britain</b>	3 Cr.
	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.	
<b>HIST 315/515</b>	<b>Contemporary Europe: Century of Violence</b>	3 Cr.
	A study of twentieth-century Europe, with emphasis on relations between Nazi Germany and Europe, including the USSR and the United States where applicable. The course explores the rise of ideologies such as nationalism, communism, and fascism, the major wars, and the dominant issues associated with the post-World War II world.	

<b>HIST 316/516</b>	<b>Blood and Iron: Imperial Germany, 1871-1918</b>	3 Cr.
	A study of the political, social, and cultural development of Imperial Germany from its founding until its destruction during the First World War. The course considers the respective roles that personality (e.g., Bismarck and Kaiser Wilhelm II), class, and religion had in forging a path for the German nation-state.	
<b>HIST 317/517</b>	<b>Hitler and the Third Reich</b>	3 Cr.
	A study of the rise and reign of Adolf Hitler and National Socialism. The course analyzes the man and the movement within the larger social, economic, and political trends of nineteenth and twentieth-century Germany. The course is structured around a variety of historical debates (i.e., historical continuity versus discontinuity, Hitler as "weak" dictator or "strong" dictator, etc.). This course examines the racial, political, and geopolitical aspects of National Socialism and provides extensive coverage of the Holocaust.	
<b>HIST 318</b>	<b>The Old Regime and the French Revolution</b>	3 Cr.
	A detailed study of the causes and effects of the French Revolution. Topics discussed include the Enlightenment, social conditions, the monarchy, human rights, and the Napoleonic Era. Seminar discussions will be based on both primary and secondary source readings.	
<b>History of the Americas Courses</b>		
<b>HIST 320/520</b>	<b>Colonial America</b>	3 Cr.
	A detailed study through readings and discussion of the major issues in colonial life. Topics will range from contact with Native Americans, to the Salem witch trials, to the origins of slavery. Students will examine European settlement patterns in the four regions of British North America, including family, religious, and political life. The course will conclude by studying the social, military, and political strain placed on colonial institutions by the Seven Years' War.	
<b>HIST 321/521</b>	<b>The American Revolution, 1763-1789</b>	3 Cr.
	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 postwar problems culminating in the adoption of the Constitution.	
<b>HIST 323/523</b>	<b>Civil War and Reconstruction</b>	3 Cr.
	A study of the great watershed conflict in American history, with special emphasis on the problems of Black Americans.	
<b>HIST 324/524</b>	<b>Depression and War: The United States, 1929-1945</b>	3 Cr.
	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.	
<b>HIST 325/525</b>	<b>The Age of Anxiety: United States since 1945</b>	3 Cr.
	An examination of the post war American response to the prospect of living in an uncertain world.	
<b>HIST 327/527</b>	<b>History of Chicago</b>	3 Cr.
	A study through readings and discussion of Chicago's development from a frontier village, to a bustling town, to the "Second City," to a postindustrial metropolis.	
<b>HIST 329/529</b>	<b>Revolution! Insurgence in Latin America</b>	3 Cr.
	Why is "social change" such a common notion, yet revolutions are so rare? This course draws upon interdisciplinary theories of revolution and examines conditions and social forces that may lead to-or inhibit-revolution. Case studies include both "successful" revolutions and "failed" efforts, from Mexico to Cuba, Nicaragua to Argentina, and beyond. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	

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<b>HIST</b>		
<b>333/533</b>	<b>Latin America in the Cold War Era</b>	3 Cr.
	This course examines the political and social implications of the Cold War throughout Latin America. Study will include the Guatemala coup, the Cuban Revolution, the military dictatorships of the 1970s-1980s, civil wars and revolution in Central America, and Mexico's "dirty war." May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	

<b>HIST</b>		
<b>394/594</b>	<b>Beats and Hippies</b>	3 Cr.
	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.	

## *Non-Western History Courses*

<b>HIST</b>		
<b>341/541</b>	<b>Revolution and Its Roots: The Making of Modern China</b>	3 Cr.
	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 Cultural Diversity course component of the General Education Requirements.	

<b>HIST</b>		
<b>342/542</b>	<b>Tragedy and Triumph: The Making of Modern Japan</b>	3 Cr.
	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 postwar world. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	

<b>HIST</b>		
<b>350</b>	<b>Colonialism and Independence: Understanding Modern Africa</b>	3 Cr.
	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 Cultural Diversity course component of the General Education Requirements.	

<b>HIST</b>		
<b>355/555</b>	<b>Modern Middle Eastern History</b>	3 Cr.
	A retrospective look through documents, films, and literature at the history of the region beginning with the rise of Islam and the legacy of early splinter movements that profoundly impact twentieth century history. Particular attention is given to the breakup of the Ottoman Empire and the rise of Zionism in order to contextualize the Arab-Israeli conflict. Lastly, individual countries are studied to enhance understanding of the Middle East's influence on international affairs. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	

## *Specialized Offerings*

<b>HIST</b>	<b>386</b>	<b>Internship in History</b>	1-3 Cr.
		Students gain experience working for an organization that utilizes historical applications. Such organizations might include historical museums and historical parks. Prerequisite: junior standing and application in writing to department chair a semester in advance.	

<b>HIST</b>	<b>390/590</b>	<b>Topics in History</b>	3 Cr.
		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. Appropriate topics may be designated to fulfill the requirement in European history, history of the Americas, or non-Western history.	

<b>HIST</b>	<b>393/593</b>	<b>History through Film</b>	3 Cr.
		A study of the relationship among history, film, and theory in a specific geographical and chronological context. 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 30-hour major.	

**HIST  
492/592****Reading and Discussion Seminars**

2-3 Cr.

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. Appropriate topics may be designated to fulfill the requirement in European history, history of the Americas, or non-Western history. Prerequisite: junior or senior standing or consent of the chair of the department.

**HIST 493****Research Seminar**

3 Cr.

This course offers 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. May be repeated for credit if the topics are different. Prerequisite: HIST 300 and history major with junior or senior standing.

**HIST 495****Supervised Study**

2-3 Cr.

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**

3 Cr.

See Honors Work, page 56.

**HIST 498****Honors Candidacy in History**

3 Cr.

See Honors Work, page 56.

# Kinesiology

Learn more about [Kinesiology](#) at Valpo online.

**Associate Professors B.Tyree (acting chair), K. Helm, D. Rolling, B. Starkoff; Assistant Professor J. Stangel; Adjunct Instructors Daugherty, Leonhard, Reichard, Brooks.**

The Department of Kinesiology 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.

The Department of Kinesiology provides comprehensive undergraduate degree programs that incorporate scientific and professional methods of inquiry to study physical activity, exercise, sport, and health related issues and advances the body of knowledge through scholarly inquiry.

## Bachelor of Science in Physical Education Physical Education Major (Minimum 35 Cr.)

<b>KIN 150</b>	History and Philosophy of Physical Education, Health, and Sport	2 Cr.
<b>KIN 158</b>	Teaching Rhythmic Activities	3 Cr.
<b>KIN 205</b>	Fundamental Nutrition	3 Cr.
<b>KIN 228</b>	Stress Management and Prevention	2 Cr.
<b>KIN 270</b>	Teaching Swimming	2 Cr.
<b>KIN 275</b>	Methods of Teaching Fitness	2 Cr.
<b>KIN 289</b>	Methods of Teaching Elementary Physical Education	2+2, 3 Cr.
<b>KIN 315</b>	Teaching of Team Sports	3 Cr.
<b>KIN 325</b>	Teaching of Individual and Dual Sports	3 Cr.
<b>KIN 360</b>	Adapted Physical Education	3 Cr.
<b>KIN 370</b>	Kinesiology I	3+2, 4 Cr.

**One course from the following options:**

<b>KIN 373</b>	Research Seminar in Kinesiology and Ethics	2 Cr.
<b>KIN 415</b>	Research Methods in Sport and Kinesiology	3 Cr.

**One course from the following options:**

<b>KIN 277</b>	Physiology of Exercise	2+2, 3 Cr.
<b>KIN 340</b>	Motor Learning	2+2, 3 Cr.
<b>KIN 387</b>	Fitness Assessment and Exercise Prescription	3 Cr.

**Additional Required Courses**

<b>BIO 151+L</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152+L</b>	Human Anatomy and Physiology II	3+3, 4 Cr.

## Bachelor of Science – Exercise Science Major (Minimum 61 Cr.)

<b>KIN 151</b>	Introduction to Exercise Science	1 Cr.
<b>KIN 205</b>	Fundamental Nutrition	3 Cr.
<b>KIN 250</b>	Medical Terminology	3 Cr.
<b>KIN 277</b>	Physiology of Exercise	2+2, 3 Cr.
<b>KIN 370</b>	Kinesiology I	3+2, 4 Cr.
<b>KIN 372</b>	Kinesiology II	2+2, 3 Cr.
<b>KIN 373</b>	Research Seminar in Kinesiology and Ethics	2 Cr.
<b>KIN 387</b>	Fitness Assessment and Exercise Prescription	3 Cr.
<b>KIN 415</b>	Research Methods in Physical Education and Sport	3 Cr.
<b>KIN 477</b>	Advanced Physiology of Exercise	3 Cr.
<b>KIN 486</b>	Internship for Sports Management or Exercise Science	1-3 Cr.

**Additional Required Courses**

<b>BIO 151+L</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152+L</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.

**One of the following concentrations:****Pre-Occupational Therapy**

<b>KIN 473</b>	Kinesiology Senior Project	3 Cr.
<b>BIO 210+L</b>	Microbiology	4 Cr.
<b>CHEM 111+L</b>	Introduction to Chemistry	3+2, 4 Cr.
<b>PSY 215</b>	Life Span Development	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>SOC 110</b>	Introduction to Sociology	3 Cr.

**Pre-Athletic Training**

<b>KIN 473</b>	Kinesiology Senior Project	3 Cr.
<b>BIO 210+L</b>	Microbiology	4 Cr.
<b>HS/PHS 203</b>	Human Health and Disease	3 Cr.
<b>PHYS 111</b>	Essentials of Physics	3+0, 3 Cr.
<b>PHYS 141L</b>	Essentials of Physics Lab	0+3, 1 Cr.

**One of the following:**

<b>CHEM 111+L</b>	Introduction to Chemistry	3+2, 4 Cr.
<b>CHEM 121+L</b>	General Chemistry I	3+3, 4 Cr.

**Pre-Physical Therapy**

<b>KIN 473</b>	Kinesiology Senior Project	3 Cr.
<b>BIO 171+L</b>	Unity of Life	3+3, 4 Cr.
<b>BIO 172+L</b>	Diversity of Life	3+3, 4 Cr.
<b>BIO 210+L</b>	Microbiology	4 Cr.
<b>CHEM 121+L</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 122+L</b>	General Chemistry II	3+3, 4 Cr.
<b>PHYS 111+L</b>	Essentials of Physics + Physics 141L	3+1, 4 Cr.
<b>PHYS 112</b>	Essentials of Physics	3+0, 3 Cr.
<b>PHYS 112L</b>	Essentials of Physics Lab	0+3, 1 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.

**Pre-Strength and Conditioning**

<b>KIN 192</b>	Care and Prevention of Sport Injuries	1 Cr.
<b>KIN 310</b>	Psychology of Sport	3 Cr.
<b>KIN 478</b>	Sport Nutrition	3 Cr.
<b>KIN 479</b>	Strength and Conditioning	3 Cr.
<b>BIO 210+L</b>	Microbiology	4 Cr.
<b>CHEM 111+L</b>	Introduction to Chemistry	3+2, 4 Cr.

**Nutrition Science**

<b>KIN 478</b>	Sport Nutrition	3 Cr.
<b>CHEM 121+L</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 122+L</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 221+L</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222+L</b>	Organic Chemistry II	3+3, 4 Cr.
<b>CHEM 315+L</b>	Biochemistry	3+3, 4 Cr.

**Bachelor of Arts – Sports Management Major (Minimum 37 Cr.)**

<b>KIN 150</b>	History and Philosophy of Physical Education, Health, and Sport	2 Cr.
<b>KIN 220</b>	Coaching Theory	3 Cr.
<b>KIN 240</b>	Governance in Sport	3 Cr.
<b>KIN 320</b>	Sport, Society, and Ethics	3 Cr.
<b>KIN 333</b>	Management and Development of Facilities	3 Cr.
<b>KIN 343</b>	Sport Marketing and Social Media	3 Cr.
<b>KIN 386</b>	Internship Preparation and Career Management	3 Cr.
<b>KIN 433</b>	Sport Law	3 Cr.
<b>KIN 443</b>	Financial Aspects of Sport	3 Cr.
<b>KIN 486</b>	Internship in Sport Management or Exercise Science	3 Cr.

**Two courses from the following options:**

<b>KIN 310</b>	Psychology of Sport	3 Cr.
<b>KIN 390</b>	Special Topics in Kinesiology	3 Cr.
<b>ECON 367</b>	Sports Economics	3 Cr.

**One course from the following options:**

<b>KIN 373</b>	Research Seminar in Kinesiology and Ethics	2 Cr.
<b>KIN 415</b>	Research Methods in Sport and Kinesiology	3 Cr.

**Additional Required Courses**

<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
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**One course from the following options:**

<b>CVA 243</b>	Public Speaking	3 Cr.
<b>CVA 244</b>	Persuasion and Advocacy	3 Cr.
<b>CVA 265</b>	Public Relations Principles	3 Cr.

<b>Business Administration Minor</b>	27 Cr.
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**Coaching Education Minor (Minimum 15 Cr.)**

<b>KIN 192</b>	Care and Prevention of Sport Injuries	1 Cr.
<b>KIN 220</b>	Coaching Theory	3 Cr.
<b>KIN 310</b>	Psychology of Sport	3 Cr.

**Three courses from the following options:**

<b>KIN 205</b>	Fundamental Nutrition	3 Cr.
<b>KIN 222</b>	Sport Officiating	2 Cr.
<b>KIN 240</b>	Governance in Sport	3 Cr.
<b>KIN 277</b>	Physiology of Exercise	3 Cr.
<b>KIN 320</b>	Sport, Society, and Ethics	3 Cr.
<b>KIN 340</b>	Motor Learning	3 Cr.
<b>KIN 370</b>	Kinesiology I	3 Cr.

**Exercise Science Minor (Minimum 20 Cr.)**

<b>KIN 151</b>	Introduction to Exercise Science	1 Cr.
<b>KIN 205</b>	Fundamental Nutrition	3 Cr.
<b>KIN 277</b>	Physiology of Exercise	2+2, 3 Cr.
<b>KIN 370</b>	Kinesiology I	3+2, 4 Cr.
<b>KIN 387</b>	Fitness Assessment and Exercise Prescription	3 Cr.
<b>KIN 477</b>	Advanced Physiology of Exercise	3 Cr.

**One course from the following options:**

<b>KIN 340</b>	Motor Learning	3 Cr.
<b>KIN 372</b>	Kinesiology II	3 Cr.

**Health and Safety Minor (Minimum 15 Cr.)**

<b>KIN 192</b>	Care and Prevention of Sport Injuries	1 Cr.
<b>KIN 205</b>	Fundamental Nutrition	3 Cr.
<b>KIN 228</b>	Teaching Stress Management	2 Cr.
<b>KIN 230</b>	Personal and Community Health	3 Cr.
<b>KIN 231</b>	Substance Abuse and Health	3 Cr.
<b>KIN 388</b>	Methods of Teaching Health K-12	3 Cr.

**Sport Management Minor (Minimum 27 Cr.)**

<b>KIN 240</b>	Governance in Sport	3 Cr.
<b>KIN 320</b>	Sport, Society, and Ethics	3 Cr.
<b>KIN 333</b>	Management and Development of Facilities	3 Cr.
<b>KIN 343</b>	Sport Marketing and Social Media	3 Cr.
<b>KIN 433</b>	Sport Law	3 Cr.
<b>KIN 443</b>	Financial Aspects of Sport	3 Cr.
<b>One course from the following options:</b>		
<b>KIN 310</b>	Psychology of Sport	3 Cr.
<b>KIN 390</b>	Special Topics in Kinesiology	3 Cr.
<b>ECON 367</b>	Sport Economics	3 Cr.
<b>Additional Required Courses</b>		
<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.

**Degree**

Completion of the degree requirements of the College of Arts and Sciences with a major in physical education leads to the Bachelor of Science in Physical Education degree. The Sport Management majors receive a Bachelor of Arts degree upon successful completion of required courses. Exercise Science majors receive a Bachelor of Science in Exercise Science degree upon successful completion of degree requirements.

**Basic Courses in Kinesiology**

All Kinesiology majors must take one credit hour of KIN 101 Wellness and Stress. Anyone who has served in the Armed Forces for at least one year is exempted from this requirement, with the exception of National Guard members.

No more than four credit hours earned in KIN 102-149 may be counted toward any degree.

**Kinesiology Courses**

<b>KIN 100</b>	<b>Healthy Lifestyles</b>	1 Cr.
	This course is designed for freshmen (and transfer students) and should be taken during their first year of attendance at Valparaiso University. The course is aimed at promoting a concern in each student for their current level of health and physical fitness. The correlation between healthful practices and future physical, mental, and emotional well-being is emphasized.	
<b>KIN 101</b>	<b>Wellness and Stress</b>	1 Cr.
	This course is designed for freshmen (and transfer students) and should be taken during their first year of attendance at Valparaiso University. This course is aimed at helping students understand and identify the body's reaction to various types of stress. Students will learn about various stressors unique to the college environment. Additionally, students will learn a variety of ways to deal with stress, including coping skills and stress management techniques.	
<b>KIN 102-149</b>	<b>Elective Activities</b>	0+1, 0.5 Cr.
	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 grade.	
<b>KIN 150</b>	<b>History and Philosophy of Physical Education, Health, and Sport</b>	2 Cr.
	This course examines the history, philosophy, and principles of physical education, sport, and health and their relationship to modern education. This course is designed to provide the students with an enhanced knowledge of the field of physical education, including its growth and development, emerging trends, and critical factors.	
<b>KIN 151</b>	<b>Introduction to Exercise Science</b>	1 Cr.
	Introduces the student to the exercise science discipline. Examination of concepts including professionalism, ethics, certification and licensure, employment opportunities and scientific foundations of the various sub-disciplines, including exercise physiology, biomechanics, strength and conditioning, physical therapy and occupational therapy.	
<b>KIN 158</b>	<b>Teaching Rhythmic Activities</b>	3 Cr.
	The course is designed to provide the prospective physical education teacher with the skills necessary to teach dance, gymnastics, and other rhythmic activities at the elementary and secondary school level.	
<b>KIN 160</b>	<b>Advanced Lifesaving/Lifeguarding</b>	1+2, 2 Cr.
	Analysis and practice of skills in swimming and lifesaving which lead to an American Red Cross Advanced Lifesaving Certificate. Mini or Summer Session only.	

<b>KIN 192</b>	<b>Care and Prevention of Sport Injuries</b>	1 Cr.
	This course will provide an overview of basic principles of athletic training for those who aspire to be physical education teachers and coaches. This course will prepare students to provide basic health care to athletes.	
<b>KIN 205</b>	<b>Fundamental Nutrition</b>	3 Cr.
	A study of the basic principles of human nutrition. The course emphasizes the importance of nutrition for a healthy life during the life cycle. It describes the bioactive components of food and their absorption by the body. The course also relates energy balance to body composition and weight control. The course presents the relationship between physical activity, athletic performance, and nutrition. Not open to students who have received credit for either BIO 205 or BIO 260.	
<b>KIN 220</b>	<b>Coaching Theory</b>	3 Cr.
	This course introduces students to many principles of coaching that are applicable across all sports. It offers principles of current coaching practices as well as information on issues that coaches in modern society need to be mindful of, such as social media, nutrition and fitness, and legal responsibilities. It also gives step by step guidance on teaching the necessary skills of several individual and team sports and the opportunity to receive a coaching certification at the completion of the course.	
<b>KIN 222</b>	<b>Sport Officiating</b>	2 Cr.
	Course is designed to give instruction in the officiating of selected sports. The major sports covered in this course are soccer, volleyball, football, basketball, baseball and softball. Standards for officiating and rules for each sport will be included.	
<b>KIN 227</b>	<b>Obesity in America</b>	3 Cr.
	This course will examine the development, science, prevention, and treatment of adult and childhood obesity in society. The course will also review common contributors, consequences, and methods of prevention of excess weight gain and obesity. Through current research and discussion, the students will be provided with current trends, guidelines, and recommendations relating to diet, physical activity, and health behavior in healthy, overweight, and obese populations.	
<b>KIN 228</b>	<b>Stress Management and Prevention Methods</b>	2 Cr.
	This course is designed to teach students the basic principles, theories, and relaxation techniques to effectively manage personal stress. Students will gain a greater understanding of the mind-body relationship, learn to employ a holistic approach to stress, and adopt effective cognitive techniques, coping skills, and relaxation techniques.	
<b>KIN 229</b>	<b>Consumer Health</b>	3 Cr.
	An examination of the factors involved in the selection and evaluation of health services and products. Topics will also include quackery, consumer protection laws and organizations, and health insurance considerations.	
<b>KIN 230</b>	<b>Personal and Community Health</b>	3 Cr.
	This course is designed to introduce updated health information in such areas as: psychosocial health, substance abuse, injuries, death, sexuality, sexually transmitted diseases, fitness, nutrition, stress management, and environmental issues. Students will also examine health issues across cultural perspectives.	
<b>KIN 231</b>	<b>Substance Abuse and Health</b>	3 Cr.
	A study of substance use and abuse in the United States. The course will examine the effects of alcohol, tobacco, and other drugs on the mental, physical, and social well-being of the individual.	
<b>KIN 232</b>	<b>Stress Management Module I</b>	1 Cr.
	This course provides a basic understanding of stress and its physical, psychological, and social effects. Topics for Module I include: illness/disease; and intrapersonal, interpersonal, and perceptions intervention. Students may take up to three modules per class. Specific modules may not be repeated for credit.	
<b>KIN 234</b>	<b>Stress Management Module II</b>	1 Cr.
	This course provides a basic understanding of stress and its physical, psychological, and social effects. Topics for Module II include: the relationships between stress and change; self-evaluation; sources of stress; and current coping skills for handling stress including spirituality, meditation, autogenic training, progressive muscle relaxation, and biofeedback. Students may take up to three modules per class. Specific modules cannot be repeated for credit. Prerequisite: KIN 232.	
<b>KIN 236</b>	<b>Stress Management Module III</b>	1 Cr.
	This course provides a basic understanding of stress and its physical, psychological, and social effects. Module III covers the following topics: physiological interventions; behavior; diversity; occupational stress; college stress; and family and the elderly stress. Students may take up to three modules per class. Specific modules cannot be repeated for credit. Prerequisite: KIN 234.	

<b>KIN 240</b>	<b>Governance in Sport</b>	3 Cr.
	This course is an examination of sport organizations focused on both professional and amateur governance structures and processes. The study of policy in educational, non-profit, and professional sport venues will also be addressed.	
<b>KIN 242</b>	<b>Gender and Sport</b>	3 Cr.
	This course offers a comprehensive examination of the intersecting themes and concepts surrounding the study of gender and sport. Topics may include gender and sport participation, Title IX, sexual identity, sport media, and race, ethnicity and gender.	
<b>KIN 250</b>	<b>Medical Terminology</b>	3 Cr.
	This course prepares students to gain proficiency in both the spoken and written communication with the medical language used by health professionals. Course may be useful for students in Kinesiology, Nursing, and any of the Allied Health fields. This course may not be used to fulfill a major requirement. Prerequisite: BIO 151 or BIO 380.	
<b>KIN 270</b>	<b>Teaching Swimming</b>	2 Cr.
	A study of techniques for teaching swimming and basic lifesaving. This course leads to certification in one of the currently recognized training programs for swimming instructors.	
<b>KIN 273</b>	<b>Kinesiology Sophomore Research</b>	1 Cr.
	Team investigation of a specific area in the field Kinesiology and/or Exercise Science. Students complete team research tasks common to the field and conclude the experience with a written report. Prerequisites: a formal application to the director of exercise science. Graded S/U.	
<b>KIN 274</b>	<b>Kinesiology Junior Research</b>	1 Cr.
	Team investigation of a specific area in the field Kinesiology and/or Exercise Science. Students complete team research tasks common to the field and conclude the experience with a written report. Prerequisites: a formal application to the director of exercise science. Graded S/U.	
<b>KIN 275</b>	<b>Methods of Teaching Fitness</b>	2 Cr.
	Methods and materials for designing and implementing fitness instruction and assessment in the K-12 school setting. Topics include: effects of physical activity and inactivity, current fitness assessment procedures, principles and guidelines for developing health related and skill related fitness, and providing a safe learning environment.	
<b>KIN 277</b>	<b>Physiology of Exercise</b>	2+2, 3 Cr.
	An investigation of the physiological response of the human body to exercise and training, with laboratory experience. Prerequisite: Grade of C- or higher in BIO 152.	
<b>KIN 289</b>	<b>Methods of Teaching Elementary Physical Education</b>	2+2, 3 Cr.
	Focuses on planning, teaching, and evaluating a developmental physical education program for elementary students. Includes lab experiences designed to enhance planning, management, and teaching skills. Prerequisite: sophomore standing.	
<b>KIN 290</b>	<b>Special Topics in Kinesiology</b>	1-3 Cr.
	An open topic course which may investigate various topics pertaining to exercise science, sports management or physical education. May be repeated for credit if topic is different.	
<b>KIN 310</b>	<b>Psychology of Sport</b>	3 Cr.
	A study of the competitive sports experience, with emphasis on the multidimensional factors involved in the psychology of sport. Kinesiology majors/minors only or chair's approval required. Prerequisite: PSY 110.	
<b>KIN 315</b>	<b>Teaching of Team Sports</b>	3 Cr.
	This course will prepare students to teach a variety of team sports, including, but not restricted to football, soccer, baseball, softball, volleyball, and basketball. Students will be involved in teaching basic skills, drills, lead-up games, and game play. Rules, regulations, history, and officiating will also be taught. Kinesiology majors/minors only, or chair's approval required.	
<b>KIN 320</b>	<b>Sport, Society, and Ethics</b>	3 Cr.
	Sport, Society, and Ethics will study the general relationship between sport and society and help students develop an ethical framework to make decisions as future sport management professionals. Students will examine the ways sport is linked to other spheres of social life and the organization and behavior patterns that exist within sport settings. Ethical inquiry will be employed to examine the cultural, structural, and situational factors affecting sports and sport experiences as well as the social processes related to sports such as conflict, competition, cooperation, discrimination, social mobility, democratization, collective behavior, and social change.	

<b>KIN 325</b>	<b>Teaching of Individual and Dual Sports</b>	3 Cr.
	This course will prepare students to teach a variety of dual and individual sports, including, but not restricted to golf, badminton, tennis, racquetball, and pickle ball. Students will be involved in teaching basic skills, drills, lead-up games, and game play. Rules, regulations, history, and officiating will also be taught. Kinesiology majors/minors only, or chair's approval required. Junior standing and Kinesiology majors/minors only, or chair's approval required.	
<b>KIN 333</b>	<b>Management and Development of Facilities</b>	3 Cr.
	The course explores planning, developing, and managing sports facilities. Students examine existing facilities and plan for the development and management of new sports facilities.	
<b>KIN 340</b>	<b>Motor Learning</b>	2+2, 3 Cr.
	This course will expose students to the theoretical perspectives and current principles associated with the control and learning of movement skills. Specifically, the neural and mechanical mechanisms underlying motor behavior and the variables influencing motor learning will be addressed. The course will have applications to kinesiology, exercise science, adapted physical education, and both elementary and secondary physical education. Prerequisite: C- or higher in BIO 151 and BIO 152.	
<b>KIN 343</b>	<b>Sport Marketing and Social Media</b>	3 Cr.
	Sports Marketing and Social Media presents an overview of the various techniques and strategies used in meeting the wants and needs of consumers in the sport industry as well as understanding how sport can be used to assist in the marketing of other companies and products. Emerging sources such as social media have played an integral role in modern marketing efforts. With this increasing emphasis on integrated social media strategies, there is an irrefutable need for sport professionals and organizations to have end-to-end social media expertise. Through case studies, interactive sessions, and class exercises, students will learn best practices and develop the skills to connect business objectives with marketing strategies, platforms, and tactics.	
<b>KIN 354</b>	<b>Recreational Leadership</b>	3 Cr.
	This course addresses the concepts of leisure, play, and recreation, emphasizing the role leisure should play in modern society. Lectures and discussions on societal attitudes toward work and leisure stress the need to keep work and leisure in proper perspective. Students will concentrate on the psychological aspects of optimal experience and quality of life. Community leisure services will be addressed. Assignments will encourage students to explore leisure lifestyle attitudes. Prerequisite: PSY 110.	
<b>KIN 360</b>	<b>Adapted Physical Education</b>	3 Cr.
	A study of the needs and problems of the exceptional individual with emphasis on adapting appropriate activities to meet these needs.	
<b>KIN 361</b>	<b>Cardiac Rehabilitation: Theory and Application</b>	3 Cr.
	This course studies physiological responses to exercise, graded exercise testing, and program prescriptions for prevention and rehabilitation. It provides experience in exercise tolerance testing and the reading of electrocardiograms. Prerequisite BIO 152.	
<b>KIN 370</b>	<b>Kinesiology I</b>	3+2, 4 Cr.
	The first of two courses focusing on the mechanics and anatomy of human movement and their roles in promoting health and reducing disease. Kinesiology has direct applications to fitness and health, including developing exercise programs for people with and without disabilities, preserving the independence of older people, preventing disease due to trauma and neglect, and rehabilitating people after disease or injury. Course includes a laboratory component. Prerequisite: BIO 151. Co-requisite: MATH 115 or placement higher than MATH 115 on the math placement process.	
<b>KIN 372</b>	<b>Kinesiology II</b>	2+2, 3 Cr.
	The second of two courses focusing on the mechanics and anatomy of human movement and their roles in promoting health and reducing disease. Course includes a laboratory component. Prerequisite: KIN 370.	
<b>KIN 373</b>	<b>Research Seminar in Kinesiology and Ethics</b>	2 Cr.
	The course seeks to provide a practical overview of the rules, regulations, and professional practices that defines ethical, responsible conduct of biomedical research, preparation for senior research/project for undergraduate students of Exercise Science, Physical Education and Sports Management, and answers the question "How do I prepare for a senior research project?" Students will learn the process of selecting a research topic, how to find and evaluate research articles, and write annotated bibliographies. A Writing in the Discipline course. Prerequisite: KIN 370, junior standing.	

<b>KIN 380</b>	<b>Human Sexuality</b>	3 Cr.
	Sexual knowledge, attitudes, and behaviors will be examined in detail through a variety of methods. Particular attention will be given to the enhancement of sexual well-being and the course will address various sexual health concerns. Junior standing required.	
<b>KIN 386</b>	<b>Internship Preparation and Career Management</b>	3 Cr.
	This course provides an overview of internship policies and requirements, guidance through site selection and application process, and communication skills for the business/sport environment. Students learn how to select and arrange an internship opportunity, linking it to personal and professional career goals. Topics include letters of applications, resumes, interview preparation, and other career-related skills. Prerequisite: junior standing.	
<b>KIN 387</b>	<b>Fitness Assessment and Exercise Prescription</b>	3 Cr.
	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: Grade of C or higher in BIO 151 and BIO 152, or approval of the instructor.	
<b>KIN 388</b>	<b>Methods of Teaching Health K-12</b>	3 Cr.
	An introduction to current school health programs, including content and methods of health education. The course will survey basic wellness issues such as nutrition, fitness, sexuality, drug abuse, and chronic and communicable disease prevention. The theory and practice of health education programs at the K-12 levels are discussed, including the use of a variety of methods and the development of relevant materials.	
<b>KIN 390</b>	<b>Special Topics in Kinesiology</b>	1-3 Cr.
	An open topic course which may investigate various topics pertaining to exercise science, sports management or physical education. May be repeated for credit if topic is different.	
<b>KIN 415</b>	<b>Research Methods in Kinesiology and Sport</b>	3 Cr.
	A course in research methods for students of Exercise Science & Kinesiology in preparation for personal research. Building on KIN 373, students will complete and present a research proposal, write the first three chapters of a thesis, and do a formal presentation, orally, and in the form of a research poster. A Writing in the Discipline course. Prerequisites: KIN 373, KIN 370, senior standing.	
<b>KIN 433</b>	<b>Sport Law</b>	3 Cr.
	This course provides an extensive overview of legal principles and ethical issues in sports. Included will be a broad range of issues related to sports law (such as antitrust exemption, labor law, and the athlete/agent relationship). The course concludes with a study of the role and application of ethics in decision-making processes. Prerequisite: BLAW 104, junior standing or chair's approval.	
<b>KIN 443</b>	<b>Financial Aspects of Sport</b>	3 Cr.
	This course provides the sports management student with information concerning the basic theories of finance and economics in areas of sports management. Included are forms of ownership, taxation, financial analysis, feasibility studies, licensing, and economic impact studies. Prerequisite: ECON 221 or ACC 205.	
<b>KIN 473</b>	<b>Kinesiology Senior Project</b>	3 Cr.
	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: KIN 373, Senior standing, and approval of the chair of the department.	
<b>KIN 477</b>	<b>Advanced Physiology of Exercise</b>	3 Cr.
	Critical review of the most current exercise science literature. Topics include biochemistry of exercise, carbohydrate metabolism, ergogenic aids, muscle physiology, endocrine physiology, and cardiac rehabilitation. Prerequisites: KIN 370, KIN 387, KIN 277, and a grade of C- or higher in CHEM 111 or CHEM 121, or approval of the instructor.	
<b>KIN 478</b>	<b>Sport Nutrition</b>	3 Cr.
	This course explores the intricacies of improving sport performance through adjustments in dietary practices, and prepares students for sport nutrition certification. Prerequisites: BIO 151, BIO 152, KIN 205, KIN 277, or instructor approval.	
<b>KIN 479</b>	<b>Principles of Strength, Conditioning &amp; Functional Training</b>	3 Cr.
	This course focuses on the scientific principles of physical and functional conditioning through resistance and cardiovascular training. This course also addresses functional movement. Emphasis will be placed on physiological adaptations to exercise, anaerobic and aerobic training, exercise technique, program design, and testing and evaluation. Additionally, this course is designed to prepare students for National Certification in Strength and Conditioning (NCSC) and to certify as a Functional Strength Coach (CFSC). Prerequisites: KIN 387 or KIN 277.	

<b>KIN 486</b>	<b>Internship in Sport Management or Exercise Science</b>	1-3 Cr.
	An opportunity for students to gain practical experience under careful supervision by working in University programs or offices, public agencies or businesses, sport clubs, sports medicine clinics, community or adult fitness programs, high schools, media and communications, programs for the elderly, athletic administration, intramural and facility management, or other appropriate work experiences. Objectives, evaluations and procedures for the conduct of the course are jointly planned by the student, the instructor, and the program supervisor. Exercise science and sports management majors must complete a minimum of 3 internship credits. This course may be repeated for a maximum of 12 credit hours. Prerequisites: junior standing, KIN 386 (Sports Management majors only), and approval of the instructor and the chair of the department.	
<b>KIN 490</b>	<b>Special Topics in Kinesiology</b>	1-3 Cr.
	An open-topic course which examines a variety of topics pertaining to the needs of the physical educator, e.g., motor learning, curriculum construction, advanced athletic conditioning, current issues in kinesiology. May be repeated for credit, provided topics are different.	
<b>KIN 495</b>	<b>Independent Group Study</b>	1-3 Cr.
	A personal investigation of a research-oriented concern pertaining to kinesiology. This course may be repeated for a maximum of six credit hours. Prerequisite: approval of the instructor and consent of the chair of the department.	
<b>KIN 497</b>	<b>Honors Work in Kinesiology</b>	3 Cr.
	See Honors Work, page 56.	
<b>KIN 498</b>	<b>Honors Candidacy in Kinesiology</b>	3 Cr.
	See Honors Work, page 56.	

# Mathematics and Statistics

Learn more about the [Department of Mathematics and Statistics](#) at Valpo online.

**Professors Maxin, Pudwell, Szaniszlo (chair); Associate Professors Beagley, A. Capaldi, M. Capaldi, Desjarlais, Drube, Gong, Kolba, Luther, Sullivan; Lecturer B. Davis**

## Mathematics

Mathematics is the disciplined form of communication which serves both to lend 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.

Careers in mathematics include statistical analysis, education, scientific, industrial, and mathematical research, operations research, and actuarial science.

### Mathematics Major (Minimum 38 Cr.)

#### Core

MATH 131	Calculus I	3+2, 4 Cr.
MATH 132	Calculus II	3+2, 4 Cr.
MATH 253	Calculus III	4 Cr.
MATH 264	Linear Algebra	3 Cr.
MATH 266	Transitions in Mathematics	3 Cr.
MATH 199	Mathematics Colloquium I	0 Cr.
MATH 299	Mathematics Colloquium II	0 Cr.
MATH 399	Mathematics Colloquium III	1 Cr.
MATH 499	Mathematics Colloquium IV	1 Cr.

#### Electives

Three courses from the following options:

MATH 421	Combinatorics I	3 Cr.
MATH 422	Combinatorics II	3 Cr.
MATH 451	Analysis I	3 Cr.
MATH 452	Analysis II	3 Cr.
MATH 453	Topology	3 Cr.
MATH 461	Abstract Algebra I	3 Cr.
MATH 462	Abstract Algebra II	3 Cr.

Three additional MATH or STAT courses of 3 credits or more numbered 270 or above.

#### Additional Required Courses

One statistics course from the following options

STAT 140	General Statistics	3 Cr.
STAT 240	Statistical Analysis	3 Cr.
PSY 201	Statistical Methods	3 Cr.
IDS 205	Business Statistics	3 Cr.
CE 202	Statistical Applications in Civil Engineering	3 Cr.

Note: The preferred statistics course is STAT 240.

One computing course from the following options:

CS 156	Fundamentals of Programming	2+2, 3 Cr.
CS 157	Algorithms and Programming	2+3, 3 Cr.

Note: Mathematics majors are strongly encouraged to take CS 158.

**Degree**

Completion of the degree requirements of the College of Arts and Sciences with a major in mathematics leads to a Bachelor of Arts or a Bachelor of Science degree. A student having a mathematics major in view should begin mathematics in the freshman year.

**Mathematics Complementary Major (Minimum 32 Cr.)**

A student with a first major in another discipline may take a complementary major in mathematics.

**Core**

<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 264</b>	Linear Algebra	3 Cr.
<b>MATH 266</b>	Transitions in Mathematics	3 Cr.
<b>MATH 199</b>	Mathematics Colloquium I	0 Cr.
<b>MATH 299</b>	Mathematics Colloquium II	0 Cr.
<b>MATH 399</b>	Mathematics Colloquium III	1 Cr.
<b>MATH 499</b>	Mathematics Colloquium IV	1 Cr.

**Electives****One course from the following options:**

<b>MATH 421</b>	Combinatorics I	3 Cr.
<b>MATH 451</b>	Analysis I	3 Cr.
<b>MATH 461</b>	Abstract Algebra I	3 Cr.

**Three additional MATH or STAT courses of 3 credits or more numbered 270 or above**

**Additional Required Course****One statistics course from the following options**

<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>CE 202</b>	Statistical Applications in Civil Engineering	3 Cr.

**Note: The preferred statistics course is STAT 240.**

**Mathematics Minor (Minimum 15 Cr.)****One course from the following options:**

<b>MATH 213</b>	Mathematics for Elementary Teachers I	3 Cr.
<b>MATH 220</b>	Discrete Mathematics	3 Cr.
<b>MATH 264</b>	Linear Algebra	3 Cr.
<b>MATH 266</b>	Transitions in Mathematics	3 Cr.

**OR any other MATH course numbered 300 or above**

**One additional MATH or STAT course of at least 3 credits numbered 213 or above**  
**Seven to nine additional credits in MATH or STAT courses except MATH 110, MATH 111, and MATH 115**

See page 351 for a description of the Applied Statistics Minor.

**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 2.500 cumulative grade point average and a 2.500 grade point average in all required Mathematics courses taken prior to participation in the program.

# Statistics

Statistics is the science of collecting, organizing, and interpreting data. The goal of statistics is not to merely perform computations and make graphs with data, but to learn from data. Understanding statistics, including its misuses and limitations, is a critical component of being an informed citizen in our increasingly data-driven world.

A major in statistics provides students with a foundation in statistical theory, but focuses on how to appropriately conduct statistical analyses in real applications. Careers in statistics include a wide array of fields, such as medicine, public health, manufacturing, marketing, finance, and government positions.

## Statistics Major (Minimum 32 Cr.)

### Introductory Statistics Course

#### One course from the following options:

<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>CE 202</b>	Statistical Applications in Civil Engineering	3 Cr.

**Note: The preferred statistics course is STAT 240.**

### Intermediate Statistics Course

#### One course from the following options:

<b>STAT 340</b>	Statistics for Decision Making	3 Cr.
<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>ECON 325</b>	Econometrics	3 Cr.

### Core

<b>DATA 151</b>	Introduction to Data Science	3 Cr.
<b>STAT 299</b>	Statistics Colloquium I	1 Cr.
<b>STAT 343</b>	Time Series Analysis	3 Cr.
<b>STAT 344</b>	Stochastic Processes	3 Cr.
<b>STAT 361</b>	Introduction to R	1 Cr.
<b>STAT 363</b>	Introduction to SAS	3 Cr.
<b>STAT 399</b>	Statistics Colloquium II	1 Cr.
<b>STAT 441</b>	Probability	4 Cr.
<b>STAT 442</b>	Mathematical Statistics	3 Cr.
<b>STAT 499</b>	Statistics Colloquium III	1 Cr.

### Elective

#### One course from the following options:

<b>ACRS 325</b>	Actuarial Modeling	3 Cr.
<b>BIO/MATH 321</b>	Mathematical Models of Infectious Diseases	3 Cr.
<b>BUS 440</b>	Data Mining	3 Cr.
<b>CS 325</b>	Simulation and Modeling	3 Cr.
<b>DATA 433</b>	Data Mining and Applications	3 Cr.
<b>ECON 473</b>	Applied Data Science	3 Cr.
<b>GEO/MET 460</b>	Data Analysis	3 Cr.
<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>PSY 202</b>	Research Methods in Psychology	3 Cr.
<b>SOC 320</b>	Research Methods in Sociology	3 Cr.
<b>STAT 490</b>	Advanced Topics in Statistics	3 Cr.

**Note: The chosen elective cannot be used to fulfill requirements of any other major or minor.**

### Additional Required Courses

<b>MATH 131</b>	Calculus I	4 Cr.
<b>MATH 132</b>	Calculus II	4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.

#### One course from the following options:

<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 264</b>	Linear Algebra	3 Cr.

Statistics majors may not pursue a minor in Applied Statistics. Statistics majors who are also pursuing either the Mathematics major or the Complementary Mathematics major may not use courses with a STAT prefix to fulfill any of the upper-level elective requirements for the Mathematics major or the Complementary Mathematics major. Statistics majors who are also pursuing a Mathematics minor may not use courses with a STAT prefix to fulfill any of the minor requirements.

### Degree

Completion of the degree requirements of the College of Arts and Sciences with a major in statistics leads to a Bachelor of Arts or a Bachelor of Science degree.

### Placement and Special Credit

Before registration, each new student will be assigned a placement rank based on available student data and/or an online mathematics placement assessment. The Department of Mathematics and Statistics will recommend which course(s) each student should take.

Qualified students may also take a Calculus Placement Exam. A student who is placed into MATH 132 will receive 4 credits for MATH 131 and 4 credits for MATH 132 by passing MATH 132 with a grade of C or higher.

### Credit by Examination

Credit for MATH 131 and 132 may be earned through the College Level Examination Program subject examination in Introductory Calculus and through the AP calculus program.

### Approval of Schedules

All students taking a major or minor in the department are encouraged to have their schedules approved by the chair of the department or his/her representative before registration each semester.

## Mathematics Courses

<b>MATH 110</b>	<b>Intermediate Algebra</b>	1 Cr.
	(See paragraph on Placement.) A first course to assist students in developing fundamental mathematical concepts and processes. Self-paced course focused on mastering topics in the realm of Intermediate Algebra. Offered every term. S/U grade only. Recommended for students with a placement level of 0 in the Math Placement process. 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. This course may not be taken by a student with credit for any other mathematics course.	
<b>MATH 111</b>	<b>College Algebra</b>	1 Cr.
	(See paragraph on Placement.) Self-paced course focused on mastering topics in the realm of College Algebra. Offered every term. S/U grade only. 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 110 in the Math Placement process.	
<b>MATH 115</b>	<b>Trigonometry and Functions</b>	1 Cr.
	(See paragraph on Placement.) Topics will include trigonometry in the plane, trigonometric functions, simple vector geometry, functional concepts and notation, and an introduction to polar coordinates. Self-paced course. Offered every term. S/U grade only. 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 111, or placement higher than MATH 111 in the Math Placement process.	
<b>MATH 120</b>	<b>Mathematics in Modern Society</b>	3 Cr.
	(See paragraph on Placement.) A one semester course intended primarily for students majoring in the humanities. The relationship between mathematics and modern society is studied. Socially relevant topics will vary by instructor, but may include voting theory, game theory, or statistics & data analysis. Emphasis placed on problem solving, reasoning, and mathematical writing. This course may be used to fulfill the Quantitative Analysis component of the General Education Requirements. Usually offered every spring semester. Prerequisite or Corequisite: MATH 110, or placement higher than MATH 110 in the Math Placement process.	

<b>MATH 122</b>	<b>Applied Calculus</b>	4 Cr.
	(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. The course may be used to fulfill the Quantitative Analysis component of the General Education Requirements. Students with credit for MATH 131 may not receive credit for this course. Prerequisite or Corequisite: MATH 111, or placement higher than MATH 111 in the Math Placement process.	
<b>MATH 124</b>	<b>Finite Mathematics</b>	4 Cr.
	(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, probability, counting methods, Markov chains, and game theory. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. Prerequisite or Corequisite: MATH 111, or placement higher than MATH 111 in the Math Placement process.	
<b>MATH 131</b>	<b>Calculus I</b>	3+2, 4 Cr.
	(See paragraph on Placement.) A first course in the calculus sequence. Topics include limits, continuity, differentiation, application of the derivative, the Intermediate Value Theorem, definite integrals and the Fundamental Theorem of Calculus, with transcendental functions throughout. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. This course is not open to students with credit for MATH 122. Prerequisite or Corequisite: MATH 115, or placement higher than MATH 115 in the Math Placement process.	
<b>MATH 132</b>	<b>Calculus II</b>	3+2, 4 Cr.
	A continuation of MATH 131. Topics include techniques of integration, applications of the definite integral, improper integrals, an introduction to differential equations, convergence of sequences and series, Taylor series, parametric equations, and polar coordinates. Prerequisite: Grade of C- or higher in MATH 131.	
<b>MATH 199</b>	<b>Mathematics Colloquium I</b>	0 Cr.
	Students attend and act as moderators for sessions of MATH 499, and begin participating in co-curricular mathematical activities, culminating in MATH 399. S/U grade only.	
<b>MATH 213</b>	<b>Mathematics for Elementary Teachers I</b>	3 Cr.
	(See paragraph on Placement.) This course is restricted to students majoring in elementary education. Topics include problem solving, sets, numeration systems, development of the rational number system, properties and methods of modeling mathematical operations, functions and algebraic relationships. Usually offered every fall semester. Prerequisite or Corequisite: MATH 111 or placement higher than MATH 111 in the math placement process. Open to students with sophomore standing or above.	
<b>MATH 214</b>	<b>Mathematics for Elementary Teachers II</b>	3 Cr.
	A continuation of MATH 213. Topics include two-and three-dimensional geometry, measurement, functions, graphing, proportions, probability, statistics, and methods for solving real world problems. Usually offered every spring semester. Prerequisite: A grade of C+ or higher in MATH 213. Open to students with sophomore standing or above.	
<b>MATH 220</b>	<b>Discrete Mathematics</b>	3 Cr.
	An introduction to mathematical reasoning, algorithm analysis, and the concepts that provide a mathematical foundation for computer science. Topics include a review of sets, logic, proof techniques including mathematical induction, counting techniques, recurrences, RSA cryptography, graph algorithms, applications, and elementary analysis of iterative and recursive algorithms. Pre/corequisite: MATH 131.	
<b>MATH 253</b>	<b>Calculus III</b>	4 Cr.
	A continuation of MATH 132. Topics include conic sections, vector algebra, space curves, calculus of functions of several variables, multiple integration, calculus of vector fields. Prerequisite: Grade of C- or higher in MATH 132.	
<b>MATH 260</b>	<b>Linear Systems and Matrices</b>	1 Cr.
	Students will study properties of, and solutions to, linear equations and systems of linear equations. Related topics include matrices, properties of matrices, matrix algebra, determinants, eigenvalues, real vectors in two and three dimensions, vector algebra (including dot and cross products), linear combinations, and linear independence. This class is not open to students with credit for MATH 264. Prerequisite or Corequisite: MATH 111, or placement higher than MATH 111 in the Math Placement process.	

<b>MATH 264</b>	<b>Linear Algebra</b>	3 Cr.
	A study of linear algebra and an introduction to mathematical reasoning. Topics include systems of linear equations, matrices, determinants, vectors in n-space, abstract vector spaces, and linear transformations. Prerequisite: MATH 132 or MATH 220.	
<b>MATH 266</b>	<b>Transitions in Mathematics</b>	3 Cr.
	In this class, students prepare to become professional mathematicians. Major course components are 1) a study of common proof techniques using linear algebra and number theory as foundations, and 2) an introduction to current professional practices such as the use of mathematical typesetting software, the use of computational software, finding and reading mathematical literature, and a survey of current issues in mathematics. Usually offered every spring semester. Prerequisite: a WIC course and either MATH 264 or MATH 132 with consent of the department chair. Recommended to be taken concurrently with MATH 299.	
<b>MATH 270</b>	<b>Ordinary Differential Equations</b>	3 Cr.
	Study of differential equations of a single variable, and their solutions (graphical, exact, and numerical), applications of ordinary differential equations, Laplace transforms, introduction to systems of linear differential equations, use of eigenvalues and eigenvectors in solving such systems. Prerequisites: Grade of C- or higher in MATH 132, and either MATH 260 or MATH 264. (The latter may be taken concurrently.)	
<b>MATH 285</b>	<b>Practicum in Mathematics</b>	0.5-3 Cr.
	Intensive professional experience and/ or technical training in a mathematics related field. A written report is required. S/U grade only. Prerequisite: MATH 264 and consent of the chair.	
<b>MATH 290</b>	<b>Topics in Mathematics</b>	1-3 Cr.
	Topics may include problem solving techniques, computer applications, or topics from finite mathematics. Only offered when there is sufficient demand. May be repeated for credit, provided topics are different. Prerequisite: consent of the instructor.	
<b>MATH 299</b>	<b>Mathematics Colloquium II</b>	0 Cr.
	Students are required to attend sessions of MATH 499, evaluate student presentations, and continue participating in co-curricular mathematical activities, culminating in MATH 399. S/U grade. Prerequisite: MATH 199. Recommended to be taken concurrently with MATH 266.	
<b>MATH 312</b>	<b>History of Mathematics</b>	3 Cr.
	Students will study the development of mathematics, usually through a survey of mathematics from earliest times to the present. Special topics may be chosen according to the interest of the class. Usually offered in the fall semester of even numbered years.	
<b>MATH 314</b>	<b>Elements of Geometry</b>	4 Cr.
	Logic, axiom systems, and models; consistency, independence, and completeness; consideration of the foundations of Euclidean and non-Euclidean geometries; topics from projective and transformational geometries. Usually offered in the fall semester of odd numbered years. Prerequisite: MATH 266.	
<b>MATH 320/520</b>	<b>Dynamical Systems</b>	3 Cr.
	Theory and applications of mathematical models of dynamical systems (discrete and continuous). Topics include linear and non-linear equations, linear and non-linear systems of equations, bifurcation, chaos, and fractals. Usually offered in the fall semester of odd numbered years. Prerequisite: MATH 132.	
<b>MATH 321/521</b>	<b>Mathematical Models of Infectious Diseases</b>	3 Cr.
	(Also offered as BIO 321.) An application of mathematical methods such as differential equations and elementary matrix algebra to the study of infectious diseases, and analyze outbreaks and control methods (such as vaccinations). Usually offered in the spring semester of odd-numbered years, and online during the summer. Prerequisite: MATH 131 and one of STAT 140, STAT 240, IDS 205, PSY 201, or CE 202.	
<b>MATH 322/522</b>	<b>Optimization</b>	3 Cr.
	Theory of, and computer algorithms for, the solution of mathematical programming problems and applications. Topics include the simplex method, cutting planes, branch and bound methods, and numerical methods for unconstrained optimization, game theory, and dynamic programming. Usually offered in the spring semester of even numbered years. Previous computer programming or spreadsheet experience is recommended but not required. Prerequisites: MATH 260 or MATH 264.	

<b>MATH 323/523</b>	<b>Game Theory</b>	3 Cr.
	An introduction to the fundamentals of game theory, including dominance, Nash equilibria, and evolutionary stable solutions. Students will explore various models of strategic games, and apply them to economics, biology, and other disciplines. Usually offered in the summer. Prerequisites: MATH 131 and one of STAT 140, STAT 240, IDS 205, CE 202, or PSY 201.	
<b>MATH 330/530</b>	<b>Partial Differential Equations</b>	3 Cr.
	Theory of, and solution techniques for, partial differential equations of first and second order, including the heat equation and wave equation in rectangular, cylindrical, and spherical coordinates. Tools include Fourier series, Bessel Functions, Legendre Polynomials, and transform techniques. Usually offered every spring semester. Prerequisites: MATH 253 and MATH 270.	
<b>MATH 334/534</b>	<b>Complex Variables</b>	3 Cr.
	A study of mathematics in the complex plane, including analytic functions, derivatives, power and Laurent series, integrals, residues, and conformal mapping, with applications to partial differential equations. Usually offered in the fall semester of even numbered years. Prerequisite: MATH 253.	
<b>MATH 370/570</b>	<b>Numerical Analysis</b>	3 Cr.
	Analysis and implementation of numerical techniques such as root finding, polynomial interpolation, the finite difference method, quadrature methods, and numerical solutions to differential equations, with an emphasis on theory and error analysis. Usually offered in the spring semester of even numbered years. Previous computer programming or spreadsheet experience is recommended but not required. Prerequisite: MATH 264 or MATH 270.	
<b>MATH 371/571</b>	<b>Experimental Mathematics</b>	3 Cr.
	A study of the role of computation and experimentation in mathematical proof. Students will learn to write code in a mathematical programming language (e.g. Maple), and then apply programming skills to a variety of mathematical problems. Topics include enumeration, continued fractions, high precision computing, and numerical integration, among others. Students will also study famous proofs that integrate computation in nontrivial ways, and the current state of automated theorem proving/automated proof-checking software. Usually offered in the spring semester of odd numbered years. Prerequisites: MATH 220, or MATH 266.	
<b>MATH 374</b>	<b>Computational Linear Algebra</b>	2+2, 3 Cr.
	(Also offered as CS 374 and DATA 374.) A survey of computational applications of linear algebra for solving science and engineering problems. Topics include linear systems in both equation and matrix form, row operations, inverses and determinants, eigenvalues, Gaussian elimination, matrix decomposition (including singular value and QR decompositions), sparse vs. dense matrices, and approximation. Topics are explored through applications to large data sets, with programming in both Python and MATLAB environments. Other advanced topics related to data mining may be covered. Usually offered in the fall semester of even-numbered years. Prerequisites: one of CS 157 or DATA 151, and one of MATH 260 or MATH 264.	
<b>MATH 381</b>	<b>Cooperative Education in Mathematics</b>	1-2 Cr.
	The application of mathematical concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. May be repeated for additional credit. S/U grade only. Prerequisite: MATH 266 or approval of the chair of the department.	
<b>MATH 399</b>	<b>Mathematics Colloquium III</b>	1 Cr.
	Students are required to attend sessions of MATH 499, and participate in activities related to mathematics that take place outside of the classroom. Examples include attending a mathematics conference, participating in service learning opportunities, or taking the national Putnam exam. Potential activities are assigned points, and students must attain a certain minimum number of points before the completion of this course to receive credit. Prerequisite: MATH 299 and at least junior standing.	
<b>MATH 421</b>	<b>Combinatorics I</b>	3 Cr.
	Theory of combinatorics, including elementary counting techniques, the inclusion-exclusion principle, Ramsey theory, and an introduction to graph theory. Additional topics are introduced according to the interests of the students. Usually offered in the fall semester of even-numbered years. Prerequisite: MATH 266.	
<b>MATH 422</b>	<b>Combinatorics II</b>	3 Cr.
	A continuation of MATH 421. Topics include generating functions and recurrence relations, Polya's theorem, matchings and coverings, and other topics based on the interests of the students. Usually offered in the spring semester of odd-numbered years. Prerequisite: MATH 421 or consent of the instructor.	

<b>MATH 451</b>	<b>Analysis I</b>	3 Cr.
	Properties of real numbers, theory of continuity, differentiation and integration of real valued functions of a real variable, sequences, series, and uniform convergence. Usually offered in the spring semester of even-numbered years. Prerequisites: MATH 132 and MATH 266.	
<b>MATH 452</b>	<b>Analysis II</b>	3 Cr.
	Theory of continuity and differentiation of real and vector-valued multi-variable functions; multiple integration and the Jacobian; implicit and inverse function theorems; topology of real n-space. Offered only when there is sufficient demand. Prerequisites: MATH 253 and MATH 451.	
<b>MATH 453</b>	<b>Topology</b>	3 Cr.
	Introduces students to topological spaces, open and closed sets, continuous functions, limit points, and homeomorphisms. Topics also include properties of spaces, such as connectedness and path-connectedness. Additional topics could consist of applications of topology, such as knot theory and 2-D manifolds. Usually offered in the spring semester of odd-numbered years. Prerequisite: MATH 266.	
<b>MATH 461</b>	<b>Abstract Algebra I</b>	3 Cr.
	A course in the theory of mathematical structures, i.e. groups, rings, and fields, along with substructures, quotient structures, and homomorphisms. Usually offered in the fall semester of odd-numbered years. Prerequisite: MATH 266.	
<b>MATH 462</b>	<b>Abstract Algebra II</b>	3 Cr.
	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. Usually offered in the spring semester of even-numbered years. Prerequisite: MATH 461.	
<b>MATH 490/590</b>	<b>Advanced Topics in Mathematics</b>	1-3 Cr.
	An advanced course for mathematics majors, topics will vary according to faculty and student interest. Only offered when there is sufficient demand. Prerequisites will depend on the content. May be repeated for credit, provided topics are different.	
<b>MATH 495</b>	<b>Independent Study in Mathematics</b>	1-3 Cr.
	Students study advanced topics in mathematics under the supervision of a faculty member. Written work is required. May be repeated for credit. Prerequisite: consent of the chair of the department.	
<b>MATH 496</b>	<b>Research in Mathematics</b>	0-3 Cr.
	Students undertake a research problem in mathematics under the direction of a faculty member. Written and oral reports are required. S/U grade only. May be repeated for credit. Prerequisite: consent of the chair of the department.	
<b>MATH 497</b>	<b>Honors Work in Mathematics</b>	3 Cr.
	See Honors Work, page 56.	
<b>MATH 498</b>	<b>Honors Candidacy in Mathematics</b>	3 Cr.
	See Honors Work, page 56.	
<b>MATH 499</b>	<b>Mathematics Colloquium IV</b>	1 Cr.
	Students explore, write about, and give presentations about a topic or topics chosen according to the interests of faculty and students. Guest speakers may be arranged in accordance with the topic or topics. Students design, implement, and run a regularly-scheduled departmental colloquium, to which all faculty and students are invited. Prerequisites: MATH 266 and MATH 399.	

## Statistics Courses

<b>STAT 140</b>	<b>General Statistics</b>	3 Cr.
	A non-calculus-based introduction to the major concepts and tools for collecting, organizing, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: planning a study; exploring data; anticipating patterns; and statistical inference. This course may be used to fulfill the Quantitative Analysis component of the General Education Requirements. Not open to students with credit for STAT 240, IDS 205, PSY 201, or CE 202. Prerequisite or Corequisite: MATH 110, or placement higher than MATH 110 in the Math Placement process.	
<b>STAT 240</b>	<b>Statistical Analysis</b>	3 Cr.
	An introduction to probability and statistics for students who have completed a semester of calculus. Topics include probability, empirical and theoretical frequency distributions, sampling, correlation and regression, testing hypotheses, and estimation of parameters, with an emphasis on illustrations and applications of these techniques. Students with credit for STAT 140, IDS 205, PSY 201, or CE 202 must obtain permission from the department chair. Prerequisites: MATH 122 or MATH 131.	
<b>STAT 299</b>	<b>Statistics Colloquium I</b>	1 Cr.
	Students read current newspaper or journal articles involving statistics and complete written analyses and/or oral presentations. Students evaluate senior presentations given by students in STAT 499. Guest speakers may be arranged to present on a variety of topics in statistics. A Writing in the Discipline course. Meets jointly with STAT 399 and STAT 499. Prerequisite: one of STAT 140, STAT 240, PSY 201, IDS 205, or CE 202.	
<b>STAT 340/540</b>	<b>Statistics for Decision Making</b>	3 Cr.
	A study of statistical concepts and methods to facilitate decision making. Content includes analysis of variance, simple and multiple regression, correlation, time-series analysis, and nonparametric methods. Prerequisite: one of STAT 140, STAT 240, IDS 205, PSY 201, or CE 202. This course is not open to students who have completed IDS 340.	
<b>STAT 343/543</b>	<b>Time Series Analysis</b>	3 Cr.
	This course studies statistical modeling and forecasting of time series, which are observations made sequentially through time. Applications of time series discussed are selected from finance, economics, health sciences, meteorology, and many other fields. Students will participate in periodic computer lab sessions with the software SAS. Previous experience with SAS is recommended. Usually offered every fall semester. Prerequisite: one of STAT 340, IDS 340, or ECON 325.	
<b>STAT 344/544</b>	<b>Stochastic Processes</b>	3 Cr.
	This course focuses on the modeling and analysis of stochastic processes arising from a wide range of applications. Topics include discrete-time Markov chains, Poisson processes, continuous-time Markov chains, queueing theory, and decision theory. Usually offered in the fall semester of odd numbered years. Prerequisites: a linear algebra course (MATH 260 or MATH 264) and a statistics course (one of STAT 140, STAT 240, IDS 205, PSY 201, or CE 202).	
<b>STAT 361/561</b>	<b>Introduction to R</b>	1 Cr.
	An introductory course to the statistical analysis software R. Topics include basic R programming, importing and cleaning data, data visualization, performing descriptive and inferential statistics, and creating reproducible reports. Pre/corequisite: one of STAT 340, IDS 340, or ECON 325.	
<b>STAT 363/563</b>	<b>Introduction to SAS</b>	3 Cr.
	An introductory course to the statistical analysis software SAS. Topics include basic SAS programming, creating SAS data sets from external files, creating and managing variables, reading raw data in fixed fields, reading free-format data, reading date and time values, producing descriptive statistics, SAS functions, SAS plots, one-sample tests, two-sample tests, and linear regression. Usually offered in the spring semester of even numbered years. Pre/corequisite: one of STAT 340, IDS 340, or ECON 325.	

<b>STAT 381</b>	<b>Cooperative Education in Statistics</b>	0.5-3 Cr.
	The application of statistical concepts in a professional setting. Grade based on employer's evaluation and student's written and oral reports. S/U grade only. May be repeated for additional credit. Prerequisite: Statistics major and approval of the department chair.	
<b>STAT 386</b>	<b>Internship in Statistics</b>	1-3 Cr.
	Opportunities for students to have direct, supervised experience in public agencies or private industry, such as scientific, technical, or financial firms. S/U grade only. Prerequisites: Statistics major and approval of the department chair.	
<b>STAT 399</b>	<b>Statistics Colloquium II</b>	1 Cr.
	Students read current newspaper or journal articles involving statistics and complete written analyses and/or oral presentations. Students will propose and design a statistical project to be completed in STAT 499. Guest speakers may be arranged to present on a variety of topics in statistics. A Writing in the Discipline course. Meets jointly with STAT 299 and STAT 499. Prerequisite: STAT 299 and a WIC course.	
<b>STAT 441/541</b>	<b>Probability</b>	4 Cr.
	A course in probability with some topics applicable to statistics. Topics include probability spaces, random variables, classical discrete and continuous probability distributions, multivariate probability distributions (with an introduction to multivariable calculus), and joint and conditional distributions. Usually offered every third semester. Prerequisite: MATH 132.	
<b>STAT 442/542</b>	<b>Mathematical Statistics</b>	3 Cr.
	A continuation of STAT 441. Topics include Central Limit Theorem, covariance, moments, estimation, tests of hypotheses, and sampling theory. Usually offered every third semester. Prerequisite: STAT 441.	
<b>STAT 490/590</b>	<b>Advanced Topics in Statistics</b>	3 Cr.
	An intensive study of selected topics, methods, techniques, and problems in applied statistics. Only offered when there is sufficient demand. Prerequisites will depend on the content. May be repeated for credit, provided topics are different.	
<b>STAT 495</b>	<b>Independent Study in Statistics</b>	1-3 Cr.
	Students study advanced topics in statistics under the supervision of a faculty member. Written work is required. May be repeated for credit. Prerequisite: consent of the chair of the department.	
<b>STAT 496</b>	<b>Research in Statistics</b>	0-3 Cr.
	Students undertake a research problem in statistics under the direction of a faculty member. Written and oral reports are required. S/U grade only. May be repeated for credit. Prerequisite: consent of the chair of the department.	
<b>STAT 497</b>	<b>Honors Work in Statistics</b>	3 Cr.
	See Honors Work, page 56.	
<b>STAT 498</b>	<b>Honors Candidacy in Statistics</b>	3 Cr.
	See Honors Work, page 56.	
<b>STAT 499</b>	<b>Statistics Colloquium III</b>	1 Cr.
	Students read current newspaper or journal articles involving statistics and complete written analyses and/or oral presentations. Students will each individually complete a major project involving statistics, producing a written paper and oral presentation. Guest speakers may be arranged to present on a variety of topics in statistics. Meets jointly with STAT 299 and STAT 399. Prerequisite: STAT 399.	

# Music

Learn more about the [Department of Music](#) at Valpo online.

## **Professors C. Cock, Doebler; Associate Professors Bognar, Maugans (chair); Assistant Professors Kim, Macklay, Piedro, Swamy, Uhde.**

The Department of Music offers four degree programs: Bachelor of Arts, Bachelor of Music, Bachelor of Music Education, and Bachelor of Music Therapy. The Bachelor of Arts may be pursued as a traditional liberal arts music major or with an emphasis in church music or music industry. Study of music may also be combined with the Diaconal Program (see page 55). 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, instrumental, and general music. The Bachelor of Music Therapy is accredited by the American Music Therapy Association, prepares students for national board certification (MT-BC), and includes supervised field training and internship. 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, universities, and in private studios; professional music leadership in churches; performance; 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, music therapy, church music, and music business, require hands-on training through internship experiences. 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 theory placement is required for entry into the music major or minor. 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 located online ([valpo.edu/music](http://valpo.edu/music)) 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 components of the Liturgical Institute, and performances of the Bach Institute. 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.

### **Placement and Special Credit**

Students who earn a score of 4 or 5 on the AP Music Theory exam will receive 3 credits for MUS 163 and 2 credits for MUS 109. Qualified students may take a music theory or musicianship placement exam. Students who place directly into MUS 164 shall receive 3 credits for MUS 163 after they pass MUS 164 with a grade of C- or higher at Valparaiso University. Students who place directly into MUS 110 shall receive 2 credits for MUS 109 after they pass MUS 110 with a grade of C- or higher at Valparaiso University.

## Bachelor of Arts – Music Major (Minimum 40 Cr.)

The Bachelor of Arts in music, the traditional liberal arts music track, allows time for a second major or a minor, if carefully planned; 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.

<b>Music Core</b>		<b>31 Cr.</b>
MUS 109	Musicianship I	2+1, 2 Cr.
MUS 110	Musicianship II	2+1, 2 Cr.
MUS 163	Music Theory I	3 Cr.
MUS 164	Music Theory II	3 Cr.
MUS 201	Development of Western Music	2 Cr.
MUS 263	Music Theory III	3 Cr.
MUS 300	Keyboard Proficiency I	0 Cr.
MUS 318	Music of the Baroque, Classical and Early Romantic Eras	3 Cr.
MUS 319	Music of the Late Romantic and Modern Eras	3 Cr.
MUS 400	Concert Attendance	0 Cr.
MUS 499	Music Colloquium (six semesters)	0 Cr.
<b>Six credits of principal performing medium</b>		6 Cr.
MUAP 275	Performance Level Proficiency II	0 Cr.
<b>Four credits of ensemble participation</b>		4 Cr.

**One of the following options:**

<b>Standard Option</b>		
MUS 209	Musicianship III	2+1, 2 Cr.
MUS 264	Music Theory IV: Post-Tonal	3 Cr.
<b>One credit from the following options:</b>		
MUS 404	Recital	1-2 Cr.
MUS 495	Independent Study in Music	1-3 Cr.
<b>At least 3 additional credits from the following options:</b>		
MUS 210	Musicianship IV	2+1, 2 Cr.
MUS 213	Basic Conducting	2 Cr.
MUS 285	Introduction to the Music Industry	3 Cr.
<b>Any 300 or 400-level music course (with MUS prefix)</b>		

<b>Church Music Option</b>		
MUS 213	Basic Conducting	2 Cr.
MUS 313	Intermediate Conducting	2 Cr.
MUS 337	Studies in Liturgical Theology and Practice	3 Cr.
MUS 486	Internship	2 Cr.
MUAP 175	Performance Level Proficiency I (piano or organ)	0 Cr.

<b>Music Industry Option</b>		
MUS 285	Introduction to the Music Industry	3 Cr.
MUS 405	Arts and Entertainment Administration	3 Cr.
MUS 486	Internship	3 Cr.
<b>One minor from the following options (recommended):</b>		
<b>Business Administration</b>		
<b>Fundamentals of Business</b>		
<b>Studio Art</b>		
<b>General Communication</b>		
<b>Digital Media</b>		

**Bachelor of Music Education**

The General Education and Professional Education Requirements for this degree are given on page 46.

<b>Music Core</b>		<b>39 Cr.</b>
MUS 109	Musicianship I	2+1, 2 Cr.
MUS 110	Musicianship II	2+1, 2 Cr.
MUS 209	Musicianship III	2+1, 2 Cr.
MUS 210	Musicianship IV	2+1, 2 Cr.
MUS 163	Music Theory I	3 Cr.
MUS 164	Music Theory II	3 Cr.
MUS 263	Music Theory III	3 Cr.
MUS 264	Music Theory IV: Post-Tonal	3 Cr.
MUS 201	Development of Western Music	2 Cr.
MUS 300	Keyboard Proficiency I and II	0 Cr.
MUS 318	Music of the Baroque, Classical and Early Romantic Eras	3 Cr.
MUS 319	Music of the Late Romantic and Modern Eras	3 Cr.
MUS 213	Basic Conducting	2 Cr.
MUS 313	Intermediate Conducting	2 Cr.
MUS 400	Concert Attendance	0 Cr.
<b>Six credits from the following options:</b>		
MUEN 350	Choirs	1 Cr.
MUEN 352	Bands	1 Cr.
MUEN 354	Orchestra	1 Cr.
<b>One credit from the following options:</b>		
MUEN 357	Small Ensemble Music	0.5 Cr.
MUEN 358	Chamber Music	0.5 Cr.
MUS 499	Music Colloquium (seven semesters)	0 Cr.
<b>Music Education Core</b>		<b>26 Cr.</b>
<b>Principal Instrument<sup>6</sup></b>		8 Cr.
MUAP 375	Performance Level Proficiency III	0 Cr.
<b>Secondary Instrument<sup>7</sup></b>		5 Cr.
MUS 230	Wind/Percussion Methods	3 Cr.
MUS 231	Stringed Instructional Methods	0+2, 1 Cr.
MUS 239	Voice Instructional Methods	0+2, 1 Cr.
MUS 312	Scoring and Arranging	2 Cr.
MUS 389	School Music I	3 Cr.
MUS 489	School Music II	3 Cr.
<b>Additional Required Course</b>		
PSY 110	General Psychology	3 Cr.

<sup>6</sup> Completion of level 303 is required.

<sup>7</sup> 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.

## Bachelor of Music Therapy

The General Education requirements for this degree are given on page 47.

<b>Music Core</b>		
<b>MUS 109</b>	Musicianship I	<b>31 Cr.</b>
<b>MUS 110</b>	Musicianship II	2+1, 2 Cr.
<b>MUS 209</b>	Musicianship III	2+1, 2 Cr.
<b>MUS 210</b>	Musicianship IV	2+1, 2 Cr.
<b>MUS 163</b>	Music Theory I	3 Cr.
<b>MUS 164</b>	Music Theory II	3 Cr.
<b>MUS 263</b>	Music Theory III	3 Cr.
<b>MUS 264</b>	Music Theory IV: Post-Tonal	3 Cr.
<b>MUS 201</b>	Development of Western Music	2 Cr.
<b>MUS 213</b>	Basic Conducting	2 Cr.
<b>MUS 300</b>	Keyboard Proficiency I and II	0 Cr.
<b>MUS 400</b>	Concert Attendance	0 Cr.
<b>Six credits from the following options:</b>		
<b>MUEN 350</b>	Choirs	1 Cr.
<b>MUEN 352</b>	Bands	1 Cr.
<b>MUEN 354</b>	Orchestra	1 Cr.
<b>One credit from the following options:</b>		
<b>MUEN 357</b>	Small Ensemble Music	0.5 Cr.
<b>MUEN 358</b>	Chamber Music	0.5 Cr.
<b>MUS 499</b>	Music Colloquium (six semesters)	0 Cr.
<b>Music Therapy Core</b>		
<b>Principal Instrument<sup>8</sup></b>		
<b>MUAP 275</b>	Performance Level Proficiency III	0 Cr.
<b>Secondary Instrument<sup>9</sup></b>		
<b>MUS 204</b>	Popular Music in America	3 Cr.
<b>MUS 232</b>	Percussion Methods for Music Therapists	0+2, 1 Cr.
<b>MUS 236</b>	Guitar Instructional Methods	0+2, 1 Cr.
<b>MUS 239</b>	Voice Instructional Methods	0+2, 1 Cr.
<b>MUS 304</b>	World Music	3 Cr.
<b>MUS 312</b>	Scoring and Arranging	2 Cr.
<b>MUTH 120</b>	Introduction to Music Therapy	3 Cr.
<b>MUTH 175</b>	Performance Level Music Therapy Proficiency I	0 Cr.
<b>MUTH 240</b>	Music Therapy Foundations I: The Therapeutic Process	2 Cr.
<b>MUTH 241</b>	Music Therapy Foundations I Lab	0+2, 1 Cr.
<b>MUTH 250</b>	Music Therapy Foundations II: Special Populations	2 Cr.
<b>MUTH 251</b>	Music Therapy Foundations II Lab	0+2, 1 Cr.
<b>MUTH 275</b>	Performance Level Music Therapy Proficiency II	0 Cr.
<b>MUTH 330</b>	Clinical Musicianship in Music Therapy	2 Cr.
<b>MUTH 340</b>	Cultural Psychology of Music	3 Cr.
<b>MUTH 373</b>	Music Therapy Junior Seminar I	1 Cr.
<b>MUTH 374</b>	Music Therapy Junior Seminar II	1 Cr.
<b>MUTH 383</b>	Music Therapy Practicum I	1 Cr.
<b>MUTH 384</b>	Music Therapy Practicum II	1 Cr.
<b>MUTH 430</b>	Music Therapy Advocacy and Entrepreneurship	1 Cr.
<b>MUTH 476</b>	Music Therapy Senior Seminar (taken twice)	6 Cr.
<b>MUTH 486</b>	Music Therapy Internship (taken twice)	16 Cr.
<b>MUTH 493</b>	Music Therapy Research Seminar	1 Cr.

<sup>8</sup> Completion of level 203 is required.

<sup>9</sup> Piano (MUAP 003 or 103, 2 Cr.), Guitar (MUAP 003 or 103, 1 Cr.), and Voice, Piano, Guitar, or a World Music Instrument (2 Cr.); if principal instrument is piano, then Guitar (MUAP 003 or 102, 2 Cr.), Voice (MUAP 003 or 103, 1 Cr.), and Voice, Piano, Guitar, or a World Music Instrument (2 Cr.).

<b>Additional Required Courses</b>		<b>16 Cr.</b>
<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 111</b>	Laboratory in General Experimental Psychology	1 Cr.
<b>PSY 215</b>	Lifespan Development	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights and Justice	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.

## Music Therapy Equivalency Post-Baccalaureate Certificate (Minimum 35 Cr.)

<b>Music Therapy Core</b>		<b>35 Cr.</b>
<b>MUS 204</b>	Popular Music in America	3 Cr.
<b>MUS 232</b>	Percussion Methods for Music Therapists	0+2, 1 Cr.
<b>MUS 300</b>	Keyboard Proficiency I and II	0 Cr.
<b>MUS 304</b>	World Music	3 Cr.
<b>MUTH 120</b>	Introduction to Music Therapy	3 Cr.
<b>MUTH 175</b>	Performance Level Music Therapy Proficiency I	0 Cr.
<b>MUTH 240</b>	Music Therapy Foundations I: The Therapeutic Process	2 Cr.
<b>MUTH 241</b>	Music Therapy Foundations I Lab	0+2, 1 Cr.
<b>MUTH 250</b>	Music Therapy Foundations II: Special Populations	2 Cr.
<b>MUTH 251</b>	Music Therapy Foundations II Lab	0+2, 1 Cr.
<b>MUTH 275</b>	Performance Level Music Therapy Proficiency II	0 Cr.
<b>MUTH 330</b>	Clinical Musicianship in Music Therapy	2 Cr.
<b>MUTH 340</b>	Cultural Psychology of Music	3 Cr.
<b>MUTH 373</b>	Music Therapy Junior Seminar I	1 Cr.
<b>MUTH 374</b>	Music Therapy Junior Seminar II	1 Cr.
<b>MUTH 383</b>	Music Therapy Practicum I	1 Cr.
<b>MUTH 384</b>	Music Therapy Practicum II	1 Cr.
<b>MUTH 386</b>	Music Therapy Equivalency Internship	1+1, 2 Cr.
<b>MUTH 430</b>	Music Therapy Advocacy and Entrepreneurship	1 Cr.
<b>MUTH 476</b>	Music Therapy Senior Seminar (taken twice)	6 Cr.
<b>MUTH 493</b>	Music Therapy Research Seminar	1 Cr.

## Bachelor of Music

For the General Education Requirements for this degree, see page 45.

<b>Music Core</b>		<b>43 Cr.</b>
<b>MUS 109</b>	Musicianship I	2+1, 2 Cr.
<b>MUS 110</b>	Musicianship II	2+1, 2 Cr.
<b>MUS 209</b>	Musicianship III	2+1, 2 Cr.
<b>MUS 210</b>	Musicianship IV	2+1, 2 Cr.
<b>MUS 163</b>	Music Theory I	3 Cr.
<b>MUS 164</b>	Music Theory II	3 Cr.
<b>MUS 263</b>	Music Theory III	3 Cr.
<b>MUS 264</b>	Music Theory IV: Post-Tonal	3 Cr.
<b>MUS 201</b>	Development of Western Music	2 Cr.
<b>MUS 300</b>	Keyboard Proficiency I and II	0 Cr.
<b>MUS 318</b>	Music of the Baroque, Classical and Early Romantic Eras	3 Cr.
<b>MUS 319</b>	Music of the Late Romantic and Modern Eras	3 Cr.
<b>MUS 400</b>	Concert Attendance	0 Cr.
<b>MUS 401</b>	Early Music Seminar	2 Cr.
<b>MUS 213</b>	Basic Conducting	2 Cr.
<b>MUS 464</b>	Advanced Musical Analysis	3 Cr.
<b>Music Ensemble</b>		8 Cr.
<b>MUS 499</b>	Music Colloquium (eight semesters)	0 Cr.

**Other Requirements****Church Music or Composition**

	<b>Organ</b>	<b>Voice</b>	<b>Comp</b>
<b>MUS 107</b>	--	--	1
<b>MUS 312</b>	--	--	2
<b>MUS 313</b>	2	2	2
<b>MUS 337</b>	3	3	--
<b>MUS 404</b>	1+2	1+2	1
<b>MUS 454</b>	1	1	--
<b>Composition</b>	--	--	12
<b>Performance Study<sup>10</sup></b>	--	--	12
<b>Piano or Harpsichord</b>	4	--	--
<b>Organ</b>	20 <sup>11</sup>	8	--
<b>Voice</b>	4	20 <sup>11</sup>	--
<b>MUAP 175 (piano or organ)</b>	--	--	0
<b>MUAP 275 (principal instrument)</b>	--	--	0
<b>MUAP 475 (principal instrument)</b>	0	0	--
<b>Total Credits</b>	39	39	30
<b>Elective Credits</b>	4-9	4-9	10-15
<b>Total Required</b>	<b>132</b>	<b>132</b>	<b>128</b>

**Performance**

	<b>Organ</b>	<b>Piano</b>	<b>Voice</b>	<b>Instrument</b>
<b>MUEN 358</b>	--	2	--	2
<b>MUS 313</b>	--	--	2	2
<b>MUS 220-223</b>	--	--	3	--
<b>MUS 404</b>	1+2	1+2	1+2	1+2
<b>MUS 423</b>	3	3	--	3
<b>MUS 454</b>	--	--	1	--
<b>Piano</b>	4	--	4	--
<b>Principal Instrument</b>	20 <sup>11</sup>	20 <sup>11</sup>	20 <sup>12</sup>	20 <sup>11</sup>
<b>MUAP 475</b>	0	0	0	0
<b>Total</b>	30	28	33	30
<b>Elective Credits</b>	9-14	11-16	6-11	9-14
<b>Total Required</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>

**Music Minor (Minimum 18 Cr.)**

<b>MUS 109</b>	Musicianship I	2+1, 2 Cr.
<b>MUS 163</b>	Music Theory I	3 Cr.
<b>MUS 164</b>	Music Theory II	3 Cr.
<b>MUS 201</b>	Development of Western Music	2 Cr.
<b>MUS 400</b>	Concert Attendance	0 Cr.
<b>Four credits of studio instruction</b>		4 Cr.
<b>MUAP 175</b>	Performance Level Proficiency I	0 Cr.
<b>Four credits of ensemble music instruction from the following options:</b>		4 Cr.
<b>MUEN 350</b>	Choirs	
<b>MUEN 352</b>	Bands	
<b>MUEN 354</b>	Orchestra	

**Note: Minors must meet all additional requirements set for them by this department as outlined in the Department Handbook for Music Students (see page 165).**

<sup>10</sup> Performance study requires completion of level 203 in a primary performing area and completion of level 103 in piano or organ if primary performing area is not one of these. Up to 5 credits of performance study may be fulfilled with instructional methods courses (at 1 credit).

<sup>11</sup> Completion of MUAP 453 is required.

<sup>12</sup> Completion of MUAP 453 is required; total may include MUS 239.

## Music History and Culture Minor (Minimum 15 Cr.)

<b>MUS 101</b>	Introduction to Music	3 Cr.
<b>MUS 204</b>	Popular Music in America	3 Cr.
<b>MUS 304</b>	World Music	3 Cr.
<b>MUS 350</b>	Music and Meaning	3 Cr.
<b>Three credits from the following options:</b>		
<b>MUS 107</b>	Introduction to Electronic Music	1 Cr.
<b>MUS 190</b>	Topics in Music	1-3 Cr.
<b>MUS 285</b>	Introduction to the Music Industry	3 Cr.
<b>MUS 337</b>	Studies in Liturgical Theology and Practice	3 Cr.
<b>MUS 390</b>	Topics in Music	1-3 Cr.
<b>MUEN 350</b>	Choirs	1-3 Cr.
<b>MUEN 352</b>	Bands	1-3 Cr.
<b>MUEN 354</b>	Orchestra	1-3 Cr.
<b>MUTH 120</b>	Introduction to Music Therapy	3 Cr.

## Theory, History, and Methods Courses

<b>MUS 101</b>	<b>Introduction to Music</b>	3 Cr.
A study of the basic forms and styles of musical art in Western civilization and in non-Western cultures. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>MUS 102</b>	<b>Fundamentals of Music</b>	1 Cr.
	A course for students who plan to take a music theory sequence. Topics include fundamentals of note-reading, rhythmic notation, scale and melody, and intervals. This course is offered for S/U grade only and may not be used to fulfill the General Education Requirement in the College of Arts and Sciences or be counted toward a major or minor in music. Available only for students identified through the Music Theory Placement Exam.	
<b>MUS 107</b>	<b>Introduction to Electronic Music</b>	1 Cr.
	A hands-on entry-level course designed to empower students to use sound as a means of creative expression and to compose and produce their own electronic music in any genre. Students will study repertoire and techniques of experimental and popular electronic musics and gain skills in recording, editing, mixing, sequencing, and digital signal processing in a digital audio workstation. No previous musical experience expected.	
<b>MUS 109</b>	<b>Musicianship I</b>	2+1, 2 Cr.
	A practical course in which basic musicianship is developed through sight singing, dictation, and guided listening. An introduction to non-Western music is included. Prerequisite or Corequisite: MUS 163.	
<b>MUS 110</b>	<b>Musicianship II</b>	2+1, 2 Cr.
	A practical course in which basic musicianship is developed through sight-singing, dictation, and guided listening. Prerequisite: Grade of C- or higher in MUS 109 and MUS 163.	
<b>MUS 163</b>	<b>Music Theory I</b>	3 Cr.
	A study of basic concepts in diatonic tonal harmony and melody through analysis, part writing, and composition. Topics include fundamentals of tonal music, an introduction to species counterpoint, elementary voice leading and harmonic analysis, diatonic harmonic function, and the phrase. Prerequisite: concurrent enrollment in MUS 102 or placement into MUS 163 as determined by the Music Theory placement component of the Music Diagnostic Exam.	
<b>MUS 164</b>	<b>Music Theory II</b>	3 Cr.
	A continuation of MUS 163. Topics include secondary chords, applied chords, tonicization, and modulation. The study of small formal units/forms such as period and sentence structure, binary forms, and variations is integrated with the study of harmony. Emphasis is on analysis, part-writing, and composition. Prerequisite: Grade of C- or higher in MUS 163.	
<b>MUS 190</b>	<b>Topics in Music</b>	1-3 Cr.
	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. Fulfils the Humanities: Fine Arts General Education requirement.	
<b>MUS 201</b>	<b>Development of Western Music</b>	2 Cr.
	An overview of the stylistic trends in Western art music from the Middle Ages to the contemporary era. Prerequisite: MUS 163.	

<b>MUS 204</b>	<b>Popular Music in America</b>	3 Cr.
	A survey and analysis of popular music genres in the United States including jazz, hip-hop, gospel, R&B, rock, country, folk, reggae, heavy metal and others. Through lecture, discussion, music listening, and hands-on musical experiences, the course will focus on the origins, history, musical qualities, and social, political, economic, and cultural context of each genre. This includes an investigation of music anthems in various groups and historical periods such as in LGBTQ+ communities and the civil rights movement. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education requirements. Recommended prerequisite: MUS 163.	
<b>MUS 209</b>	<b>Musicianship III</b>	2+1, 2 Cr.
	An intermediate course in ear-training, sight-singing, and guided listening. Prerequisite: Grade of C- or higher in MUS 110 and MUS 164.	
<b>MUS 210</b>	<b>Musicianship IV</b>	2+1, 2 Cr.
	An advanced course in ear-training, sight-singing, and guided listening. Prerequisite: Grade of C- or higher in MUS 209 and MUS 263.	
<b>MUS 213</b>	<b>Basic Conducting</b>	2 Cr.
	An introduction to conducting including a study of score reading, beat patterns, acoustics, and interpretive principles. Prerequisite: MUS 164 or consent of the instructor.	
<b>MUS 220</b>	<b>English Diction for Singers</b>	1 Cr.
	Using the International Phonetic Alphabet as a guide, students acquire the skills to read, hear, transcribe, and sing English lyric texts with proper clarity, inflection, and understanding.	
<b>MUS 221</b>	<b>Italian Diction for Singers</b>	1 Cr.
	Using the International Phonetic Alphabet as a guide, students acquire the skills to read, hear, transcribe, and sing Italian lyric texts with proper clarity, inflection, and understanding.	
<b>MUS 222</b>	<b>German Diction for Singers</b>	1 Cr.
	Using the International Phonetic Alphabet as a guide, students acquire the skills to read, hear, transcribe, and sing German lyric texts with proper clarity, inflection, and understanding. Prerequisite: MUS 220 or MUS 221.	
<b>MUS 223</b>	<b>French Diction for Singers</b>	1 Cr.
	Using the International Phonetic Alphabet as a guide, students acquire the skills to read, hear, transcribe, and sing French lyric texts with proper clarity, inflection, and understanding. Prerequisite: MUS 220 or MUS 221.	
<b>MUS 230</b>	<b>Wind/Percussion Methods</b>	3 Cr.
	Brass, woodwind, and percussion instruments are studied for the purpose of giving the student a fundamental playing and teaching competence in these instruments.	
<b>MUS 231</b>	<b>Stringed Instructional Methods</b>	0+2, 1 Cr.
	Violin, viola, violoncello, and contrabass are studied for the purpose of giving the student a fundamental playing and teaching knowledge of the instruments.	
<b>MUS 232</b>	<b>Percussion Methods for Music Therapists</b>	0+2, 1 Cr.
	In this course, music therapy students will focus on developing functional skills and basic competence on various percussion instruments, as well as gain an understanding of their socio-cultural origins, and learn to facilitate rhythm-based, musical experiences. Prerequisite: MUTH 120.	
<b>MUS 236</b>	<b>Guitar Instructional Methods</b>	0+2, 1 Cr.
	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 and music therapy.	
<b>MUS 239</b>	<b>Voice Instructional Methods</b>	0+2, 1 Cr.
	This course is designed to give the student a fundamental technical and teaching knowledge of the voice as an instrument, as well as the use of voice in music education and music therapy.	
<b>MUS 263</b>	<b>Music Theory III</b>	3 Cr.
	A continuation of MUS 164 with further exploration of chromatic harmony and musical forms. Topics include modulation, chromatic harmonies, borrowed chords, music-text relationships in art song, binary, ternary, rondo, and sonata forms, and 18th-century contrapuntal forms such as canon and fugue. Emphasis is on analysis, writing about music, and application of analysis to performance. Prerequisite: Grade of C- or higher in MUS 164.	

<b>MUS 264</b>	<b>Music Theory IV: Post-Tonal</b>	3 Cr.
	An analytical and creative study of seminal works of Western art music of the 20th century. The works studied represent a wide variety of techniques and aesthetics including impressionism, free atonality, serialism, constructed modes, algorithmic music, micropolyphony and sound mass, minimalism, indeterminacy, and spectralism. Prerequisite: Grade of C- or higher in MUS 263.	
<b>MUS 285</b>	<b>Introduction to the Music Industry</b>	3 Cr.
	An overview of the history, trends, and scope of the music industry as it relates to career opportunities, including retailing, publishing, manufacturing, performing and recording, and managing musical enterprises.	
<b>MUS 300</b>	<b>Keyboard Proficiency</b>	0 Cr.
	Students in the music major or minor register for MUS 300 as an indicator of their completion of the degree requirements for keyboard proficiency. Procedural information may be found in the Department Handbook for Students of Music which is located online ( <a href="http://valpo.edu/music">valpo.edu/music</a> ) and available on request from the Department of Music Office. Consent of the department chair required. S/U grade.	
<b>MUS 304</b>	<b>World Music</b>	3 Cr.
	A survey and analysis of music from major regions of the world, covering folk, tribal, classical, traditional, fusion, and popular styles. Through listening, videos, discussion, live music, and written assignments, this course will focus on the musical elements, instrumentation, and forms unique to each region. In addition, social, political, historical, and cultural context of the music will be addressed, as well as the connection between music and the communication styles, worldviews, values, and behaviors of specific socio-cultural groups. May be used to fulfill the Cultural Diversity component of the General Education Requirements. Recommended prerequisite: MUS 163.	
<b>MUS 312</b>	<b>Scoring and Arranging</b>	2 Cr.
	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.	
<b>MUS 313</b>	<b>Intermediate Conducting</b>	2 Cr.
	A continuation of MUS 213. Includes rehearsal techniques, specific choral and instrumental conducting problems, and ensemble conducting experience. Prerequisite: MUS 213.	
<b>MUS 318</b>	<b>Music of the Baroque, Classical, and Early Romantic Eras</b>	3 Cr.
	The development of musical thought and literature from 1700 to 1880. A Writing in the Discipline course. Fulfills the Humanities: Fine and Performing Arts General Education requirement. Prerequisite: Grade of C- or higher in MUS 201.	
<b>MUS 319</b>	<b>Music of the Late Romantic and Modern Eras</b>	3 Cr.
	A study of music and musical thought from 1880 to the present. A Writing in the Discipline course. Fulfills the Humanities: Fine and Performing Arts General Education requirement. Prerequisite: Grade of C- or higher in MUS 318.	
<b>MUS 337</b>	<b>Studies in Liturgical Theology and Practice</b>	3 Cr.
	(Also offered as THEO 337.) An intensive academic study of the history and practices of music and liturgy in both the Eastern and Western Christian traditions, with an emphasis on the Lutheran heritage. Study includes both primary liturgical theology (participation in a variety of liturgical expressions), and secondary liturgical theory (reflection on liturgical forms and structure). Topics may include theologies and practices of music, history of hymnody, music in worship, ecclesiastical art and architecture, and ritual practices. Prerequisite: THEO 200.	
<b>MUS 350</b>	<b>Music and Meaning</b>	3 Cr.
	A seminar which explores the modes in which students listen to music and the manner in which they understand and derive meaning from it. Students will evaluate music from a variety of perspectives, including literary, social, political, neuroscientific, and philosophical. Students will be expected to critically respond to their own musical tastes and listening habits, to examine modern assumptions about the value and place of music, and to consider the ways in which music, especially music devoid of text, might have meaningful significance. May be used to fulfill the Writing Intensive and Humanities: Fine and Performing Arts components of the General Education requirements. Sophomore standing required.	
<b>MUS 381</b>	<b>Cooperative Education in Music</b>	0.5-3 Cr.
	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.	

<b>MUS 389</b>	<b>School Music I</b>	3 Cr.
	A course designed to deal with materials, procedures, organization, administration, and musical growth and development of children in elementary and junior high/middle schools. Prerequisite: MUS 164.	
<b>MUS 390</b>	<b>Topics in Music</b>	1-3 Cr.
	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. Some sections of this course may be used to fulfill the Writing Intensive General Education Requirement. Prerequisite: sophomore standing.	
<b>MUS 400</b>	<b>Concert Attendance</b>	0 Cr.
	Students in the music major or minor register for MUS 400 as an indicator of their completion of the degree requirements for concert attendance. Procedural information may be found in the Department Handbook for Students of Music which is located online ( <a href="http://valpo.edu/music">valpo.edu/music</a> ) and available on request from the Department of Music Office. Consent of the department chair required. S/U grade.	
<b>MUS 401</b>	<b>Early Music Seminar</b>	2 Cr.
	A history of Western music from antiquity to the early Baroque era; emphasis is placed on historical research and the study of notation and performance practice. Prerequisite: MUS 318.	
<b>MUS 404</b>	<b>Recital</b>	1-2 Cr.
	Preparation and performance of a program of music as specified in the Handbook for Music Students.	
<b>MUS 405</b>	<b>Arts and Entertainment Administration</b>	3 Cr.
	A general survey of the field covering all basic elements of arts and entertainment administration, including a brief overview of investigational methodologies and the functions of management within arts organizations. Professional writing assignments to prepare students entering the field of arts and arts administration. A Writing in the Discipline course. Prerequisites: Junior standing and a Writing Intensive Course.	
<b>MUS 413</b>	<b>Advanced Conducting, Choral/Instrumental</b>	2 Cr.
	A study of instrumental and choral scores, conducting techniques, and materials. Prerequisite: MUS 313 or the equivalent.	
<b>MUS 423</b>	<b>Pro-Seminar in the Pedagogy of Music</b>	3 Cr.
	A consideration of the problems of teaching basic musicianship at all levels. Special attention is given to the adaptation of basic principles to the media of most interest to the members of the pro-seminar. Prerequisite: music major or music minor with at least junior standing or consent of the chair.	
<b>MUS 454</b>	<b>Teaching of Performance Music</b>	1 Cr.
	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 MUAP 453.	
<b>MUS 464</b>	<b>Advanced Musical Analysis</b>	3 Cr.
	An introduction to a variety of advanced analytical techniques, including Schenkerian analysis. Prerequisite: MUS 264.	
<b>MUS 486</b>	<b>Internship</b>	1-3 Cr.
	Direct, supervised experience in the music industry, church music, or other sectors in the field of music. Prerequisite: approval of the chair of the department.	
<b>MUS 489</b>	<b>School Music II</b>	3 Cr.
	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. Prerequisite: MUS 389.	
<b>MUS 495</b>	<b>Independent Study in Music</b>	1-3 Cr.
	A course of study arranged by the student with the consent of and under the supervision of a faculty advisor. The study results in a written essay on a topic approved by the advisor. Prerequisites: MUS 264 or MUS 381 and approval of the chair of the department.	
<b>MUS 497</b>	<b>Honors Work in Music</b>	3 Cr.
	See Honors Work, page 56.	
<b>MUS 498</b>	<b>Honors Candidacy in Music</b>	3 Cr.
	See Honors Work, page 56.	

<b>MUS 499</b>	<b>Music Colloquium</b>	0 Cr.
	All music majors will register for this course each semester in residence as outlined in the Handbook for Music Students. S/U grade.	

## Music Therapy Courses

<b>MUTH 120</b>	<b>Introduction to Music Therapy</b>	3 Cr.
	An overview and history of the music therapy profession. This includes the ancient European, indigenous, and cultural roots of the profession as well as the major themes, theoretical approaches, and populations served in the United States. Case studies and hands-on music therapy experiences will help students gain an understanding about the neurological, psychological, aesthetic, and spiritual power of music to heal. Fulfills the Humanities: Fine Arts General Education requirement.	
<b>MUTH 175</b>	<b>Performance Level Music Therapy Proficiency I</b>	0 Cr.
	Students who are music therapy majors register for MUTH 175 as an indicator of fulfilling the competency requirements on voice, as well as either guitar or piano. This proficiency is a prerequisite for MUTH 383 and 384. Consent of the department chair required. S/U grade.	
<b>MUTH 240</b>	<b>Music Therapy Foundations I: The Therapeutic Process</b>	2 Cr.
	This course will cover basic tenets of the therapeutic process necessary for effective music therapy practice. This includes the therapeutic relationship, the stages of therapy, and how to develop a sense of therapeutic presence. In addition, an overview of the treatment planning process appropriate for the beginning stages of music therapy will be covered, including balancing medical terminology with humanistic and spiritual perspectives. Includes observations of music therapy sessions in professional settings in Northwest Indiana. Prerequisite: MUTH 120, MUS 236 or 239; Corequisite: MUTH 241.	
<b>MUTH 241</b>	<b>Music Therapy Foundations I Laboratory</b>	0+2, 1 Cr.
	To be taken concurrently with MUTH 240. Through various role play and music therapy experiential exercises, students will practice musical, clinical, self-reflective, and empathic skills necessary for the beginning music therapy process. Corequisite: MUTH 240.	
<b>MUTH 250</b>	<b>Music Therapy Foundations II: Special Populations</b>	2 Cr.
	Continuation of MUTH 240. A focus on foundational music therapy methods and their application to common clinical and exceptional populations, socio-cultural groups and various communities in need. Includes observations of music therapy sessions in professional settings in Northwest Indiana. Prerequisites: MUS 236, MUS 239, MUTH 240, and MUTH 241; Corequisite: MUTH 251.	
<b>MUTH 251</b>	<b>Music Therapy Foundations II Laboratory</b>	0+2, 1 Cr.
	Through various role play and music therapy experiential exercises, students will utilize musical, clinical, self-reflective and empathic skills, and practice foundational methods applicable for specific clinical populations. Corequisite: MUTH 250.	
<b>MUTH 275</b>	<b>Performance Level Music Therapy Proficiency II</b>	0 Cr.
	Students who are music therapy majors register for MUTH 275 as an indicator of fulfilling the competency requirements on voice and both guitar and piano. This is a prerequisite for Internship I and II. Consent of the department chair required. S/U grade.	
<b>MUTH 330</b>	<b>Clinical Musicianship in Music Therapy</b>	2 Cr.
	This course will focus on how to use musical elements, forms, idioms and techniques to meet clients in the moment and address therapeutic goals. Uses hands-on exercises, music and imagery, movement activities and skill building on primary instruments as well as guitar, piano, and instruments from various cultures. Prerequisites: MUTH 175, MUS 236, MUTH 250, MUTH 251, and MUS 300.	
<b>MUTH 340</b>	<b>Cultural Psychology of Music</b>	3 Cr.
	An analysis and investigation into how music is perceived by music therapy clients from various socio-cultural groups and settings. Topics covered include the function of music in cultural and social contexts, the cultural interpretation and analysis of musical syntax and semantics, and absolute and referential understandings of music. Through discussions and intensive writing, students will learn about scholarly writing in a music therapy context. A Writing in the Discipline course. Prerequisites: MUS 210, MUS 264, MUS 304 (may be taken concurrently), and a Writing Intensive Course.	

<b>MUTH 373</b>	<b>Music Therapy Junior Seminar I</b>	1 Cr.
	Taken concurrently with MUTH 383. A seminar for students to integrate theory, practice, and skills during initial field experiences in music therapy. Students will receive academic supervision, engage in peer supervision, discussion, and music-based experiential activities for self-reflection, professional growth and learning. Prerequisites: MUTH 175, MUTH 250, MUTH 251, and MUS 300; Corequisite: MUTH 383.	
<b>MUTH 374</b>	<b>Music Therapy Junior Seminar II</b>	1 Cr.
	Taken concurrently with MUTH 384. A seminar for students to integrate theory, practice, and skills during their second field experience in music therapy. Students will focus on applying knowledge and experience gained in MUTH 373 and 383 to a different clinical population. Students will receive academic supervision, engage in peer supervision, music and discussion-based experiential activities for self-reflection, professional growth and learning. Prerequisites: MUTH 373 and MUTH 383; Corequisite: MUTH 384.	
<b>MUTH 383</b>	<b>Music Therapy Practicum I</b>	1 Cr.
	Provides students with beginning field experiences in music therapy. Students will observe and assist facilitation of music therapy in collaboration with a board-certified music therapist in off-campus settings in Northwest Indiana and Chicago. Prerequisites: MUTH 175, MUTH 250, MUTH 251, MUS 300, and consent of instructor; Corequisite: MUTH 373.	
<b>MUTH 384</b>	<b>Music Therapy Practicum II</b>	1 Cr.
	Provides students with a second field experience in music therapy with a different clinical population than in MUTH 383. Students will observe, assist, and facilitate music therapy sessions in collaboration with a board-certified music therapist in off-campus settings in Northwest Indiana or Chicago. Prerequisites: MUTH 373, MUTH 383 and consent of instructor; Corequisite: MUTH 374.	
<b>MUTH 386</b>	<b>Music Therapy Equivalency Internship</b>	1 Cr.
	Provides students with a pre-professional field experience in music therapy. Students will conduct music therapy sessions and collaborate with other professionals under the supervision of a board-certified music therapist in an off-campus setting in Northwest Indiana or Chicago, in order to complete hours of internship required by the American Music Therapy Association. May be repeated for credit. Prerequisites: MUTH 275, MUS 304, MUTH 340, MUTH 330, MUTH 374, MUTH 384, and consent of instructor; Corequisite: MUTH 476.	
<b>MUTH 390</b>	<b>Special Topics in Music Therapy</b>	3 Cr.
	Special topics in music therapy that may vary from semester to semester, including study abroad, advanced methods in music therapy, or other current topics of interest to students and faculty. Prerequisites: MUTH 120.	
<b>MUTH 430</b>	<b>Music Therapy Advocacy and Entrepreneurship</b>	1 Cr.
	Designed to prepare music therapy students for the professional world. This includes learning to write music therapy business plans, apply for grants, and prepare for the board certification exam. Students will also learn information about national music therapy professional networks and associations and legislative topics affecting music therapists. Prerequisites: MUTH 374 and 384.	
<b>MUTH 476</b>	<b>Music Therapy Senior Seminar</b>	3 Cr.
	Taken concurrently with MUTH 386 or 486. A seminar for students to integrate theory, practice, ethics and skills during their final field experience in music therapy. Students will receive academic supervision and engage in peer supervision, discussion and music-based experiential activities for self-reflection, professional growth, and learning. May be repeated for credit. Prerequisites: MUTH 275, MUS 304, MUTH 340, MUTH 330, MUTH 374, MUTH 384, and consent of instructor; Corequisite: MUTH 386 or 486.	
<b>MUTH 486</b>	<b>Music Therapy Internship</b>	8 Cr.
	Provides students with a pre-professional field experience in music therapy. Students will conduct music therapy sessions and collaborate with other professionals under the supervision of a board-certified music therapist in an off-campus setting in Northwest Indiana or Chicago, in order to complete hours of internship required by the American Music Therapy Association. May be repeated for credit. Prerequisites: MUTH 275, MUS 304, MUTH 340, MUTH 330, MUTH 374, MUTH 384, and consent of instructor; Corequisite: MUTH 476.	
<b>MUTH 493</b>	<b>Music Therapy Research Seminar</b>	1 Cr.
	An overview of basic methods and principles in music therapy research, including quantitative, qualitative, and arts-based approaches. The focus will be on evaluating the quality of existing research studies, as well as utilizing current research to support students' clinical practice in their internship and advocate for music therapy services. Students will complete and publicly present a written and oral project related to their clinical music therapy work. Prerequisites: MUTH 374 and 384.	

## 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 and/or ensemble which may be applied toward degree requirements. See page 51 for more information.

### A. Studio Instruction

See page 392 for appropriate fees.

A 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. A limited number of studio spaces are available for non-majors. All non-major studio enrollments are for 1 credit hour. 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.

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. Students with no, or minimal, prior study should register for MUAP 003.

Studio instruction is available in:

Voice	Flute
Piano and Jazz Piano	Oboe
Harp	Clarinet
Harpsichord	Bassoon
Organ	Saxophone
Organ Improvisation	French Horn
Violin	Trumpet
Viola	Trombone
Violoncello	Euphonium
Contrabass	Tuba
Classical Guitar	Percussion
Viola da gamba	Alexander Technique
Composition	

The Department of Music has six articulated levels of performance study, each of which is tied to technical and repertoire proficiencies. Advancement through studio levels is based on performance at juries each semester and through completion of repertoire and technical requirements established for each level. The repertoire for each performance medium stresses variety in styles and periods and is selected from the standard repertoire.

Titles of the individual course sections correspond to the area of study (e.g. MUAP 003 Bassoon).

<b>MUAP 003</b>		1 Cr.
	Beginning studio instruction. May be repeated for credit. Prerequisite: consent of the department chair.	
<b>MUAP 103</b>		1 Cr.
	Intermediate studio instruction. Standard level of entry for students who have studied on their instrument throughout high school; music minors are required to complete the repertoire requirements of this level. May be repeated for credit. Prerequisite: placement through departmental audition or successful completion of the jury requirements for MUAP 003, and consent of the department chair.	
<b>MUAP 175</b>	<b>Performance Level Proficiency I</b>	0 Cr.
	Students in the music major or minor register for MUAP 175 as an indicator of fulfilling the jury and performance requirements for MUAP 103. Consent of the department chair required. S/U grade.	
<b>MUAP 203</b>		1-2 Cr.
	Late intermediate studio instruction. Completion of this level is required for the Bachelor of Arts in Music. This is the expected entry level for incoming BM Performance and Church Music majors. May be repeated for credit. Prerequisite: placement through departmental audition or successful completion of the jury requirements for MUAP 103, and consent of the department chair.	

<b>MUAP 275</b>	<b>Performance Level Proficiency II</b>	0 Cr.
	Students in the music major or minor register for MUAP 275 as an indicator of fulfilling the jury and performance requirements for MUAP 203. Consent of the department chair required. S/U grade.	
<b>MUAP 303</b>		1-3 Cr.
	Early advanced studio instruction. Completion of this level is required for the Bachelor of Music Education. May be repeated for credit. Prerequisite: successful completion of the jury requirements for MUAP 203 and consent of the department chair.	
<b>MUAP 375</b>	<b>Performance Level Proficiency III</b>	0 Cr.
	Students in the music major or minor register for MUAP 375 as an indicator of fulfilling the jury and performance requirements for MUAP 303. Consent of the department chair required. S/U grade.	
<b>MUAP 403</b>		1-3 Cr.
	Advanced studio instruction. May be repeated for credit. Prerequisite: successful completion of the jury requirements for MUAP 303 and consent of the department chair.	
<b>MUAP 453</b>		1-3 Cr.
	Late advanced studio instruction. Completion of this level is required for BM Performance and Church Music majors. May be repeated for credit. Prerequisite: successful completion of the jury requirements for MUAP 403 and consent of the department chair.	
<b>MUAP 475</b>	<b>Performance Level Proficiency IV</b>	0 Cr.
	Students in the music major or minor register for MUAP 475 as an indicator of fulfilling the jury and performance requirements for MUAP 453. Consent of the department chair required. S/U grade.	

#### 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. The following are considered major ensembles: Valparaiso University Chorale, Kantorei, Concert Band, Jazz Ensemble, Symphony Orchestra, Luce Band, Men's Ensemble, and Women's Choir. All other ensembles listed here are considered minor ensembles. All ensemble courses are available for graduate credit at the 500 level. Enrollment at the 500 level is limited to students who have specialized training and background to participate in the ensemble in some capacity (such as assistant conductor, section leader, or project director) to be determined by the instructor of the ensemble and with the approval of the chair of the department.

<b>MUEN 350/550</b>	<b>Choirs</b> Valparaiso University Chorale, Kantorei, Men's Ensemble, and Women's Choir: admission by audition only.
<b>MUEN 352/552</b>	<b>Bands</b> Concert Band, Luce Band, Jazz Ensemble: admission by audition only. Also Community/University Band: audition not required.
<b>MUEN 354/554</b>	<b>Orchestra</b> University Symphony Orchestra: admission by audition only.
<b>MUEN 356/556</b>	<b>Music/Theatre Workshop</b> Admission by audition only.
<b>MUEN 357/557</b>	<b>Small Ensemble Music</b> Small specialized ensembles to study and perform an array of repertoires, including Horn Ensemble, Guitar Ensemble, and Jazz Combo. Open to students at a variety of skill levels. Some sections require audition or prior consultation with the instructor.
<b>MUEN 358/558</b>	<b>Chamber Music</b> Specialized ensembles, one to a part, for study and performance of standard chamber music repertoire (typically instrumental duos, trios, quartets, etc.) Admission and placement in sections by department screening only.

# Philosophy and Theology

Learn more about the Department of [Philosophy](#) and [Theology](#) at Valpo online.

**Professors Becker, Denysenko, L. Driver (chair), Holman, J. Moore, Pati, Preston; Associate Professor Geiman; Assistant Professors Abdelgawwad, Brobst-Renaud, Wong; Lecturer Jones.**

## Philosophy

Philosophy is the oldest academic discipline, and the one broadest in scope and application. Courses in philosophy examine the big, foundational questions that have animated great thinkers in both Western and non-Western civilizations, such as the following: What is the right way to live? How should society be structured? What is the relationship between human beings and the rest of the natural world? What is ultimately real, and what is its nature? How is knowledge about these, as well as more mundane matters, to be obtained?

The study of philosophy tends to develop and sharpen students' analytical and critical thinking skills, not only in connection with topics traditionally deemed 'philosophical,' but in all areas. That's why philosophy majors [tend to outperform](#) all other humanities majors, and in many cases even STEM majors, on tests such as the [GRE](#), [LSAT](#), and [GMAT](#). Philosophical training has proven to be a "[secret weapon](#)" for leaders in many other fields including business, law, government, the military, and ministry. Thus, philosophical coursework naturally accompanies and enhances study in virtually any other field. Philosophy can also help Christians and members of other faiths think critically about various issues relevant to their religious commitments.

Valparaiso University philosophy majors have gone on to top law schools and graduate programs in business, medicine, linguistics, and, of course, philosophy. But even for those students who do not plan to pursue graduate study, a degree in philosophy is a prudent choice. Because of their exceptional critical thinking and communication skills, the employment rate of recent philosophy graduates exceeds those of any other humanities majors, and is comparable with that of graduates in business management, computer science, education, and chemistry.

### Bachelor of Arts – Philosophy Major (Minimum 34 Cr.)

PHIL 145	Elementary Logical and Critical Thinking	3 Cr.
PHIL 275	Ancient and Medieval Philosophy	3 Cr.
PHIL 280	Modern Philosophy	3 Cr.
PHIL 401	Comprehensive Exam	1 Cr.
PHIL 475	Advanced History of Philosophy	3 Cr.
PHIL 493	Philosophy Seminar	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
PHIL 315	Philosophy of Mind and Language	3 Cr.
PHIL 330	Philosophy of Religion	3 Cr.
PHIL 335	Ethical Theory	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
PHIL 410	Theory of Knowledge	3 Cr.
PHIL 420	Metaphysics	3 Cr.
PHIL 425	Advanced Philosophical Topics	3 Cr.
<b>One additional Philosophy course at any level</b>		<b>3 Cr.</b>
<b>One additional 200-level Philosophy course</b>		<b>3 Cr.</b>
<b>Two additional upper-level (300- or 400-level) Philosophy courses</b>		<b>6 Cr.</b>

### Philosophy Minor (Minimum 18 Cr.)

PHIL 145	Elementary Logical and Critical Thinking	3 Cr.
PHIL 275	Ancient and Medieval Philosophy	3 Cr.
PHIL 280	Modern Philosophy	3 Cr.
<b>Two additional 100-level (or higher) Philosophy courses</b>		<b>6 Cr.</b>
<b>One 300- or 400-level Philosophy courses</b>		<b>3 Cr.</b>

**Ethics and Moral Philosophy Minor (Minimum 18 Cr.)**

<b>PHIL 120</b>	Culture, Identity, and Values	3 Cr.
<b>PHIL 125</b>	The Good Life	3 Cr.
<b>PHIL 275</b>	Ancient and Medieval Philosophy	3 Cr.
<b>PHIL 280</b>	Modern Philosophy	3 Cr.
<b>PHIL 343</b>	Principles of Peace and Social Justice	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
<b>PHIL 335</b>	Ethical Theory	3 Cr.
<b>One 400-level ethics-themed* Philosophy course</b>		3 Cr.

**History of Western Philosophy Minor (Minimum 18 Cr.)**

<b>PHIL 145</b>	Elementary Logical and Critical Thinking	3 Cr.
<b>PHIL 275</b>	Ancient and Medieval Philosophy	3 Cr.
<b>PHIL 280</b>	Modern Philosophy	3 Cr.
<b>PHIL 285</b>	History of 20th Century Anglo-American Philosophy	3 Cr.
<b>PHIL 286</b>	History of 20th Century European Philosophy	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
<b>PHIL 475</b>	Advanced History of Philosophy	3 Cr.
<b>One 400-level history-themed* Philosophy course</b>		3 Cr.

**Philosophy of Religion Minor (Minimum 18 Cr.)**

<b>PHIL 130</b>	Death and Immortality	3 Cr.
<b>PHIL 145</b>	Elementary Logical and Critical Thinking	3 Cr.
<b>PHIL 275</b>	Ancient and Medieval Philosophy	3 Cr.
<b>PHIL 280</b>	Modern Philosophy	3 Cr.
<b>PHIL 330</b>	Philosophy of Religion	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
<b>PHIL 410</b>	Theory of Knowledge	3 Cr.
<b>PHIL 420</b>	Metaphysics	3 Cr.

**History and Philosophy of Science Minor (Minimum 18 Cr.)**

<b>PHIL 145</b>	Elementary Logical and Critical Thinking	3 Cr.
<b>PHIL 205</b>	Science and the Interpretation of Reality	3 Cr.
<b>PHIL 280</b>	Modern Philosophy	3 Cr.
<b>PHIL 410</b>	Theory of Knowledge	3 Cr.
<b>Two courses from the following options:</b>		<b>6 Cr.</b>
<b>PHIL 275</b>	Ancient and Medieval Philosophy	3 Cr.
<b>PHIL 285</b>	History of 20 <sup>th</sup> Century Anglo-American Philosophy	3 Cr.
<b>PHIL 315</b>	Philosophy of Mind and Language	3 Cr.
<b>PHIL 345</b>	Formal Logic and Critical Thinking	3 Cr.

\*Students should consult with their Philosophy advisor or the department chair to determine which courses count as “ethics-themed” and “history-themed.”

**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 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 except PHIL 145 and PHIL 345 will satisfy the Humanities: Philosophy General Education Requirement, but students will usually be best served by choosing a course at the 100 or 200 level. PHIL 145 will satisfy the Quantitative Analysis General Education Requirement. PHIL 330 and PHIL 341 satisfy the upper level Theology requirement. PHIL 120 and PHIL 220 may be used to fulfill the Cultural Diversity course requirement.

## Philosophy Courses

<b>PHIL 115</b>	<b>Experience and Existence</b>	3 Cr.
	A study of the fundamental philosophical questions that arise as we attempt to understand the world around us and our experience of it. Topics covered may include the nature of time, space, and matter, the existence of God and of human souls, the nature of the human person and of consciousness, the reliability of sense-perception and the possibility of knowledge, the compatibility of faith, reason, and science, and so on.	
<b>PHIL 120</b>	<b>Culture, Identity, and Values</b>	3 Cr.
	A study of the basic assumptions and arguments that underlie and support treating identity and culture as distinct categories and moral goods. Topics may relate to the nature of personal identity and collective belonging, the implications they have for the idea of a universal human nature, and the limits of society's obligation to protect personal expression. May be used to fulfill the Cultural Diversity or Humanities: Philosophy General Education Requirement.	
<b>PHIL 125</b>	<b>The Good Life</b>	3 Cr.
	An introduction to philosophical thought about the shape and substance of a good human life. What might such a life look like? Would it be a life of pleasure or of moral rectitude? A life of self-effacing service to others, or of self-fulfillment? Possibly a life of religious devotion and union with the Divine? Is there one model that stands out as uniquely correct, or are there many equally good models—and what makes a model good in the first place? These and other similar questions may be covered.	
<b>PHIL 130</b>	<b>Death and Immortality</b>	3 Cr.
	A philosophical inquiry into questions surrounding death and the possibility of life after death. What is death, and why does it exist? Is it good, bad, or neutral? Is the idea of an afterlife plausible? Are some models of the afterlife, such as resurrection or reincarnation, more plausible than others? Do "near-death experiences" give us evidence for the reality of an afterlife? These and similar questions may be covered.	
<b>PHIL 145</b>	<b>Elementary Logical and Critical Thinking</b>	3 Cr.
	An introduction to 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. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. May not be used to fulfill the Humanities component of the General Education Requirements. Prerequisite or Corequisite: MATH 111 or placement higher than MATH 111 in the math placement process.	
<b>PHIL 190</b>	<b>Introductory Topics in Philosophy</b>	3 Cr.
	Introductory-level study of a focused philosophical theme or issue. This course may be repeated for credit if the topics are different. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 205</b>	<b>Science and the Interpretation of Reality</b>	3 Cr.
	A study of the philosophical questions surrounding science as a field of knowledge and as a cultural institution. What is science, and how do we distinguish between science and non-science? Does science yield knowledge of reality, or does it merely generate plausible models whose significance comes from their practical applications (technology)? Is scientific knowledge superior to non-scientific knowledge, and does science therefore deserve the place of authority that it has in Western (and, increasingly, global) culture? These and related issues may be covered. Prerequisite: sophomore standing or consent of the instructor.	
<b>PHIL 220</b>	<b>Asian Philosophy</b>	3 Cr.
	An introduction to major philosophical themes in Asian thought. Emphasis is placed upon the analysis of primary texts. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Prerequisite: sophomore standing or consent of the instructor.	
<b>PHIL 230</b>	<b>Environmental Philosophy and Ethics</b>	3 Cr.
	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. Prerequisite: sophomore standing or consent of the instructor.	
<b>PHIL 275</b>	<b>Ancient and Medieval Philosophy</b>	3 Cr.
	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. Prerequisite: sophomore standing or consent of the instructor.	

<b>PHIL 280</b>	<b>Modern Philosophy</b>	3 Cr.
	An introduction to major thinkers and themes of seventeenth and eighteenth century Europe. The thinkers include some selection of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, and possibly others. Topics may include the nature of mind and body, human freedom, the nature of reality, and the extent and limitations of knowledge. Primary documents will be read throughout. Prerequisite: sophomore standing or consent of the instructor. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 285</b>	<b>History of 20th Century Anglo-American Philosophy</b>	3 Cr.
	A survey of the major thinkers and themes of British and American philosophy in the 20th century. The emphasis is on Analytic Philosophy and Pragmatism, but other topics may be covered as well. Prerequisite: sophomore standing or consent of the instructor. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 286</b>	<b>History of 20th Century European Philosophy</b>	3 Cr.
	A survey of the major thinkers and themes of European philosophy in the 20th century. The emphasis is on Phenomenology and Post-Modernism, but other topics may be covered as well. Prerequisite: sophomore standing or consent of the instructor. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 290</b>	<b>Philosophical Topics</b>	3 Cr.
	A study of a focused philosophical theme or issue. This course may be repeated for credit if the topics are different. Prerequisite: sophomore standing or consent of the instructor.	
<b>PHIL 315</b>	<b>Philosophy of Mind and Language</b>	3 Cr.
	This course examines the nature of the mental and the nature of language. It covers topics related to consciousness and thought, including how words get their meaning, the existence of the soul, the relationship between the mind and the body, and the philosophical significance of recent developments in psychology, neuroscience, and artificial intelligence. Prerequisite: At least one of PHIL 130, PHIL 145, PSY 375, or BIO 370, or consent of the instructor. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 330</b>	<b>Philosophy of Religion</b>	3 Cr.
	(Also offered as THEO 335.) A philosophical analysis of some of the beliefs, concepts, and problems involved in traditional theistic belief and its critics, exploring how these debates impact the church and its beliefs. Problems include arguments for the existence of God, religious experience, the problem of evil, and faith and reason. Prerequisite: one course in philosophy or THEO 200.	
<b>PHIL 335</b>	<b>Ethical Theory</b>	3 Cr.
	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, and the place of reason and convention in moral discourse and practice. Prerequisite: any two courses in philosophy or consent of the instructor.	
<b>PHIL 341</b>	<b>Biomedical Ethics</b>	3 Cr.
	(May also be offered as THEO 341.) A study of a range of moral issues encountered in both clinical medicine and human experimentation. Prerequisite: one course in philosophy or THEO 200.	
<b>PHIL 343</b>	<b>Principles of Peace and Social Justice</b>	3 Cr.
	(Also offered as POLS 343.) This course focuses on the means of establishing justice, achieving peace, and resolving conflicts nonviolently. It examines the causes (economic, political, sociological, religious and/or psychological), nature, and processes of conflict and the concepts of social justice and responsibility.	
<b>PHIL 345</b>	<b>Formal Logic and Critical Thinking</b>	3 Cr.
	A continuation of PHIL 145. Topics include predicate and modal logic, semantics, pragmatics, and other related areas of the philosophy of language. May not be used to fulfill the Humanities component of the General Education Requirements. Prerequisite: PHIL 145.	
<b>PHIL 386</b>	<b>Internship in Philosophy</b>	1-3 Cr.
	Students gain experience working for organizations or agencies in which writing proficiency and critical thinking skills are essential. A written report is required. May not be used for the major or minor. S/U grade only. Prerequisite: approval of the chair of the department.	
<b>PHIL 401</b>	<b>Comprehensive Exam</b>	1 Cr.
	The comprehensive exam is required of all philosophy majors in the fall of their senior year. The exam itself consists of a logic exam equivalent in difficulty to a final exam for PHIL 245, an essay in the history of philosophy, and an essay in philosophical topics (see the philosophy student handbook for more information). In addition to covering the administration of this exam, this course will be used to arrange tutorials to prepare students for the various sections of the exam. Prerequisites: philosophy major with senior standing.	

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<b>PHIL 410</b>	<b>Theory of Knowledge</b>	3 Cr.
	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. Prerequisite: any two courses in philosophy or consent of the instructor.	
<b>PHIL 420</b>	<b>Metaphysics</b>	3 Cr.
	An examination of traditional and contemporary metaphysical topics, such as time, substance, agency, freedom, appearance and reality, persons, and the mind-body problem. Prerequisite: PHIL 145, PHIL 245, MATH 131, or consent of the instructor. Fulfills Humanities: Philosophy General Education requirement.	
<b>PHIL 425</b>	<b>Advanced Philosophical Topics</b>	3 Cr.
	An examination of the work on 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. Prerequisite: PHIL 275 and PHIL 280 or consent of the instructor.	
<b>PHIL 475</b>	<b>Advanced History of Philosophy</b>	3 Cr.
	An advanced study of the major philosophical themes of some period, for example, nineteenth century German philosophy, eighteenth century Scottish philosophy, or medieval philosophy. Prerequisite: PHIL 275 and PHIL 280 or consent of the instructor.	
<b>PHIL 493</b>	<b>Philosophy Seminar</b>	3 Cr.
	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. Prerequisite: PHIL 275 and PHIL 280 or consent of the instructor.	
<b>PHIL 495</b>	<b>Independent Projects</b>	1-3 Cr.
	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.	
<b>PHIL 497</b>	<b>Honors Work in Philosophy</b>	3 Cr.
	See Honors Work, page 56.	
<b>PHIL 498</b>	<b>Honors Candidacy in Philosophy</b>	3 Cr.
	See Honors Work, page 56.	

## Theology

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 requires that students complete two courses: THEO 200 (or CC 215 for Christ College students) and any Theology course at the 300-level. THEO 200 is a prerequisite for all upper-level courses (except for transfer students and students who receive a waiver from the chair of the Theology Department). Students whose academic programs require only one course in Theology must take THEO 200.

### Bachelor of Arts – Theology Major (Minimum 34 Cr.)

<b>Foundation</b>	<b>3 Cr.</b>
<b>One course from the following options:</b>	
THEO 200      The Christian Tradition	3 Cr.
CC 215      The Christian Tradition	3 Cr.
<b>Biblical Studies</b>	
One Theology course numbered 310-319	3 Cr.
<b>Foundations of Christianity</b>	
One Theology course numbered 320-329	3 Cr.
<b>Theology and Ethics</b>	
One Theology course numbered 330-349	3 Cr.
<b>Religions of the World</b>	
One Theology course numbered 360-369	3 Cr.
<b>Research and Writing in the Discipline</b>	
THEO 393      Theories and Methods in Theological and Religious Studies	3 Cr.
THEO 492      Research and Writing in Theology	1 Cr.
<b>Seminar</b>	
THEO 493      Theology Seminar	3 Cr.
<b>Upper-Level Theology</b>	
Four additional 300-level (or higher) Theology courses (except S/U courses)	12 Cr.

### Theology Minor (Minimum 18 Cr.)

<b>One course from the following options:</b>	
THEO 200      The Christian Tradition	3 Cr.
CC 215      The Christian Tradition (for Christ College students)	3 Cr.
<b>Research and Writing in the Discipline</b>	
THEO 393      Theories and Methods in Theological and Religious Studies	3 Cr.
Twelve additional Theology credits, chosen by the student in consultation with the chair of the department or the chair's designated representative	12 Cr.

### 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 Diaconal Ministry are structured by the department in cooperation with the Lutheran Deaconess Association (see page 55).
2. Students preparing for seminary should consult "Preparation for Seminary" on page 53. Further information is available from the chair of the Department of Theology and on the department's Web site: [valpo.edu/theology](http://valpo.edu/theology).
3. Students interested in service as directors of Christian Education, Youth Ministers, or in other ministries that may be held with a bachelor's degree, should take the Theology and Ministry major (see page 190).

**Approval 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 advisor at the beginning of each semester.

<b>THEO 200</b>	<b>The Christian Tradition</b>	3 Cr.
A study of the origins and development of Christian thought as it forms communities and engages the world. Prerequisite for all upper-level courses in Theology (except for transfer students and students who receive a waiver from the chair of the Theology Department). Sophomore standing recommended; at least one semester of college required. Some sections may be used to fulfill the Writing Intensive Course (WIC) General Education Requirement.		

**Biblical Studies Courses**

<b>THEO 311/511</b>	<b>Understanding the Old Testament</b>	3 Cr.
A study of the history and theology of the Old Testament with attention to its role in Christian faith.		
<b>THEO 312/512</b>	<b>Understanding the New Testament</b>	3 Cr.
A study of the history and theology of the New Testament with attention to its rootage in the Old Testament.		
<b>THEO 314/514</b>	<b>The Pentateuch</b>	3 Cr.
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.		
<b>THEO 315/515</b>	<b>The Prophets</b>	3 Cr.
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.		
<b>THEO 317/517</b>	<b>The World of the New Testament</b>	3 Cr.
A study of the societies and culture in which Christian communities arose with a view to understanding the New Testament better and determining its contemporary significance more accurately. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.		
<b>THEO 318/518</b>	<b>Jesus and the Gospels</b>	3 Cr.
A comparative study of the New Testament gospels with a focus on the uniqueness of each in its presentation of the story of Jesus.		
<b>THEO 319/519</b>	<b>Topics in Biblical Studies</b>	3 Cr.
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.		

**Foundations of Christianity Courses**

<b>THEO 320</b>	<b>Early Christianity</b>	3 Cr.
A study of the beliefs, practices, and experiences of the early Christians from the second to the sixth century. Particular attention will be given to early Christian theological methods and the relationship between belief and behavior.		
<b>THEO 321</b>	<b>Medieval Christianity: East and West</b>	3 Cr.
A comparative study of eastern and western Christianity from the fifth to the fifteenth century. The course will examine the distinctive characteristics of both Christian traditions including missions, ecclesiastical organization, Christological developments, reform movements, and devotional practices. May be used to fulfill the Cultural Diversity course component of the General Education requirements.		

<b>THEO 322</b>	<b>Early Christian Social Thought</b>	3 Cr.
	A study of Christian concepts about the human person in community and the shape of Christian social action from the first to the sixth century. Particular attention will be given to the spheres of economics, education, family, and health.	
<b>THEO 323/523</b>	<b>Reformation Theology</b>	3 Cr.
	A study of the major theological developments of the sixteenth-century reform movements, both Protestant and Catholic.	
<b>THEO 324/524</b>	<b>Christianity in America</b>	3 Cr.
	An investigation of the history of Christianity in America, with special emphasis on the interaction between religion and cultural developments.	
<b>THEO 325</b>	<b>Why Am I Here? The Called Life</b>	3 Cr.
	An examination of Christian perspectives on vocation in its many meanings and embodiments. Using resources primarily from the Christian tradition, students will analyze issues such as the relationship between life-calling and career, discerning the relationship of divine and human purposes, and the role of the individual and community in shaping identity. Particular attention will be given to developing personal vocational questions and applying theological resources to the students' own search for meaning and purpose.	
<b>THEO 328/528</b>	<b>Topics in Lutheran History and Theology</b>	3 Cr.
	An examination of selected issues, movements, thinkers, or institutions within the Lutheran tradition. May be repeated for credit if topics are different.	
<b>THEO 329/529</b>	<b>Topics in Christian History</b>	3 Cr.
	An examination of a selected topic or thinker in the history of Christian thought and institutions. May be repeated for credit if topics are different.	

## *Theology and Ethics Courses*

<b>THEO 332</b>	<b>Christian Theology and the Moral Life</b>	3 Cr.
	An examination of basic concepts of Christian ethics such as the sources of moral knowledge, the structure of Christian life, and the virtues central to it.	
<b>THEO 333/533</b>	<b>Black Theology and Black Church</b>	3 Cr.
	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 "majority world" peoples, women's struggles, black families, and, most importantly, the praxis of black church ministry. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Some sections of this course may fulfill the Writing Intensive Course (WIC) General Education Requirement.	
<b>THEO 334</b>	<b>Holocaust Theology</b>	3 Cr.
	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.	
<b>THEO 335</b>	<b>Philosophy of Religion</b>	3 Cr.
	(Also offered as PHIL 330.) A philosophical analysis of some of the beliefs, concepts, and problems involved in traditional theistic beliefs and its critics, exploring how these debates impact the church and its beliefs. Problems include arguments for the existence of God, religious experience, problem of evil, and faith and reason. Prerequisite: one course in philosophy or THEO 200.	
<b>THEO 337</b>	<b>Studies in Liturgical Theology and Practice</b>	3 Cr.
	An intensive academic study of the history and practices of music and liturgy in both the Eastern and Western Christian traditions, with an emphasis on the Lutheran heritage. Study includes both primary liturgical theology (participation in a variety of liturgical expressions), and secondary liturgical theology (reflection on liturgical forms and structure). Topics may include theologies and practices of music, history of hymnody, and music in worship, ecclesiastical art and architecture, and ritual practices. May be repeated for credit if the topic is different.	

<b>THEO 339</b>	<b>Topics in Christian Theology</b>	3 Cr.
	An examination of central themes, problems, or practices; or of a selected thinker in Christian theology. May be repeated for credit if topics are different.	
<b>THEO 341</b>	<b>Bioethics</b>	3 Cr.
	(Also offered as PHIL 341.) A study of a range of moral issues encountered in both clinical medicine and human experimentation.	
<b>THEO 343</b>	<b>Theology of Marriage and Sexuality</b>	3 Cr.
	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.	
<b>THEO 344</b>	<b>Theology and the Scientific World</b>	3 Cr.
	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.	
<b>THEO 345/545</b>	<b>The Church in the World</b>	3 Cr.
	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 Cultural Diversity course component of the General Education Requirements.	
<b>THEO 346/546</b>	<b>Studies in Theology, Health and Healing</b>	3 Cr.
	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.	
<b>THEO 347</b>	<b>Christian Response to Social Victims</b>	3 Cr.
	A study of theological resources and strategies for individuals and communities to become involved in responding to those wronged due to matters of race, sexuality, involvement with the criminal justice system, poverty, addiction, abuse, and various limitations.	
<b>THEO 349</b>	<b>Topics in Religious Ethics</b>	3 Cr.
	An examination of a selected thinker or theme in religious ethics. May be repeated for credit if topics are different.	

## *Religions of the World Courses*

<b>THEO 360/560</b>	<b>Themes in the History of Religions</b>	3 Cr.
	A study of the history and themes of various religious traditions, with special attention to methods for studying those traditions. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>THEO 361/561</b>	<b>Indian Religions and Culture</b>	3 Cr.
	A study of religious traditions of India, viewed through both popular devotional practices and religious texts and rituals. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>THEO 362/562</b>	<b>Islamic Religion and Culture</b>	3 Cr.
	A study of the life of Muhammad, the teachings of the Quran, traditional practices and institutions in Islamic society, and contemporary developments in the Muslim world. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>THEO 363/563</b>	<b>Religions of China and Japan</b>	3 Cr.
	A study of the religious traditions (Confucianism, Taoism, Buddhism, and Shinto) of China and Japan. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>THEO 364</b>	<b>Native American Religions</b>	3 Cr.
	A study of religious worldviews present in Native American societies north of Mexico. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Some sections of this course may be used to fulfill the Writing Intensive Course (WIC) General Education Requirement.	

<b>THEO 365</b>	<b>Topics in Religions in the Americas</b>	3 Cr.
	A study of selected topics (such as recent religious movements, diaspora communities) in religion in the Americas. May be repeated for credit if topics are different.	
<b>THEO 367/567</b>	<b>Topics in South Asian Religions</b>	3 Cr.
	A study of a selected topic in the religions of South Asia. May be repeated for credit if topics are different. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>THEO 368/568</b>	<b>Topics in Abrahamic Religions</b>	3 Cr.
	A study of a selected topic in those religious traditions (Judaism, Christianity, Islam) that trace their history from Abraham. May be repeated for credit if topics are different. Fulfils the Cultural Diversity General Education requirement.	
<b>THEO 369</b>	<b>Topics in World Religions</b>	3 Cr.
	A study of selected topics in World Religions, such as traditional religions, new religions, and the interaction between religions or between religions and cultures. May be repeated for credit if topics are different.	

## Pre-Professional Study Courses

<b>THEO 399</b>	<b>Church Vocations Symposium</b>	0 Cr.
	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. S/U grade.	
<b>THEO 451/551</b>	<b>Theology of Diaconal Ministry</b>	3 Cr.
	A study of the historical and theological foundations of diaconal ministry. Attention is given to the role of the diaconate in the church, the development of diaconal community, and the nurture of a spirituality of service. Designed principally for diaconal and church work students. Others must have the consent of the instructor. May not be used to fulfill the upper-level Theology component of the General Education Requirements. Junior or senior standing required.	
<b>THEO 453/553</b>	<b>Clinical Education for Ministry</b>	3 Cr.
	A carefully supervised practicum in ministry to the physically ill and the elderly. Designed principally for senior Diaconal and Pre-Seminary students, this course in practical theology engages student in disciplined reflection on their ministry. Others must have the consent of the instructor. May not be used to fulfill the upper-level Theology component of the General Education Requirements. Usually S/U basis. Junior or senior standing required.	
<b>THEO 480</b>	<b>Practicum in Ministry</b>	1-2 Cr.
	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 four credits and is offered only on an S/U basis. Arranged with the chair of the department. Prerequisite: junior or senior standing.	
<b>THEO 481</b>	<b>Basic Homily Preparation</b>	1 Cr.
	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.	

## Advanced Study Courses

<b>THEO 393</b>	<b>Theories and Methods in Theological and Religious Studies</b>	3 Cr.
	This course teaches students to engage with theories and methods used in the academic study of religion and theology with attention to the history of the disciplines. As appropriate, students will have opportunity to test the application of these theories and methods in other humanistic and scientific disciplines. A Writing in the Discipline course. Prerequisites: THEO 200. Junior standing recommended.	
<b>THEO 490/590</b>	<b>Topics in Theology</b>	1-3 Cr.
	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.	

<b>THEO 492</b>	<b>Research and Writing in Theology</b>	1 Cr.
	A study of resources and methods for research and writing in theology, to be taken in conjunction with a 3-credit 300-level theology course. Must be taken once for credit; may be taken as often as needed. This course will support the writing of a major paper in a 300-level theology course taken concurrently, ordinarily in the student's junior year. Prerequisite: declared Theology or Theology and Ministry major or permission of chair.	
<b>THEO 493</b>	<b>Theology Seminar</b>	3 Cr.
	Advanced study culminating in the writing of a senior thesis. Prerequisites: senior standing or consent of the chair of the department.	
<b>THEO 495</b>	<b>Supervised Reading and Research</b>	1-3 Cr.
	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.	
<b>THEO 497</b>	<b>Honors Work in Theology</b>	3 Cr.
	See Honors Work, page 56.	
<b>THEO 498</b>	<b>Honors Candidacy in Theology</b>	3 Cr.
	See Honors Work, page 56.	

# Theology and Ministry

The Theology and Ministry major is administered by the [Department of Theology](#).

## Objectives

This bachelor-level major is designed for students seeking to serve in Lutheran or other Christian congregations as staff members with responsibility to children, youth, families, and persons of all ages. The major provides a broad range of foundational courses in theology, as well as practical learning experiences. Building on the University's program of General Education and the resources of the Department of Theology, students, in consultation with their academic advisor in the Department of Theology, are able to customize a course of study. This major may also be used as a second major for students with other professional or career goals, but who wish an education that will enable them to serve in leadership positions within a local congregation or other organization on either a part-time or volunteer basis.

## Bachelor of Arts – Theology and Ministry Major (Minimum 43 Cr.)

Theology Courses		28 Cr.
Core Foundation <sup>13</sup>		22 Cr.
One course from the following options:		3 Cr.
THEO 200	The Christian Tradition	3 Cr.
CC 215	The Christian Tradition (for Christ College students)	3 Cr.
Biblical Studies		3 Cr.
One Theology course numbered 310-319		
Foundations of Christianity		3 Cr.
One Theology course numbered 320-329		
Theology and Ethics		3 Cr.
One Theology course numbered 330- 349		
Religions of the World		3 Cr.
One Theology course numbered 360-369		
Research and Writing in the Discipline		4 Cr.
THEO 393	Theories and Methods in Theological and Religious Studies	3 Cr.
THEO 492	Research and Writing in Theology	1 Cr.
Seminar		3 Cr.
THEO 493	Theology Seminar	3 Cr.
Ministry Courses		6 Cr.
Pre-Professional Study		6 Cr.
At least six credits from the following options:		
THEO 451	Theology of Diaconal Ministry	3 Cr.
THEO 453	Clinical Education for Ministry	3 Cr.
THEO 480	Practicum in Ministry	3 Cr.
THEO 481	Basic Homily Preparation (may be repeated once for additional credit)	1 Cr.
Electives in Complementary Disciplines <sup>14</sup>		15 Cr.
Fifteen credits from the following options:		
CVA 230	Graphic Design	3 Cr.
CVA 243	Public Speaking	3 Cr.
CVA 244	Persuasion and Advocacy	3 Cr.
CVA 345	Leadership Communication	3 Cr.
CVA 366	Negotiation and Conflict Resolution	3 Cr.
ED 206	School and Society	3 Cr.
ED 220 <sup>15</sup>	Educational Psychology	3+0, 3 Cr.
ENGL 431	Advanced Writing and Rhetoric	3 Cr.
PSJ 201	Principles of Peace and Social Justice	3 Cr.
PHIL 115	Experience and Existence	3 Cr.
PHIL 125	The Good Life	3 Cr.
PSY 225	Social Psychology	3 Cr.
PSY 250	Principles and Applications of Learning	3 Cr.

<sup>13</sup> Six of these credits are met through General Education requirements, (e.g., THEO 200 and a 300-level THEO course).

<sup>14</sup> 15 credits in related disciplines that complement the student's ministry objectives.

<sup>15</sup> PSY 110 is a prerequisite for ED 220, but may not be counted among courses for this major

## Philosophy and Theology

<b>PSY 332</b>	Psychology of Adulthood and Aging	3 Cr.
<b>PSY 350</b>	Human Cognition	3 Cr.
<b>PSY 445</b>	Community and Health Psychology	3 Cr.
<b>PSY 461</b>	Introduction to Counseling	3 Cr.
<b>Note: PSY 110 is a prerequisite for all psychology courses but may not be counted among courses for this major.</b>		
<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>SOCW 240</b>	Communication and Counseling Skills	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>SOCW 410</b>	Social Welfare Policy: Analysis and Advocacy	3 Cr.
<b>SOC 220</b>	The Family	3 Cr.
<b>SOC 245</b>	Social Psychology	3 Cr.
<b>SOC 270</b>	Juvenile Delinquency	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOC 325</b>	Urban Sociology	3 Cr.
<b>SOC 340</b>	Gender	3 Cr.
<b>Note: SOC 110 is a prerequisite for all 300-level sociology courses but may not be counted among courses for this major.</b>		
<b>SPAN 308</b>	Spanish for Service Professionals	3 Cr.
<b>Note: SPAN 220, SPAN 230, or SPAN 231 is a prerequisite for SPAN 308, but may not be counted among courses for this major.</b>		

Students broaden their contextual knowledge of ministry by taking a minimum of 15 credits in one or more complementary disciplines as listed above. Alternative courses are permitted for the sake of specific professional objectives with the approval of the student's academic advisor and the chair of the Department of Theology.

**Note:** Courses taken for this major may not be counted for credit toward a minor or a second major.

### **Symposium and Para-Curricular Activities**

Students completing the Theology and Ministry major are also encouraged to participate in THEO 399: Church Vocations Symposium and other para-curricular activities arranged by the Center for Church Vocations (see [valpo.edu/ccv](http://valpo.edu/ccv)).

### **Candidacy and Rostering**

Information about rostering in various denominations is available on the Theology Department's website: [valpo.edu/theology](http://valpo.edu/theology).

# Physics and Astronomy

Learn more about the [Department of Physics and Astronomy](#) at Valpo online.

## Professors Hillwig, Richter (chair), Stanislaus, Zygmunt; Associate Professors Gibson-Even, He.

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, atmospheric physics, geophysics, biophysics, medical physics, computational physics, electrical engineering, nuclear engineering, scientific writing and reporting, high school physics teaching, patent law, and scientific equipment sales.

The department is well equipped, having a particle accelerator, an astronomical observatory, a surface physics laboratory, 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 [valpo.edu/physics](http://valpo.edu/physics).

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 credit hours needed for a major in the department. With departmental approval, PHYS 481-483 or PHYS 497 may be substituted for PHYS 445. For further information, refer to Cooperative Education, College of Arts and Sciences, page 57.

## Major

There are four different options a student may choose to pursue. All four options share 19 credit hours of required courses in common, thus making it easy for students to switch from one to another if their career objectives change.

## Physics Major (Minimum 34 Cr.)

### Core Courses

<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.
<b>PHYS 245</b>	Experimental Physics III	0+3, 1 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>PHYS 250</b>	Mechanics	3 Cr.
<b>PHYS 281</b>	Electricity and Electronics	2.5 Cr.
<b>PHYS 281L</b>	Analog Circuits Laboratory	0+1.5, 0.5 Cr.
<b>PHYS 314</b>	Writing in Physics and Astronomy	2 Cr.
<b>PHYS 345</b>	Experimental Physics IV	0+3, 1 Cr.
<b>PHYS 360</b>	Thermal Physics	3 Cr.
<b>PHYS 371</b>	Electromagnetic Fields	3 Cr.
<b>PHYS 445</b>	Senior Research in Physics (2 credits)	0+3, 1-2 Cr.
<b>PHYS 499</b>	Physics and Astronomy Colloquium (5 semesters)	0 Cr.
<b>Four credits from PHYS/ASTR at the 200-level or higher*</b>		<b>4 Cr.</b>

### Additional Recommended Courses

#### One year of Chemistry

<b>PHYS 490</b>	The Scientific Endeavor	3 Cr.
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\*Only one credit from PHYS/ASTR 492 can be used toward the elective requirement.

Two concentrations within the physics major have been designed to meet students' educational and career goals. The departmental advisor will assist students in selecting the most appropriate physics concentration and the courses that apply within the department.

The **Fundamental Physics Concentration** is intended for students primarily interested in pursuing a career in physics and who intend to pursue graduate study in physics. In addition to the core courses, the following courses are recommended: PHYS 372, 381, 421, 422, 430, 430L, and 440. MATH 330 and 334 are also recommended.

## Physics and Astronomy

The **Applied Physics Concentration** is intended for students interested in the application of physics to problems in a business or industrial environment. In addition to the core courses, students are advised to complete the major by electing courses most closely associated with the physics application intended. Participation in the University's Cooperative Education Program (see page 57) is strongly recommended to give the student practical work experience. The Applied Physics option is most useful to students who will seek employment immediately after graduation.

*Computational Physics*—for computer-related applications of physics and computational problem solving. In addition to the major, students are encouraged to complete the Computer Science minor (page87).

*Industrial Project Management*—for management and project leadership in technological and scientific environments in business and industry. In addition to the major, students are encouraged to complete the Fundamentals of Business Minor (page350).

### Astronomy Major (Minimum 34 Cr.)

#### Core Courses

<b>ASTR 101</b>	Astronomy	3+0, 3 Cr.
<b>ASTR 101L</b>	Astronomy Laboratory	0+3, 1 Cr.
<b>ASTR 221</b>	Observational Astronomy	0+3, 1 Cr.
<b>ASTR 252</b>	Introduction to Stellar Astrophysics	3+0, 3 Cr.
<b>ASTR 253</b>	Introduction to Galactic Astrophysics and Cosmology	3+0, 3 Cr.
<b>ASTR 445</b>	Senior Research in Astronomy (2 credits)	0+3, 1-2 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.
<b>PHYS 245</b>	Experimental Physics III	0+3, 1 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>PHYS 250</b>	Mechanics	3 Cr.
<b>PHYS 314</b>	Writing in Physics and Astronomy	2 Cr.
<b>PHYS 360</b>	Thermal Physics	3 Cr.
<b>PHYS 499</b>	Physics and Astronomy Colloquium (5 semesters)	0 Cr.

#### Courses Recommended For Students Intending to Pursue Graduate Study in

##### Astronomy or Astrophysics:

<b>PHYS 371</b>	Electromagnetic Fields	3 Cr.
<b>PHYS 381</b>	Advanced Mechanics	3 Cr.
<b>PHYS 421</b>	Quantum Mechanics I	3 Cr.

#### Additional Recommended Courses

##### One year of Chemistry

<b>PHYS 490</b>	The Scientific Endeavor	3 Cr.
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## Physics and Astronomy Education Major (Minimum 34 Cr.)

**Core Courses**

<b>ASTR 101</b>	Astronomy	3+0, 3 Cr.
<b>ASTR 101L</b>	Astronomy Laboratory	0+3, 1 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.
<b>PHYS 245</b>	Experimental Physics III	0+3, 1 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>PHYS 250</b>	Mechanics	3 Cr.
<b>PHYS 314</b>	Writing in Physics and Astronomy	2 Cr.
<b>PHYS 360</b>	Thermal Physics	3 Cr.
<b>PHYS 445</b>	Senior Research in Physics (1 credit)	0+3, 1-2 Cr.
<b>PHYS 499</b>	Physics and Astronomy Colloquium (4 semesters)	0 Cr.

**One group from the following options:**

<b>PHYS 345 and</b>	Experimental Physics IV	0+3, 1 Cr.
<b>PHYS 371</b>	Electromagnetic Fields	3 Cr.
<b>ASTR 221 and</b>	Observational Astronomy	0+3, 1 Cr.
<b>ASTR 252</b>	Introduction to Stellar Astrophysics	3+0, 3 Cr.

**Four credits from PHYS/ASTR at the 200-level or higher\*** **4 Cr.**

**Additional Recommended Courses****One year of Chemistry**

\* Only one credit from PHYS/ASTR 492 can be used toward the elective requirement.

## Physics Complementary Major (Minimum 30 Cr.)

**Core Courses**

<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.
<b>PHYS 245</b>	Experimental Physics III	0+3, 1 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.
<b>PHYS 250</b>	Mechanics	3 Cr.
<b>PHYS 281</b>	Electricity and Electronics	2.5 Cr.
<b>PHYS 281L</b>	Analog Circuits Laboratory	0+1.5, 0.5 Cr.
<b>PHYS 314</b>	Writing in Physics and Astronomy	2 Cr.
<b>PHYS 345</b>	Experimental Physics IV	0+3, 1 Cr.
<b>PHYS 360</b>	Thermal Physics	3 Cr.
<b>PHYS 371</b>	Electromagnetic Fields	3 Cr.
<b>PHYS 445</b>	Senior Research in Physics (2 credits)	0+3, 1-2 Cr.
<b>PHYS 499</b>	Physics and Astronomy Colloquium (5 semesters)	0 Cr.

**Additional Recommended Courses****One year of Chemistry**

<b>PHYS 490</b>	The Scientific Endeavor	3 Cr.
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It is assumed that students will acquire competency in at least one computer programming language.

**Physics Minor (Minimum 16 Cr.)**

<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.

**One course from the following options:**

<b>PHYS 245</b>	Experimental Physics III	0+3, 1 Cr.
<b>PHYS 246</b>	Data Reduction and Error Analysis	1 Cr.

**Four credits from PHYS/ASTR at the 200-level or higher\***

\* Only one credit from PHYS/ASTR 492 can be used toward the elective requirement. PHYS 314 may not be used to fulfill minor requirements.

**Astronomy Minor (Minimum 17 Cr.)**

<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 243</b>	Physics: Atoms and Nuclei	3 Cr.

**Two courses from the following options:**

<b>ASTR 101</b>	Astronomy	3+0, 3 Cr.
<b>ASTR 252</b>	Introduction to Stellar Astrophysics	3+0, 3 Cr.
<b>ASTR 253</b>	Introduction to Galactic Astrophysics and Cosmology	3+0, 3 Cr.

**One course from the following options:**

<b>PHYS 142L</b>	Experimental Physics II	0+3, 1 Cr.
<b>ASTR 101L</b>	Astronomy Laboratory	0+3, 1 Cr.
<b>ASTR 221</b>	Observational Astronomy	0+3, 1 Cr.

**Degrees**

Completion of the degree requirements of the College of Arts and Sciences with a major in physics leads to the Bachelor of Arts degree or the Bachelor of Science degree. Completion of the degree requirements of the College of Arts and Sciences with a major in astronomy leads to the Bachelor of Science degree.

**Credit by Examination**

Credit for PHYS 111, 112, 112L, 141, 141L, 142, or 142L may be earned through the Advanced Placement examinations offered by the College Entrance Examination Board.

**Approval of Schedules**

All students taking a major or minor in physics or astronomy and all students planning to teach physics or astronomy must have their schedules approved by the department advisor.

**Astronomy Courses**

<b>ASTR 101</b>	<b>Astronomy</b>	3+0, 3 Cr.
	A study of the history of mankind'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 or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>ASTR 101L</b>	<b>Astronomy Laboratory</b>	0+3, 1 Cr.
	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 or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process. Prerequisite or concurrent registration: ASTR 101 or ASTR 252.	

<b>ASTR 190</b>	<b>Topics in Astronomy and Space Science</b>	1-2 Cr.
	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. May be repeated for credit, provided topics are different.	
<b>ASTR 221</b>	<b>Observational Astronomy</b>	0+3, 1 Cr.
	Practical observational experience using the 16 inch reflecting telescope and astronomical instrumentation including photographic cameras, spectrograph and CCD camera, and computer. Normally offered in the spring semester of odd numbered years. Prerequisite: ASTR 101 and 101L or ASTR 252 or consent of the instructor.	
<b>ASTR 252</b>	<b>Introduction to Stellar Astrophysics</b>	3+0, 3 Cr.
	A study of modern stellar astronomy and the physical principles involved. Topics to be studied include the properties of light, the interstellar medium, and the properties and evolution of stars. Quantitative problems illustrating the nature of modern astronomy will be assigned. This course along with ASTR 101L may be used to fulfill the Natural Science component of the General Education Requirements. Normally offered in the spring semester of even numbered years. Prerequisite or concurrent registration: MATH 131 and PHYS 243.	
<b>ASTR 253</b>	<b>Introduction to Galactic Astrophysics and Cosmology</b>	3+0, 3 Cr.
	A study of modern galactic astrophysics, cosmology, and the physical principles involved in both. Topics to be studied include the Milky Way galaxy, the nature of galaxies, active galaxies, the structure of the universe, and cosmology. Quantitative problems illustrating the nature of modern astronomy will be assigned. This course along with ASTR 101L may be used to fulfill the Natural Science component of the General Education Requirements. Normally offered in the fall of even numbered years. Prerequisite or concurrent registration: MATH 131 and PHYS 243. ASTR 252 is normally taken prior to ASTR 253, but this is not a prerequisite.	
<b>ASTR 390</b>	<b>Topics in Astronomy</b>	1-4 Cr.
	The study of various topics of current interest in astronomy and space science. Prerequisites are dependent on the topic. Interested students are urged to consult the instructor or the department chair for specific information. May be repeated for credit, provided topics are different.	
<b>ASTR 445</b>	<b>Senior Research in Astronomy</b>	0+3, 1-2 Cr.
	This course is identical to PHYS 445 but with a specific focus on problems in astronomy. See PHYS 445 for details. Prerequisites: ASTR 221 and ASTR 252. Corequisite PHYS 499.	
<b>ASTR 492</b>	<b>Research or Reading in Astronomy</b>	0.5-3 Cr.
	Research or reading in astronomy, under the supervision of a faculty member. Prerequisite: consent of the chair of the department. No more than 1 credit hour of ASTR 492/PHYS 492 may be used to satisfy the minimum requirements for a physics or astronomy major.	

## Physics Courses

<b>PHYS 109</b>	<b>Mechanics—Statics</b>	3 Cr.
	(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, and friction. Prerequisites: MATH 131 and PHYS 141 or PHYS 151.	
<b>PHYS 111</b>	<b>Essentials of Physics</b>	3+0, 3 Cr.
	The development of basic concepts of physics emphasizes intuition, logic, and experiment rather than complex mathematical analysis. Specific topics included are space, time, motion, energy, conservation laws, fluids, sound, and heat. Not open to students who have taken PHYS 141. This course along with PHYS 141L may be used in fulfillment of the Natural Science component of the General Education Requirements. Prerequisite or Corequisite: MATH 110 or placement higher than MATH 110 in the math placement process.	
<b>PHYS 112</b>	<b>Essentials of Physics</b>	3+0, 3 Cr.
	This course is a continuation of PHYS 111. Specific topics include the study of electricity and magnetism, wave phenomena, optics, relativity, and atomic and nuclear physics. Prerequisites: PHYS 111 and 141L 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.	

<b>PHYS 112L</b>	<b>Essentials of Physics Laboratory</b>	0+3, 1 Cr.
	Laboratory experiments test and illustrate fundamental physics concepts and laws closely related to those studied in PHYS 112. Emphases are placed on experiential learning and on the continued development of laboratory skills in physical science. Prerequisite: PHYS 141L. Pre/corequisite: PHYS 112. Not open to students who have taken PHYS 142L.	
<b>PHYS 141</b>	<b>Newtonian Mechanics</b>	3+0, 3 Cr.
	A study of classical mechanics, including static and dynamic systems, for students of physics, engineering, chemistry, and meteorology. Applications of calculus are made as appropriate. This course along with PHYS 141L may be used in fulfillment of the Natural Science component of the General Education Requirements. Prerequisite or concurrent registration: MATH 131.	
<b>PHYS 141L</b>	<b>Experimental Physics I</b>	0+3, 1 Cr.
	Laboratory experiments test and illustrate fundamental physics concepts and laws closely related to those studied in PHYS 141. Emphasis is placed on the development of laboratory skills in physics. Pre/corequisite: PHYS 111 or PHYS 141.	
<b>PHYS 142</b>	<b>Physics: Electricity, Magnetism and Waves</b>	3+0, 3 Cr.
	A continuation of PHYS 141 which treats electricity, magnetism, wave motion, and optics. Prerequisite: PHYS 141 and 141L or advanced placement by permission of the chair of the department, MATH 132 or concurrent registration. This course along with PHYS 142L may be used in fulfillment of the Natural Science component of the General Education Requirements.	
<b>PHYS 142L</b>	<b>Experimental Physics II</b>	0+3, 1 Cr.
	Laboratory experiments test and illustrate fundamental physics concepts and laws closely related to those studied in PHYS 142. Emphasis is placed on the development of laboratory skills in physics. Prerequisite: PHYS 141L. Prerequisite or concurrent registration: PHYS 142. Not open to students who have taken PHYS 112L.	
<b>PHYS 151</b>	<b>Newtonian Mechanics – Honors</b>	3+0, 3 Cr.
	A study of classical mechanics, including static and dynamic systems, for students of physics, engineering, chemistry, and meteorology. The pace of this course and the subject matter will be similar to that in PHYS 141. However, students are assumed to be proficient in differential and integral calculus at the outset, and applications of calculus are made throughout the course. This course along with PHYS 141L may be used in fulfillment of the Natural Science component of the General Education Requirements. Students may not receive credit for both PHYS 141 and PHYS 151. Pre/corequisite: MATH 132.	
<b>PHYS 152</b>	<b>Physics: Electricity, Magnetism and Waves – Honors</b>	3+0, 3 Cr.
	A continuation of PHYS 151 which treats electricity, magnetism, wave motion, and optics. This course along with PHYS 142L may be used in fulfillment of the Natural Science component of the General Education Requirements. Prerequisite: PHYS 151 or consent of the instructor. Students may not receive credit for both PHYS 142 and PHYS 152.	
<b>PHYS 190</b>	<b>Topics in Physics</b>	1-4 Cr.
	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. May be repeated for credit, provided topics are different.	
<b>PHYS 215</b>	<b>Mechanics of Materials</b>	3 Cr.
	(Also offered as CE 215 or ME 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. Prerequisite: PHYS 109.	
<b>PHYS 243</b>	<b>Physics: Atoms and Nuclei</b>	3 Cr.
	An introduction to the special theory of relativity, physics of the atom, the Schroedinger wave equation, physics of condensed matter, physics of the nucleus including radioactivity, and elementary particles. Prerequisites: PHYS 142 and MATH 132 (may be taken concurrently).	

<b>PHYS 245</b>	<b>Experimental Physics III</b>	0+3, 1 Cr.
	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 analysis and data acquisition techniques. Prerequisites: PHYS 142, 142L, and PHYS 243. Normally offered in spring semesters.	
<b>PHYS 246</b>	<b>Data Reduction and Error Analysis</b>	1 Cr.
	The study and application of various techniques employed in the reduction and analysis of laboratory data to include probability distributions, regressions, tests of goodness 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 253.	
<b>PHYS 250</b>	<b>Mechanics</b>	3 Cr.
	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 253 (may be taken concurrently).	
<b>PHYS 252</b>	<b>Materials Science</b>	2.5 Cr.
	(Also offered as ME 252.) A study of structure-property-processing relationships of engineering materials related to their selection in design and manufacturing processes. Methods of controlling structure and mechanical properties of materials are studied with an emphasis on the strengthening mechanisms. Processes studied include solidification, phase transformation, and mechanical working of metals. Prerequisites: MATH 132 and CHEM 115 or CHEM 121.	
<b>PHYS 281</b>	<b>Electricity and Electronics</b>	2.5 Cr.
	(Also offered as ECE 281.) A study of the fundamental methods and theorems of electrical circuit analysis. Topics include steady-state and transient analysis of DC and AC circuits containing resistors, capacitors, inductors, and operational amplifiers. Prerequisite: MATH 131.	
<b>PHYS 281L</b>	<b>Analog Circuits Laboratory</b>	0+1.5, 0.5 Cr.
	(Also offered as ME 261.) Seven laboratory experiences will introduce AC and DC analog circuit analysis. Students will design, build, and analyze electrical circuits. Pre/corequisite: PHYS 281.	
<b>PHYS 314</b>	<b>Writing in Physics and Astronomy</b>	2 Cr.
	Writing is a crucial part of the scientific enterprise. Students will complete writing assignments across a selection of genres in physics and astronomy. Possible examples include science writing for a non-specialist audience, a research proposal for a grant or for the use of scientific facilities, a peer-reviewed journal article, a peer-review report, and a slide/poster presentation. Students will receive instruction in scientific writing as a distinct subject and in information literacy in the fields of physics and astronomy. Current scientific literature will be used throughout the course to provide examples. A Writing in the Discipline course. Prerequisite: a Writing Intensive Course.	
<b>PHYS 322</b>	<b>Embedded Microcontrollers</b>	2.5+1.5, 3 Cr.
	(Also offered as ECE 322.) The application of microcontrollers in embedded system design, emphasizing the interaction of hardware and software design. Topics include integrated development environments, CPUs, program and data memories, interrupts, digital inputs and outputs, timer peripherals, serial communication interfaces, and analog-to-digital converter peripherals. Course includes a laboratory component. Prerequisite: ECE 221 and ECE 251 with a minimum grade of C.	
<b>PHYS 342</b>	<b>Electronics</b>	2.5+1.5, 3 Cr.
	(Also offered as ECE 340.) An introduction to semiconductor theory and the design and analysis of electronic circuits. Topics include diodes, field-effect and bipolar transistors, CMOS logic circuits, single-state discrete transistor amplifiers, and multistage integrated-circuit amplifiers. Course includes a laboratory component. Prerequisite: ECE 263 or PHYS 281 with a minimum grade of C.	
<b>PHYS 345</b>	<b>Experimental Physics IV</b>	0+3, 1 Cr.
	Experiments in radiation detection and analysis using modern modular electronics. Prerequisites: PHYS 243, PHYS 245, PHYS 246, and MATH 253.	

<b>PHYS 360</b>	<b>Thermal Physics</b>	3 Cr.
	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 fall semester of even numbered years. Prerequisite: PHYS 243.	
<b>PHYS 371</b>	<b>Electromagnetic Fields</b>	3 Cr.
	A study of electric and magnetic fields, their sources, and interactions in vacuum and in dielectric and magnetic media. Prerequisites: PHYS 250, MATH 253, and MATH 265 or MATH 270.	
<b>PHYS 372</b>	<b>Electromagnetic Waves and Physical Optics</b>	3 Cr.
	Proceeding from Maxwell's equations, students investigate the wave aspects of electromagnetic fields including propagation, reflection, refraction, polarization, interference, and diffraction. Other topics include radiating systems and wave guides. Normally offered in the spring semester of odd numbered years. Prerequisite: PHYS 371.	
<b>PHYS 381</b>	<b>Advanced Mechanics</b>	3 Cr.
	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, MATH 253, and MATH 265 or MATH 270.	
<b>PHYS 390</b>	<b>Topics in Physics</b>	1-4 Cr.
	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. May be repeated for credit, provided topics are different.	
<b>PHYS 421</b>	<b>Quantum Mechanics I</b>	3 Cr.
	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 Schroedinger 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 265 or MATH 270 (both prerequisites may be taken concurrently with permission of the instructor).	
<b>PHYS 422</b>	<b>Quantum Mechanics II</b>	3 Cr.
	A continuation of PHYS 421, with further development and 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.	
<b>PHYS 430</b>	<b>Nuclear Physics</b>	3 Cr.
	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.	
<b>PHYS 430L</b>	<b>Nuclear Physics Laboratory</b>	0+3, 1 Cr.
	An advanced laboratory to study nuclear reactions, nuclear structure, and radioactivity. Experiments may use the 300 keV particle accelerator and a neutron howitzer. Normally offered in the spring semester of even numbered years. Prerequisites: PHYS 246 and PHYS 345; Corequisite: PHYS 430.	
<b>PHYS 440</b>	<b>Condensed Matter Physics</b>	3 Cr.
	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 includes 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. Prerequisite: PHYS 243.	
<b>PHYS 445</b>	<b>Senior Research in Physics</b>	0+3, 1-2 Cr.
	Each student undertakes a physics 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 and the astronomy major. May be taken as two credits in one semester or preferably as one credit in each of two consecutive semesters. Corequisite: PHYS 499.	

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<b>PHYS 481</b>	<b>Cooperative Education in Physics I</b>	0.5-3 Cr.
	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.	
<b>PHYS 482</b>	<b>Cooperative Education in Physics II-III</b>	0.5-3 Cr.
	Continuation of PHYS 481. Midterm and final written reports required. Prerequisites: PHYS 481 and approval of the chair of the department. S/U grade.	
<b>PHYS 483</b>	<b>Cooperative Education in Physics III</b>	0.5-3 Cr.
	Continuation of PHYS 482. Midterm and final written reports required. Prerequisites: PHYS 482 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>PHYS 490</b>	<b>The Scientific Endeavor</b>	3 Cr.
	(Also offered as CHEM 490 and NS 490.) An exploration of the scientific enterprise involving a study of foundational principles and assumptions of the scientific endeavor, its various methodologies, and its scope and limitations. This will include illustrations from historical case studies and "scientific revolutions." Students will also study the ethical and moral connections between their personal and professional science lives. Prerequisite: junior or senior standing. This course may not be used to fulfill the minimum requirements of a physics or astronomy major. This course may be used to fulfill the Humanities: Philosophy requirement of the General Education Requirements when cross-listed with CC 300.	
<b>PHYS 492</b>	<b>Research or Reading in Physics</b>	0.5-3 Cr.
	Research or reading in physics, under the supervision of a faculty member. Prerequisite: consent of the chair of the department. No more than 1 credit hour of PHYS 492/ASTR 492 may be used to satisfy the minimum requirements for a physics or astronomy major.	
<b>PHYS 497</b>	<b>Honors Work in Physics</b>	3 Cr.
	See Honors Work, page 56.	
<b>PHYS 498</b>	<b>Honors Candidacy in Physics</b>	3 Cr.
	See Honors Work, page 56.	
<b>PHYS 499</b>	<b>Physics and Astronomy Colloquium</b>	0 Cr.
	All physics and astronomy majors are expected to register for this course. S/U grade.	

# Political Science and International Relations

Learn more about the [Department of Political Science and International Relations](#) at Valpo online.

## **Professors Hora, G. Johnson (chair), Lin; Associate Professors Atchison, Old.**

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 additional focus on scientific procedures and empirical and quantitative methodology.

The study of politics and international relations has never been more important than today. More so than ever before, events that occur across the globe and in remote places around the world impact our daily lives. As a result of revolutionary technological change, relations within and between states are being reconfigured almost daily. The majors in Political Science and International Relations at Valparaiso University give students the background, experience, and analytical tools to make sense of, and prepare for dealing with this dynamic and rapidly changing world. A major in political science may lead to careers in many fields 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 series of informal events 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 see page 12.

## **Community Research and Service Center**

The Department of Political Science and International Relations 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 organizations, 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 or working as paid associates and in the process learn basic research methods and gain practical experience in working for and dealing with government, business, and other organizations.

**Bachelor of Arts – Political Science Major (Minimum 30 Cr.)**

<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 240</b>	Political Theory	3 Cr.
<b>POLS 493</b>	Senior Seminar in Political Science	3 Cr.
<b>One concentration from the following options:</b>		
<b>General Political Science</b>		<b>18 Cr.</b>
<b>18 additional credits of Political Science courses</b>		<b>18 Cr.</b>
<b>Legal Studies Concentration</b>		<b>18 Cr.</b>
<b>At least fifteen of the remaining eighteen Political Science credits from the following options:</b>		
<b>POLS 170</b>	The Field of Law	1 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.
<b>POLS 271</b>	The Judicial Process	3 Cr.
<b>POLS 290</b>	Topics in Political Science (when topic is appropriate)	3 Cr.
<b>POLS 352</b>	Model United Nations	3 Cr.
<b>POLS 371</b>	Constitutional Law I	3 Cr.
<b>POLS 372</b>	Constitutional Law II	3 Cr.
<b>POLS 386</b>	Internship in Political Science (when topic is appropriate)	1-7 Cr.
<b>POLS 390</b>	Advanced Topics in Political Science I (when topic is appropriate)	3 Cr.
<b>POLS 450</b>	International Regimes and Global Governance	3 Cr.
<b>POLS 490</b>	Advanced Topics in Political Science II (when topic is appropriate)	1-3 Cr.
<b>Public Policy and Administration Concentration</b>		<b>18 Cr.</b>
<b>POLS 290</b>	Topics in Political Science (when topic is appropriate)	3 Cr.
<b>POLS 360</b>	Public Administration	3 Cr.
<b>POLS 361</b>	Public Policy	3 Cr.
<b>At least nine credits from the following options:</b>		
<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>POLS 221</b>	Political Behavior	3 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.
<b>POLS 271</b>	The Judicial Process	3 Cr.
<b>POLS 320</b>	Politics of Urban and Metropolitan Areas	3 Cr.
<b>POLS 326</b>	The Presidency	3 Cr.
<b>POLS 327</b>	Congress	3 Cr.
<b>POLS 386</b>	Internship in Political Science (when topic is appropriate)	1-7 Cr.
<b>POLS 390</b>	Advanced Topics in Political Science I (when topic is appropriate)	3 Cr.
<b>POLS 437</b>	Comparative Public Policy	3 Cr.
<b>POLS 438</b>	Gender and Public Policy in Global Perspective	3 Cr.
<b>POLS 490</b>	Advanced Topics in Political Science II (when topic is appropriate)	1-3 Cr.

**Bachelor of Arts – International Relations Major (Minimum 30 Cr.)**

<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>POLS 240</b>	Political Theory	3 Cr.
<b>POLS 493</b>	Senior Seminar in Political Science	3 Cr.
<b>International Relations</b>		<b>9 Cr.</b>

**Three courses from the following options:**

<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>POLS 291</b>	Topics in International Relations	3 Cr.
<b>POLS 351</b>	American Foreign Policy	3 Cr.
<b>POLS 352</b>	Model United Nations	3 Cr.
<b>POLS 353</b>	Principles of Peace and Social Justice	3 Cr.
<b>POLS 359</b>	Study Abroad Field Research	3 Cr.
<b>POLS 386</b>	Internship in Political Science (when topic is appropriate)	1-7 Cr.
<b>POLS 391</b>	Advanced Topics in International Relations I	3 Cr.
<b>POLS 450</b>	International Regimes and Global Governance	3 Cr.
<b>POLS 454</b>	International Political Economy	3 Cr.
<b>POLS 456</b>	War and Conflict	3 Cr.
<b>POLS 491</b>	Advanced Topics in International Relations II	3 Cr.
<b>Comparative and Area Studies</b>		<b>6 Cr.</b>

**Two courses from the following options (At least one must be from a specific geographic area.):**

<b>POLS 231</b>	Politics of Developing States	3 Cr.
<b>POLS 291</b>	Topics in International Relations	3 Cr.
<b>POLS 330</b>	Politics of Industrialized States	3 Cr.
<b>POLS 332</b>	Politics of China and East Asia	3 Cr.
<b>POLS 333</b>	Politics of Africa	3 Cr.
<b>POLS 334</b>	Politics of the Middle East	3 Cr.
<b>POLS 336</b>	Politics of Latin America	3 Cr.
<b>POLS 386</b>	Internship in Political Science (when topic is appropriate)	1-7 Cr.
<b>POLS 391</b>	Advanced Topics in International Relations I	3 Cr.
<b>POLS 437</b>	Comparative Public Policy	3 Cr.
<b>POLS 438</b>	Gender and Public Policy in Global Perspective	3 Cr.
<b>POLS 491</b>	Advanced Topics in International Relations II	3 Cr.

**General Political Science Minor (Minimum 18 Cr.)**

<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>12 additional Political Science credits</b>		<b>12 Cr.</b>

**International Relations Minor (Minimum 18 Cr.)**

<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>Two courses from the International Relations group</b>		<b>6 Cr.</b>
<b>One course from the Comparative and Area Studies group</b>		<b>3 Cr.</b>

**Political Science Education Major (Minimum 45 Cr.)**

<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>POLS 240</b>	Political Theory	3 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.
<b>One course from the following options:</b>		
<b>POLS 351</b>	American Foreign Policy	3 Cr.
<b>POLS 456</b>	War and Conflict	3 Cr.
<b>One course from the following options:</b>		
<b>POLS 326</b>	The Presidency	3 Cr.
<b>POLS 327</b>	Congress	3 Cr.
<b>One course from the following options:</b>		
<b>POLS 371</b>	Constitution Law I	3 Cr.
<b>POLS 372</b>	Constitution Law II	3 Cr.
<b>POLS 493</b>	Senior Seminar in Political Science	3 Cr.
<b>Additional Required Courses<sup>16</sup>:</b>		
<b>ECON 222</b>	Principles of Economics Macro	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>GEO 280</b>	Geography of Cyberspace	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.

**Credit by Examination**

Credit for POLS 120 and POLS 130 may be earned through the College Level Examination Program subject examination.

**Approval of Schedules**

Students taking a major or minor in political science or international relations must have their schedules approved by the appropriate advisor.

**Political Science Courses**

<b>POLS 110</b>	<b>Introduction to Politics</b>	3 Cr.
	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 Cultural Diversity course component of the General Education Requirements.	
<b>POLS 120</b>	<b>The Government of the United States</b>	3 Cr.
	An introduction to the American national government, with special emphasis on the basic structure, functions, and policies of the system.	
<b>POLS 130</b>	<b>Comparative Politics</b>	3 Cr.
	Comparative study of Western and non-Western political systems. Includes examination of conceptual frameworks for comparative analysis. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>POLS 150</b>	<b>International Relations</b>	3 Cr.
	An examination of the fundamentals of international politics and international organization, particularly the United Nations and its specialized agencies.	
<b>POLS 170</b>	<b>The Field of Law</b>	1 Cr.
	A course designed to help students prepare for the professional study of law. Open to all students.	

<sup>16</sup> May be used to fulfill General Education requirements, where appropriate.

**Note:** The following courses are not open to freshmen without permission of the chair of the department.

<b>POLS 210</b>	<b>Research Methods in Political Science</b>	3 Cr.
An examination of the basic research methods, statistics, and data analysis techniques used by social scientists. An emphasis is on the application of these methods in an applied setting, and students are often involved in a community research project. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. May also be used to fulfill one of the three International Relations courses in the IRL major. Prerequisites: sophomore standing or permission of the chair.		
<b>POLS 221</b>	<b>Political Behavior</b>	3 Cr.
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.		
<b>POLS 231</b>	<b>Politics of Developing States</b>	3 Cr.
A study of governments and political problems within and across developing states found in Eastern Europe, the Middle East, Central and East Asia, North and Sub-Saharan Africa, Latin America, and the Caribbean. Topics include economic and political development, regime types, trade, political culture, and contemporary challenges. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.		
<b>POLS 240</b>	<b>Political Theory</b>	3 Cr.
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.		
<b>POLS 241</b>	<b>Political Philosophy</b>	3 Cr.
A survey of the major formulations and problems of Western political thought as developed by political philosophers from the Greeks through the modern era.		
<b>POLS 261</b>	<b>State and Local Politics in the United States</b>	3 Cr.
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.		
<b>POLS 271</b>	<b>The Judicial Process</b>	3 Cr.
An examination of law and courts as part of the political process with specific emphasis on factors that influence judicial decisions and the impact of court decisions. Prerequisite: POLS 120 or consent of the chair of the department.		
<b>POLS 290</b>	<b>Topics in Political Science</b>	3 Cr.
A study of topics in the process, policies, and functions of political science (e.g., political parties, political psychology, etc.). May be repeated for credit if topics are different.		
<b>POLS 291</b>	<b>Topics in International Relations</b>	3 Cr.
A study of topics in the process, policies, and functions of international relations or comparative political science (e.g., comparative political parties, political institutions, etc.). May be used to fulfill either an International Relations requirement or a Comparative requirement, when topics are appropriate (as designated by the department chair). May be repeated for credit if topics are different.		
<b>POLS 320/520</b>	<b>Politics of Urban and Metropolitan Areas</b>	3 Cr.
This course will examine the politics and policy making of urban and metropolitan governments, and will include special emphasis on issues such as the nature of local decision-making, racial and ethnic politics, education, housing, law enforcement, economic development, and the prospects for regional government. Prerequisite: POLS 120 or consent of the chair of the department.		
<b>POLS 326/526</b>	<b>The Presidency</b>	3 Cr.
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. Prerequisite: POLS 120 or consent of the chair of the department.		

<b>POLS</b>		
<b>327/527</b>	<b>Congress</b>	3 Cr.
	A study of the legislative processes in which emphasis is placed on the Congress of the United States and its policy-determining and directing roles. Prerequisite: POLS 120 or the consent of the chair of the department.	
<b>POLS</b>		
<b>330/530</b>	<b>Politics of Industrialized States</b>	3 Cr.
	A study of political systems in the industrialized world. Attention is directed primarily at Western and Eastern Europe, but focuses on other industrialized countries as well. Prerequisite: POLS 130 or consent of the chair of the department.	
<b>POLS</b>		
<b>332/532</b>	<b>Politics of China and East Asia</b>	3 Cr.
	This course examines the politics of contemporary China and East Asia. It traces the cultural and historical legacies affecting political life and the political processes through which nation-state, citizen-subjects, and the organizations and institutions of governance are constructed and interact. It also examines the major political challenges facing the region. Prerequisite: POLS 130 or consent of the chair of the department.	
<b>POLS</b>		
<b>333/533</b>	<b>Politics of Africa</b>	3 Cr.
	This course explores the economic, social, and political challenges facing Africa today, and places them in historical and global contexts. Key themes include democratization, the origins of conflict, and political and economic development. Prerequisite: POLS 130 or consent of the chair of the department.	
<b>POLS</b>		
<b>334/534</b>	<b>Politics of the Middle East</b>	3 Cr.
	This course explores the contemporary politics of the Arab world. It focuses on the political development and dynamics of these countries, and their relationships with each other and the rest of the world. Prerequisite: POLS 130 or consent of the chair of the department.	
<b>POLS</b>		
<b>336/536</b>	<b>Politics of Latin America</b>	3 Cr.
	This course examines the politics of Latin America, with a focus on democracy and economic development. The course includes a brief historical overview, an examination of the fight for democracy, an exploration of citizens' political views, and debate regarding major issues facing the region. A Writing in the Discipline course. Prerequisite: POLS 130 or consent of the chair of the department.	
<b>POLS</b>		
<b>342/542</b>	<b>Political Ideologies</b>	3 Cr.
	After an introduction to the concept of ideology and various approaches to studying ideologies, the course will examine many of the ideologies that developed during the twentieth century and that continue to shape the world in which we live. Topics for reading and discussion include: liberalism and conservatism, socialism and communism, fascism and nationalism, fundamentalism, liberation theology, feminism, environmentalism, and anarchism. The class will examine what each of these have in common as ideologies, how the proponents of each understand the world, and how each has been used to encourage and control political action. A Writing in the Discipline course. Prerequisite: POLS 240 or permission of the department chair.	
<b>POLS</b>		
<b>351/551</b>	<b>American Foreign Policy</b>	3 Cr.
	The various internal and external factors that influence the formulation and execution of U.S. foreign policy are examined. The course will also cover the substance of foreign policy, as well as the major international problems facing the United States today. Prerequisite: POLS 130, POLS 150, or consent of the chair of the department.	
<b>POLS</b>		
<b>352/552</b>	<b>Model United Nations</b>	3 Cr.
	This course provides an orientation to the operations of the United Nations, including current events, pressing international issues, the basics of international law, and some of the protocol and procedures of international diplomacy. The course will assist students in preparing for their roles as distinguished diplomats at one of the Model United Nations conferences held in Indiana or Illinois (attendance required). Prerequisite: POLS 130, POLS 150, or consent of the chair of the department.	

<b>POLS 343</b>	<b>Principles of Peace and Social Justice</b>	3 Cr.
	(Also offered as PHIL 343.) This course focuses on the means of establishing justice, achieving peace, and resolving conflicts nonviolently. It examines the causes (economic, political, sociological, religious and/or psychological), nature, and processes of conflict and the concepts of social justice and responsibility.	
<b>POLS 359</b>	<b>Study Abroad Field Research</b>	3 Cr.
	Students participating in Valparaiso University-sponsored study abroad programs can receive additional credit by doing research and writing a paper utilizing the resources available in the areas where they are located. All research must be approved in advance by the chair of the department.	
<b>POLS 360/560</b>	<b>Public Administration</b>	3 Cr.
	An introduction to the basic principles of administrative organization and management in government. Prerequisite: POLS 120 or consent of the chair of the department.	
<b>POLS 361/561</b>	<b>Public Policy</b>	3 Cr.
	An introduction to the study of the public policy processes, focusing on the politics and science of policy formulation, execution, and evaluation. Prerequisite: POLS 120 or consent of the chair of the department.	
<b>POLS 371/571</b>	<b>Constitutional Law I</b>	3 Cr.
	This course focuses on the analysis of Supreme Court decisions relating to judicial review, the power of national and state governments, federalism, the separation of powers, Presidential and Congressional power, and related topics. Prerequisite: POLS 120 and POLS 271, or consent of the instructor.	
<b>POLS 372/572</b>	<b>Constitutional Law II</b>	3 Cr.
	This course focuses on the analysis of Supreme Court decisions relating to the Bill of Rights, equal protection, due process, and related topics. Prerequisite: POLS 120 and POLS 271, or consent of the instructor.	
<b>POLS 381</b>	<b>Cooperative Education in Political Science I</b>	0.5-3 Cr.
	Professional work experience which clearly augments the student's classroom education. Written report required. Prerequisites: POLS 120 and approval of the chair of the department.	
<b>POLS 382</b>	<b>Cooperative Education in Political Science II</b>	0.5-3 Cr.
	Continuation of POLS 381. Prerequisites: POLS 381 and approval of the chair of the department. S/U grade.	
<b>POLS 383</b>	<b>Cooperative Education in Political Science III</b>	0.5-3 Cr.
	Continuation of POLS 381. Prerequisites: POLS 381 and approval of the chair of the department. S/U grade. May be repeated beyond 383 for additional credit.	
<b>POLS 386</b>	<b>Internship in Political Science</b>	1-7 Cr.
	Opportunities for students to have direct, supervised experience in governmental agencies, political parties, and other political organizations at the national, state, and local levels. Some internships are in conjunction with off campus programs such as the Washington semester. May be used to fulfill either an International Relations requirement or a Comparative requirement, when topics are appropriate. May be repeated for credit to a maximum of 7 credit hours. Prerequisite: POLS 130, POLS 150, and consent of the department chair.	
<b>POLS 390/590</b>	<b>Advanced Topics in Political Science I</b>	3 Cr.
	An intensive study of topics in the process, policies, and functions of political science (e.g., political parties, political psychology, etc.). May be repeated for credit if topics differ. Prerequisite: POLS 120 or consent of the chair of the department.	
<b>POLS 391/591</b>	<b>Advanced Topics in International Relations I</b>	3 Cr.
	An intensive study of topics in the process, policies, and functions of international relations or comparative political science (e.g., comparative political parties, political institutions, etc.). May be used to fulfill either an International Relations requirement or a Comparative requirement, when topics are appropriate (as determined by the department chair). Prerequisite: POLS 130 and POLS 150 or consent of the department chair. May be repeated for credit if topics are different.	

**POLS  
437/537****Comparative Public Policy**

3 Cr.

This course examines how public policies in other countries differ from those in the United States. The course focuses on the policies coming from both advanced industrialized nations, such as Britain, Japan, and Sweden, as well as from developing states such as Brazil, China, India, and South Africa. A Writing in the Discipline course. Prerequisite: POLS 130 or consent of the chair of the department.

**POLS  
438/538****Gender and Public Policy in Global Perspective**

3 Cr.

The purpose of this course is to introduce students to the role of gender and politics in different countries throughout the world. The course examines the role of women as political actors and their activities in formal and grassroots politics, and analyzes gender as a variable in public policy in different countries. Prerequisite: POLS 130 or consent of the chair of the department.

**POLS  
450/550****International Regimes and Global Governance**

3 Cr.

International regimes are systems of norms and rules agreed upon by states to govern their behavior in specific political contexts or issue areas. Thousands of formal and informal international regimes address issues ranging from arms control, trade and economic affairs, human rights, and environmental problems. This course examines the source, effectiveness, and the institutions designed to implement these various regimes. Prerequisite: POLS 130, POLS 150, or consent of the chair of the department.

**POLS  
454/554****International Political Economy**

3 Cr.

The objective of this course is to introduce students to the study of political economy, with an emphasis on the relationship between politics and economics within the context of globalization. The course draws upon concepts and approaches from political science, economics, history, and sociology in order to offer the student a broad introduction to current issues in political economy. Prerequisite: POLS 130, POLS 150, or consent of the chair of the department.

**POLS  
456/556****War and Conflict**

3 Cr.

This course focuses on the forces that promote international conflict and peace. Students will discuss the ways in which warfare has changed across history, as well as the form it is likely to take in the future. Of particular interest in the survey of international war will be the intersection between war and politics. Prerequisite: POLS 130, POLS 150, or consent of the chair of the department.

**POLS 490****Advanced Topics in Political Science II**

1-3 Cr.

These are full- or half-semester courses covering a variety of subject areas, with subtitles and content dependent on instructor choice and student interest. They are of two types, labeled accordingly: (a) reading and discussion seminars or (b) seminars with major papers.

**POLS 491****Advanced Topics in International Relations II**

1-3 Cr.

An intensive study of topics in the process, policies, and functions of international relations or comparative political science (e.g., comparative political parties, political institutions, etc.). May be used to fulfill either an International Relations requirement or a Comparative requirement, when topics are appropriate (determined by department chair). May be repeated for credit if topics differ, two POLS 491 classes may be taken concurrently if topics differ. Prerequisite: POLS 130 and POLS 150 or consent of the department chair. Note: POLS 491 is offered only as part of the Lutheran College Washington Semester.

**POLS 493****Senior Seminar in Political Science**

3 Cr.

This seminar is designed to be the place where students bring their knowledge and skills as political science majors to bear on current political topics in preparation for future service to society and active participation as citizens in a democracy.

<b>POLS 495</b>	<b>Independent Study in Political Science</b>	1-4 Cr.
	Individual research on a specific problem in one of the fields of government under the supervision of a member of the departmental staff. A written report is required. Prerequisites: junior or senior standing and consent of the chair of the department.	
<b>POLS 497</b>	<b>Honors Work in Political Science</b>	3 Cr.
	See Honors Work, page 56.	
<b>POLS 498</b>	<b>Honors Candidacy in Political Science</b>	3 Cr.
	See Honors Work, page 56.	

# Psychology

Learn more about the [Department of Psychology](#) at Valpo online.

**Professors Carlson, Nelson, Winquist; Associate Professors Morrill-Richards, Vernon (chair); Assistant Professors Buckman, Butler, Suarez, A. Thompson, Wise.**

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.

## Student Organizations

Psi Chi, the national honor society, was installed 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.

## Bachelor of Arts – Psychology Major (Minimum 27 Cr.)

<b>PSY 102</b>	Introductory Professional Development in Psychology	1.5 Cr.
<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 111</b>	Lab in General Experimental Psychology	1 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>PSY 202</b>	Research Methods in Psychology	3 Cr.
<b>PSY 302</b>	Advanced Professional Development in Psychology	1.5 Cr.
<b>PSY 493</b>	Senior Seminar	0 Cr.
<b>Foundational Core Areas</b>		<b>12 Cr.</b>

### Take four courses from the following options:

<b>PSY 215</b>	Life Span Development	3 Cr.
<b>PSY 225</b>	Social Psychology	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>PSY 245*</b>	Physiological Psychology	3 Cr.
<b>PSY 350*</b>	Human Cognition	3 Cr.

### Writing and Research

#### Take two from the following options (one must be a lab course):

<b>Courses with Labs</b>		
<b>PSY 245/</b>	Physiological Psychology	3 Cr.
<b>PSY 246</b>	Laboratory in Physiological Psychology	0+2.5, 1 Cr.
<b>PSY 250/</b>	Principles and Applications of Learning	3 Cr.
<b>PSY 251</b>	Laboratory in Principles and Applications of Learning	0+2.5, 1 Cr.
<b>PSY 345/</b>	Sensation and Perception	3 Cr.
<b>PSY 346</b>	Laboratory in Sensation and Perception	0+2.5, 1 Cr.
<b>PSY 350/</b>	Human Cognition	3 Cr.
<b>PSY 351</b>	Laboratory in Human Cognition	0+2.5, 1 Cr.
<b>PSY 370</b>	Laboratory in Experimental Design & Analysis	3 Cr.
<b>PSY 375/</b>	Human Neuropsychology	3 Cr.
<b>PSY 376</b>	Laboratory in Human Neuropsychology	0+2.5, 1 Cr.

**Courses without Labs**

<b>PSY 330</b>	Child and Adolescent Development	3 Cr.
<b>PSY 335</b>	Psychology of Personality	3 Cr.
<b>PSY 360</b>	History and Systems	3 Cr.
<b>PSY 365</b>	Psychology and Religion	3 Cr.
<b>PSY 465</b>	Psychology and Law	3 Cr.

\*Course may also be used to partially fulfill the laboratory requirement

**Bachelor of Science – Psychology Major (Minimum 27 Cr.)**

<b>PSY 102</b>	Introductory Professional Development in Psychology	1.5 Cr.
<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 111</b>	Lab in General Experimental Psychology	1 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>PSY 202</b>	Research Methods in Psychology	3 Cr.
<b>PSY 302</b>	Advanced Professional Development in Psychology	1.5 Cr.
<b>PSY 493</b>	Senior Seminar	0 Cr.

**Foundational Core Areas**

<b>Take four courses from the following options:</b>		
<b>PSY 215</b>	Life Span Development	3 Cr.
<b>PSY 225</b>	Social Psychology	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>PSY 245*</b>	Physiological Psychology	3 Cr.
<b>PSY 350*</b>	Human Cognition	3 Cr.

**Writing and Research**

<b>Take two* from the following options:</b>		
<b>PSY 245/</b>	Physiological Psychology	3 Cr.
<b>PSY 246</b>	Laboratory in Physiological Psychology	0+2.5, 1 Cr.
<b>PSY 250/</b>	Principles and Applications of Learning	3 Cr.
<b>PSY 251</b>	Laboratory in Principles and Applications of Learning	0+2.5, 1 Cr.
<b>PSY 345/</b>	Sensation and Perception	3 Cr.
<b>PSY 346</b>	Laboratory in Sensation and Perception	0+2.5, 1 Cr.
<b>PSY 350/</b>	Human Cognition	3 Cr.
<b>PSY 351</b>	Laboratory in Human Cognition	0+2.5, 1 Cr.
<b>PSY 370</b>	Laboratory in Experimental Design & Analysis	3 Cr.
<b>PSY 375/</b>	Human Neuropsychology	3 Cr.
<b>PSY 376</b>	Laboratory in Human Neuropsychology	0+2.5, 1 Cr.

**Additional Required Course:**

<b>BIO 151 (or higher)</b>	Human Anatomy and Physiology I	4 Cr.
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\*Course may also be used to partially fulfill the laboratory requirement

**Psychology Minor (Minimum 15 Cr.)**

<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.

**One course from the following options:**

<b>PSY 215</b>	Life Span Development	3 Cr.
<b>PSY 225</b>	Social Psychology	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>PSY 245</b>	Physiological Psychology	3 Cr.
<b>PSY 250</b>	Principles and Applications of Learning	3 Cr.
<b>PSY 345</b>	Sensation and Perception	3 Cr.
<b>PSY 350</b>	Human Cognition	3 Cr.
<b>PSY 375</b>	Human Neuropsychology	3 Cr.

**Six\* additional credits in Psychology**

\*Students in the College of Nursing and Health Professions are required to complete at least 18 total credits in Psychology to earn a minor

**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 advisor.

**Psychology Courses**

<b>PSY 102</b>	<b>Introductory Professional Development in Psychology</b>	1.5 Cr.
	This course exposes students to the variety of options and careers that people with an undergraduate degree in psychology may pursue. Topics include professional skill development, academic preparation for various professional paths, the process for applying to graduate school, and specific ways to maximize the student's experience as a psychology major. S/U grade only.	
<b>PSY 103</b>	<b>Mentored Research in Psychology</b>	1 Cr.
	Students will work with advanced Psychology major mentors on an independent research project. Mentors and mentees will work together to design a study, collect data, conduct statistical analyses, and prepare a poster summarizing the work. Mentees will meet with their mentors weekly. Prerequisites: freshman/sophomore standing and may not have taken PSY 202.	
<b>PSY 110</b>	<b>General Psychology</b>	3 Cr.
	An introduction to the field of psychology with strong emphasis upon the scientific study of behavior. Topics include nervous system functioning, 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.	
<b>PSY 111</b>	<b>Laboratory in General Experimental Psychology</b>	0+2.5, 1 Cr.
	Laboratory to be taken concurrently with PSY 110. Students study psychological phenomena and methods directly through various laboratory experiments. When taken with PSY 110, fulfills Natural Science component of the General Education Requirements. Prerequisite: PSY 110 (may be taken concurrently).	
<b>PSY 201</b>	<b>Statistical Methods</b>	3 Cr.
	An introduction to the fundamentals of descriptive and inferential statistics for the behavioral sciences. May be used to fulfill the Quantitative Analysis component of the General Education Requirements. Prerequisite or Corequisite: MATH 110 (or placement higher than MATH 110 on the math placement exam).	
<b>PSY 202</b>	<b>Research Methods in Psychology</b>	3 Cr.
	The basic principles and methods of research in psychology focusing on the experimental method and the skills necessary to design, carry out, interpret, and write up a research project. Prerequisite: PSY 201.	
<b>PSY 215</b>	<b>Life Span Development</b>	3 Cr.
	An exploration of the biological, cognitive, and psychosocial changes that occur across the human lifespan. Students taking this course may not also receive credit for PSY 330 and/or PSY 332. Prerequisite: PSY 110.	
<b>PSY 225</b>	<b>Social Psychology</b>	3 Cr.
	An interdisciplinary approach to the study of social influences on the psychological functioning and behavior of the individual. Prerequisite: PSY 110.	
<b>PSY 235</b>	<b>Abnormal Psychology</b>	3 Cr.
	An analysis of psychopathology within the framework of theory and research. Prerequisite: PSY 110.	
<b>PSY 245</b>	<b>Physiological Psychology</b>	3 Cr.
	A study of the structure and function of the nervous system in relation to motivation, emotion, and cognitive function. Prerequisite: PSY 110.	
<b>PSY 246</b>	<b>Laboratory in Physiological Psychology</b>	0+2.5, 1 Cr.
	Optional laboratory to be taken in conjunction with PSY 245. Prerequisite: PSY 201 and PSY 202 or consent of the instructor.	
<b>PSY 250</b>	<b>Principles and Applications of Learning</b>	3 Cr.
	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. Prerequisite: PSY 110.	

<b>PSY 251</b>	<b>Laboratory in Principles and Applications of Learning</b>	0+2.5, 1 Cr.
	Optional laboratory to be taken in conjunction with PSY 250. Prerequisite: PSY 201 and PSY 202 or consent of the instructor.	
<b>PSY 260</b>	<b>Psychotherapy and Counseling</b>	3 Cr.
	An introduction to how psychological theory, methods, and practices are applied in clinical or counseling settings. Topics include approaches for applying psychology to mental health issues, psychological procedures for assessment and treatment, and contemporary issues in the field. Prerequisite: PSY 110 and PSY 235.	
<b>PSY 270</b>	<b>Introduction to Industrial/Organizational Psychology</b>	3 Cr.
	Applications of psychological principles, techniques, and theories to the work environment. Topics will include leadership, motivation, job satisfaction, performance appraisal, employee selection, and teamwork. Prerequisite: PSY 110.	
<b>PSY 286</b>	<b>Behavioral Interventions in Developmental Disabilities</b>	2 Cr.
	An internship giving firsthand experience in utilizing behavior modification techniques to facilitate acquisition of pre-learning skills by children on the autism spectrum. Open to majors and non-majors. Prerequisite: PSY 110 and consent of the instructor. S/U grade only.	
<b>PSY 302</b>	<b>Advanced Professional Development in Psychology</b>	1.5 Cr.
	This course provides an opportunity to develop and refine professional skills that are relevant to a variety of careers that individuals with an undergraduate degree in psychology may pursue. Topics include resume and curriculum vitae preparation, employment interview skills, graduate application procedures, and ways to market one's academic, research, and professional experiences. S/U grade only. Prerequisite: PSY 102.	
<b>PSY 303</b>	<b>Mentoring Research in Psychology</b>	2 Cr.
	Students will serve as mentors to students taking PSY 103. Mentors will work with their mentees to design a study, collect data, conduct statistical analyses, and prepare a poster summarizing the work. Mentors will meet weekly with the instructor and with their mentees, separately. Prerequisites: major with junior/senior standing, a 3.000 grade point average, PSY 201, PSY 202, and consent of the instructor.	
<b>PSY 325</b>	<b>Cross-Cultural Psychology</b>	3 Cr.
	An examination of the relationship between culture and the behavior of the individual, with a particular focus on human development and adaptation. Western and non-Western approaches to the topic are considered and compared with each other, and applications to mental health issues are discussed. Prerequisite: PSY 110.	
<b>PSY 330/ COUN 530</b>	<b>Child and Adolescent Development</b>	3 Cr.
	Study of the maturational, cognitive, social, and behavioral changes associated with the development of the child through adolescence. Students taking this course may not also receive credit for PSY 215. Prerequisite: PSY 110.	
<b>PSY 332/ COUN 532</b>	<b>Psychology of Adulthood and Aging</b>	3 Cr.
	Examination of adult development from the end of adolescence to old age from a psychological perspective. Students taking this course may not also receive credit for PSY 215. Prerequisite: PSY 110.	
<b>PSY 335/ COUN 535</b>	<b>Psychology of Personality</b>	3 Cr.
	An introduction to various theories of personality, with emphasis on their implications for current psychological applications and research. Prerequisite: PSY 110.	
<b>PSY 345</b>	<b>Sensation and Perception</b>	3 Cr.
	An introduction to the study of sensory and perceptual processes and the physiological mechanisms that underlie them. Prerequisite: PSY 110.	
<b>PSY 346</b>	<b>Laboratory in Sensation and Perception</b>	0+2.5, 1 Cr.
	Optional laboratory to be taken in conjunction with PSY 345. Prerequisite: PSY 201 and PSY 202 or consent of the instructor.	
<b>PSY 350/550</b>	<b>Human Cognition</b>	3 Cr.
	The study of various aspects of human learning, memory, and thought, such as perception, attention, development of expertise, problem-solving, reasoning, and language. Prerequisite: PSY 110.	

<b>PSY 351</b>	<b>Laboratory in Human Cognition</b>	0+2.5, 1 Cr.
	Laboratory to be taken in conjunction with PSY 350. Prerequisite: PSY 201 and PSY 202 or consent of the instructor.	
<b>PSY 360/560</b>	<b>History and Systems of Psychology</b>	3 Cr.
	This course is a survey of the individuals and schools of thought that have influenced and still influence psychology. The philosophical beginnings of psychology and the development of a scientific approach to studying human nature are discussed in an attempt to understand contemporary trends in the field of psychology. Prerequisite: psychology major with junior standing and 15 credits in psychology.	
<b>PSY 365</b>	<b>Psychology and Religion</b>	2 Cr.
	A study of the similarities and differences between religious and psychological perspectives related to our understanding of the human person, including our development, health, and wellness. Psychological theory and research are discussed, and original source religious texts are studied from a psychological perspective in accompanying discussion sessions. Prerequisite: PSY 110. Corequisite: PSY 366 or PSY 367.	
<b>PSY 366</b>	<b>Christian Perspectives on Psychology and Religion</b>	1 Cr.
	A study of the similarities and differences between Christian and modern psychological understandings of the human person through study and discussion of original source Christian religious texts. The discussion is designed as a complement to material presented in PSY 365. Prerequisite: PSY 110. Corequisite: PSY 365.	
<b>PSY 367</b>	<b>Buddhist Perspectives on Psychology and Religion</b>	1 Cr.
	A study of the similarities and differences between Buddhist and modern psychological understandings of the human person through study and discussion of original source Buddhist religious texts. The discussion is designed as a complement to material presented in PSY 365. Prerequisite: PSY 110. Corequisite: PSY 365.	
<b>PSY 370</b>	<b>Laboratory in Experimental Design and Analysis</b>	3 Cr.
	Advanced study of the methodological and quantitative concepts introduced in PSY 201 and PSY 202 with an emphasis on applications of complex designs. This course may be taken to fulfill the experimental psychology course requirement. Prerequisites: PSY 201 and PSY 202.	
<b>PSY 375/575</b>	<b>Human Neuropsychology</b>	3 Cr.
	An introduction to the structure and function of the human brain, and the effects of various neurological disorders on cognition, emotion, behavior, learning, and other important aspects of the human person. Prerequisite: PSY 110 and sophomore standing, or consent of the instructor.	
<b>PSY 376</b>	<b>Laboratory in Human Neuropsychology</b>	0+2.5, 1 Cr.
	Optional laboratory to be taken in conjunction with PSY 375. Prerequisite: PSY 201 and PSY 202 or consent of the instructor.	
<b>PSY 380</b>	<b>Inside-Out Prison Exchange: Rethinking Crime, Justice, and Behavior</b>	3 Cr.
	(Also offered as SOC 380.) This Inside-Out Prison Exchange course brings together students from Valparaiso University and residents of a local correctional facility to engage in meaningful dialogue about crime, justice, the criminal justice system, imprisonment, and human behavior. It is an opportunity for all participants to gain a deeper understanding of these topics from both theoretical and practical perspectives. "Inside" and "outside" students will work together, share ideas and perceptions, and learn from one another over the course of the semester. The course is limited to juniors and seniors, and to Sociology and Psychology majors. Inclusion in the course requires completion of an application and interview, and consent of the instructors. Normally offered each spring.	
<b>PSY 390/590</b>	<b>Special Topics in Psychology</b>	1-3 Cr.
	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. May be repeated for credit, provided topics are different. Prerequisite: PSY 110.	
<b>PSY 445/ COUN 545</b>	<b>Community and Health Psychology</b>	3 Cr.
	An introduction to the theories and practice of both community psychology and health psychology with an emphasis on the relationship and synthesis of these two disciplines as well as their unique differences. Prerequisite: PSY 110 and junior standing.	

<b>PSY 465/565</b>	<b>Psychology and Law</b>	3 Cr.
	The application of psychological knowledge to the legal system. Topics will include eyewitness testimony, jury decision-making, the insanity defense, jury selection, and lie detection. Prerequisite: PSY 110 and junior standing.	
<b>PSY 470/ COUN 570</b>	<b>Testing and Measurement</b>	3 Cr.
	Principles and methods of psychological measurement and evaluation with application to specific testing situations. Course intensification option: 1 Cr. Prerequisite: PSY 201 and junior standing.	
<b>PSY 486</b>	<b>Psychology Internship: Field Experience</b>	1-3 Cr.
	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 instructor, and depending on the practicum site, PSY 260 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 in Psychology. S/U grade only.	
<b>PSY 493</b>	<b>Senior Seminar</b>	0 Cr.
	An integrative experience designed as a capstone for psychology majors. Prerequisite: PSY 110 and senior standing. S/U grade.	
<b>PSY 495</b>	<b>Independent Study in Psychology</b>	1-3 Cr.
	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 495 and/or PSY 496 may be applied to Psychology major requirements.	
<b>PSY 496</b>	<b>Independent Research in Psychology</b>	1-3 Cr.
	Individual research projects under faculty supervision involving the design of the project, data collection, and analysis. A written report is required. Prerequisites: Psychology major with junior/senior standing, a 3.000 grade point average, PSY 201 and PSY 202, and consent of the chair of the department. No more than six credit hours of PSY 495 and/or PSY 496 may be applied to Psychology major requirements.	
<b>PSY 497</b>	<b>Honors Work in Psychology</b>	3 Cr.
	See Honors Work, page 56.	
<b>PSY 498</b>	<b>Honors Candidacy in Psychology</b>	3 Cr.
	See Honors Work, page 56.	
<b>PSY 499</b>	<b>Psychology Colloquium</b>	1 Cr.
	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 only.	

# Social Work

Learn more about the [Department of Social Work](#) at Valpo online.

**Program Director/Assistant Professor C. Ban (co-chair); Field Director/Clinical Associate Professor B. Crumpacker Niedner; Clinical Assistant Professor R. Murray**

The Department of Social Work offers the Bachelor of Social Work (BSW) degree. As sought-after human service professionals, social workers seek to promote human and community wellbeing. According to the Council on Social Work Education, (CSWE), social work is:

Guided by a person-in-environment framework, a global perspective, respect for human diversity, and knowledge based on scientific inquiry, the purpose of social work is actualized through its quest for social and economic justice, the prevention of conditions that limit human rights, the elimination of poverty, and the enhancement of the quality of life for all persons, locally and globally.  
(CSWE, 2015, Educational Policy Accreditation Standards, p. 5)

Social Work is concerned with empowering people to develop capacities and strengths that will enhance social functioning. Our BSW graduates are prepared for generalist social work practice in a wide variety of settings. Alumni of our program are highly marketable and are employed in mental health services, schools, hospitals, elder care, churches, shelters, corrections, child welfare, public safety, government, policy, and other social service agencies. Our graduates often pursue the Master of Social Work (MSW) degree within five years of earning their BSW and are eligible to apply for advanced standing in many MSW programs. Advanced standing typically offers students who have earned a BSW the opportunity to complete their graduate degree in one year, rather than the typical two years.

Students who are interested in social work but are not pursuing a BSW degree have the option to choose from three minors: The Foundations Minor (provides practical skills for students going into a service-oriented field), the Direct Practice Minor (provides training and a skill set for students working directly with clients, especially for psychology, nursing, communication, foreign language, education and theology students) and the Policy Practice Minor (provides advocacy skills training and enables students to practice in real settings, especially for students interested in leadership, advocacy, communications and public policy). Becoming a minor involves taking 15 credits from a pre-set list of courses found at the bottom of this section and on our website at: <https://www.valpo.edu/social-work/academics/minor-in-social-work/>.

## Accreditation

The Department of Social Work is accredited by the Council on Social Work Education (CSWE) which is recognized by the Council for Higher Education as the sole accrediting agency for baccalaureate- and masters-level social work education in the United States.

## Mission

Valparaiso University Department of Social Work (VUDSW) educates culturally-responsive, strengths-based, system-focused generalist practitioners who seek truth, pursue research-informed practice, promote well-being and equity, value human rights, and act for social justice as they lead and serve at all levels of practice.

Valparaiso University's mission as a community of learning dedicated to excellence and grounded in the Lutheran tradition of scholarship, freedom, and faith, prepares students to lead and serve in both church and society. Our Social Work Department mission grows out of this university mission in that we provide a rigorous and stimulating educational environment characterized by a dynamic interchange between faculty and students that promotes critical thinking, conscious use of self, and active engagement in the learning process.

The VUDSW's mission promotes the purpose of social work as a profession, as defined by the Council on Social Work Education (CSWE):

The VUDSW mission, university mission and purpose of the profession undergird our program goals and curriculum.

Our vision is to foster the creation of coherent and integrated educational learning experiences that utilize an active learner model, valuing different ways of knowing, aimed at preparing students for generalist social work practice that will:

- address the whole person in the context of their environment;
- be informed by an ecological/systems and strengths perspective;
- be actively involved in advocacy, empowerment, and social change;
- serve vulnerable and oppressed people;
- implement culturally sensitive practice strategies; and
- contribute meaningfully to society by valuing service, social and economic justice, the dignity and worth of each person, importance of human relationships, and integrity and competence in all areas of generalist practice.

As a values-based profession, it is critical that those who pursue an education and career in social work be aware of and ascribe to the core values of the profession as outlined above.

## Purpose

The purpose of the Department of Social Work is to educate and prepare students for ethical, effective, and culturally competent generalist social work practice for service in the world. The program uses a competency-based educational model and outcome performance approach to curriculum and co-curricular design to meet this purpose.

## Admission Policies and Procedures for Majors and Minors

Students who wish to major or minor in social work must declare this intention with the University registrar and complete the departmental admissions process.

### *University-Level Process*

First-year students who enter the University with a declared social work major or minor need take no further action at the University level.

Students who wish to major in social work and transfer from either another department or an exploratory major must complete the proper University-level paperwork to declare a social work major and submit it to the Office of the Registrar no later than May 1st of their sophomore year.

Students who wish to minor in social work must complete the proper University-level paperwork and submit it to the Office of the Register. Social work minors should complete University-level paperwork before the Spring of their senior year.

### *Department-Level Process for Majors*

Both students who enter the University with social work as a declared major and students who change majors must complete the departmental admissions process no later than September 30th of their junior year. In order to have the process completed by this date, it should be initiated as soon as possible after entering the University or declaring the social work major with the University registrar.

The departmental admissions process is fully explained in the admissions materials which must be obtained from the Department of Social Work office in 112 Meier Hall. Requirements for formal admission include:

1. A strong desire to serve while promoting human and community well-being.
2. A cumulative overall University grade point average of 2.000.
3. A cumulative grade point average of 2.500 in Department of Social Work classes.
4. Completion of all paperwork included in the admissions materials which must exhibit college-level writing skills. Should any piece of writing submitted with the admissions application not meet faculty expectations for quality, it will be returned to the applicant for re-writing.
5. A formal interview with a member or members of the social work faculty.

In exceptional circumstances, a student may be admitted to the department with a cumulative grade point average lower than 2.000 and/or a social work grade point average lower than 2.500. In such circumstances, a student would be admitted to the department on conditional major status and encouraged to raise their overall grade point average to 2.000 and/or their social work department grade point average to 2.500 in order to remain a social work major.

### *Department-Level Process for Minors*

In order to meaningfully integrate minors in the social work community, minors are asked to complete admissions paperwork and interview with a faculty member as listed in requirements 4-5 above. This process is designed to help students build stronger relationships with faculty, staff and community. The social work minor is not accredited and therefore, minors are not required to meet the same academic, behavioral, or professional standards for majors, listed in requirements 1-3 above.

## Academic Progression Standards

In order to remain a social work major and progress through the program, students must maintain a cumulative grade point average of 2.000 and a social work department grade point average of 2.500. Should a student's grade point average fall below these requirements, she/he will be placed on conditional major status and will be allowed up to December of the junior year to raise the grade point average to the required standards. Failure to reach the required grade point average after this time frame on conditional major status will result in dismissal from the major.

Should a social work major earn an F in a course in the social work major, she/he will be allowed to retake the course one time in order to earn a passing grade. Failure to earn a passing grade the second time taking a course will result in dismissal from the major.

## Field Education in Social Work

Field education in social work sets our BSW graduates apart, as this experience fosters the integration of empirical and practice-based knowledge and promotes the development of professional competence. The field component is systematically designed around program educational competencies and is supervised and evaluated according to stringent criteria established by the Council on Social Work Education. Field Education consists of educationally directed internships in a variety of community settings. In order to graduate with the Bachelor of Social Work degree, social work majors are required to successfully complete two internships- a 100-hour

internship in the spring semester of their junior year and a 450-hour internship over the entirety of their senior year. These internships are sequential and must be completed in conjunction with specific coursework.

*Junior Internship Admission & Progression Standards*

The first required field internship takes place during the spring semester of the junior year. Screening of students for admission to the field practicum begins in the fall semester of the junior year. Social work majors must meet the following criteria in order to be considered for placement in a junior internship:

1. Successful completion of the foundation-level social work curriculum which consists of: SOCW 151, 210, 220, 240, and 260.
2. Current junior standing in the University.
3. Completion of formal entry to the department (as described above).
4. Submission of Junior Field Education Application materials which are distributed by the director of Field Education no later than the fall semester of the junior year.
5. Approval of the social work faculty.

Should a social work major not meet these requirements prior to the beginning of the second semester of the junior year, she/he will not be eligible to begin the first required field placement. In such a case, the student will be counseled out of the major or must wait until the following spring semester to re-apply for the first required field practicum.

Students must meet the following standards in order to remain eligible to participate in the field education component of the social work major.

1. Academic:
  - a. Meet the standards for academic progression as noted above
  - b. Earn at least a C+ in all practice and internship related courses (SOCW 356, 386, 455, 456, 475, 476, 485, & 486)
2. General Behavior:
  - a. Behavior in internships and courses conforming to the Social Work Code of Ethics
  - b. Adherence to the Valparaiso University Honor Code and its application as laid out in individual courses
  - c. Adherence to federal and state laws
3. Professionalism:
  - a. Demonstrate an ability to create a safe emotional environment for clients and fellow students
  - b. Respect clients and fellow students, in word and action, as valuable individuals
  - c. Seek to build on client and classmate strengths
  - d. Seek to learn client and classmates' vantage points and language used to describe related issues
  - e. Learn and adhere to basic classroom and workplace expectations
  - f. Resolve differences with clients, agency colleagues, classmates, and faculty assertively and professionally

Failure to meet these expectations will require either corrective action, dismissal from the field internship, or dismissal from the program, depending upon the nature of the problem.

*Senior Internship Admission & Progression Standards*

The second required field practicum is completed during both fall and spring semesters of the senior year. In order to be eligible for the senior-level practicum, social work majors must demonstrate the following:

1. Successful completion of all required classes
2. Satisfactory evaluation of junior field internship
3. Completion of the Senior Field Education Application which is distributed by the director of Field Education during the spring semester of the junior year
4. Must maintain the academic, behavioral, and professional standards outlined above.

In order to be eligible to remain in the senior-level internship for its entirety, social work majors must maintain the academic, behavioral, and professional standards outlined above.

**Double Major with Social Work**

Because students graduate from the Department of Social Work with a Bachelor of Social Work (BSW) degree, students wishing to have a major in addition to social work must declare social work as their first major. Those who desire to enhance their learning by pursuing co-curricular plans of a double major or minor are encouraged to do so.

**Study Abroad**

The Department of Social Work supports students in participating in off-campus study abroad. Students making this plan of action as a means to enhance the educational experience and broaden one's worldview should do so in the fall semester of their junior year, or sooner.

**Graduation**

To be eligible for the Bachelor of Social Work degree, a student must complete the prescribed curricula found on the following pages. The student must also meet the academic, behavioral, and professional standards stated above and all additional requirements for graduation established by the University.

**Student Organization & Honor Society**

The Department of Social Work has a Student Social Work Organization (SSWO), as well as an established chapter of the Phi Alpha National Social Work Honor Society. SSWO provides students with the opportunity to lead and serve around their interests within the department and on campus. Additionally, as an organization, it represents the voice of the students in formulating and modifying departmental level policies affecting academic and student affairs within the program. The Iota Lambda chapter of Phi Alpha at Valparaiso recognizes students who have achieved academic excellence in the social work major. Potential members are identified as those who exemplify the characteristics of consummate social work professionals involved in the University and community.

**Student Fees**

Upon entry into the program, in order to support learning pertaining to the competency-based curriculum, all majors are expected to participate in several on and off-campus co-curricular educational events. These hallmark opportunities require collection of an annual fee from each student which is based on a student's year in school and the experiences in which each student will partake for that upcoming year. These comprehensive fees cover costs pertaining to field education and required classroom activities and co-curricular events. Currently, these fees are set at \$350 each year for juniors and seniors, and \$90 each year for sophomores and first-year students.

Currently there are no fees for Minors. Minors and non-majors are invited to participate in social work community events, but may be asked to pay a small fee if they choose to attend events such as social work lobbying trips or as part of the Policy Practice minor curriculum in SOCW 410 and 456. For information about the typical cost for non-majors to attend the capitol lobbying trip, please contact the Administrative Assistant for social work at 219-464-5336.

**Bachelor of Social Work – Social Work Major (Minimum 45 Cr.)**

<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>SOCW 240</b>	Communication and Counseling Skills	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>SOCW 356</b>	Generalist Practice with Individuals	3 Cr.
<b>SOCW 376</b>	Junior Integrative Seminar	2 Cr.
<b>SOCW 386</b>	Junior Field Experience	2 Cr.
<b>SOCW 410</b>	Social Welfare Policy: Analysis and Advocacy	3 Cr.
<b>SOCW 455</b>	Generalist Practice with Families and Groups	3 Cr.
<b>SOCW 456</b>	Generalist Practice with Organizations and Communities	3 Cr.
<b>SOCW 475</b>	Senior Integrative Seminar I	3 Cr.
<b>SOCW 476</b>	Senior Integrative Seminar II	3 Cr.
<b>SOCW 485</b>	Senior Field Experience I	4 Cr.
<b>SOCW 486</b>	Senior Field Experience II	4 Cr.

**Additional Required Courses**

<b>PSY 110</b>	General Psychology	3 Cr.
<b>SOC 110</b>	Introduction to Sociology	3 Cr.
<b>One of the following research methods sequences</b>		<b>6 Cr.</b>
<b>SOCW 365</b>	Research and Statistics: Methods	3 Cr.
<b>SOCW 366</b>	Research and Statistics: Implementation	3 Cr.
<b>OR</b>		
<b>SOC 319</b>	Research Methods I: Quantitative Survey Analysis	3 Cr.
<b>SOC 320</b>	Research Methods II: Data Analysis	3 Cr.
<b>OR</b>		
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>PSY 202</b>	Research Methods in Psychology	3 Cr.

## Social Work Foundations Minor (Minimum 15 Cr.)

Fifteen credits from the following options:

<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>SOCW 240</b>	Communication and Counseling Skills	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>SOCW 290</b>	Topics in Social Work	2-3 Cr.

## Social Work Direct Practice Minor (15 Cr.)

<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>SOCW 240</b>	Communication and Counseling Skills	3 Cr.
<b>SOCW 356</b>	Generalist Practice with Individuals	3 Cr.
<b>SOCW 455</b>	Generalist Practice with Families and Groups	3 Cr.

## Social Work Policy Practice Minor (15 Cr.)

<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>SOCW 410</b>	Social Welfare Policy: Analysis and Advocacy	3 Cr.
<b>SOCW 456</b>	Generalist Practice with Organizations and Communities	3 Cr.

## Social Work Courses

### **SOCW 151 Introduction to the Profession of Social Work**

3 Cr.

This course introduces students to social work, one of the most dynamic and diverse professions in the public service arena. From a beginning look at its historical roots, to the wide variety of practice arenas, students will gain a preliminary understanding of foundational theory and conceptual materials required for effective generalist practice and essential skills necessary to develop professional and personal success. The course is intended for social work majors, minors, exploratory students, and those considering a double major or work in the human service field. Twenty-five hours of out-of-class self-directed learning experiences are required. Fifteen to twenty of the twenty-five hours will be community volunteering. Fulfills the Social Science General Education requirement.

### **SOCW 210 Social Welfare Policy: History and Programs**

3 Cr.

An overview of the history of social welfare programs in the United States, and the economic, social, and political forces that shape the structure of the American welfare system. Policy issues, including health and mental health services, anti-poverty programs, corrections, housing, employment, children's issues, and human rights, are examined with emphasis on how these policies impact populations at risk. Fulfills the Social Science component of the General Education Requirements. Some sections may fulfill the Writing Intensive Course (WIC) General Education requirement.

### **SOCW 220 Human Behavior and Social Environment**

3 Cr.

An introduction to the study of the interacting forces of biology, psychology, social systems, and cultural variables that affect human development and behavior. General Systems Theory provides the theoretical foundation for the course, which also introduces a variety of other theoretical frameworks that apply to different social groups (friendship, family, organization, community). Gender, race, sexual orientation, and social class issues related to human development and interaction are explored. Fulfills the Social Science component of the General Education Requirements.

<b>SOCW 240</b>	<b>Communication and Counseling Skills</b>	3 Cr.
	This course is a unique experiential and introductory interviewing course where students critically examine and learn about foundational theory for communication and counseling skills. Additionally, they learn elements of basic counseling theory, the overarching helping process in a multicultural context, and then apply theoretical frameworks in videotaped and cross-cultural exchanges. Built on social work systems theory and the strengths perspectives, students gain experience in applying theory and skills with sensitivity to work with people from diverse backgrounds. The aim is for students to develop beginning level intentional competence as communicators, interviewers, and change agents with client systems.	
<b>SOCW 260</b>	<b>Diverse Populations: Human Rights &amp; Justice</b>	3 Cr.
	This course introduces students to some of the diversity factors by which people self-define or are defined by others. Students will learn social work theories and practices relevant to understanding human diversity and how it is sometimes used as an excuse for oppression, as well as strategies to address human rights and social justice issues involved in such situations. Prerequisite: junior/senior status. May be used to fulfill either the Cultural Diversity course component or to fulfill the Social Science component of the General Education Requirements, but not both.	
<b>SOCW 290</b>	<b>Topics in Social Work</b>	2-3 Cr.
	A study of selected topics reflective of contemporary concerns 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. May be repeated if topics are different.	
<b>SOCW 356</b>	<b>Generalist Practice with Individuals</b>	3 Cr.
	An integrated theory and practice course that introduces the planned change process and the Generalist Intervention Model for social work practice. Theories, concepts, and ethical models are presented as a framework for generalist social work intervention at the micro-level. Prerequisites: SOCW 151, SOCW 220, and SOCW 240.	
<b>SOCW 365</b>	<b>Research and Statistics: Methods</b>	3 Cr.
	This course covers multiple, interrelated topics necessary to plan an independent research project. These topics include univariate, bivariate, and multivariate statistics, using and interpreting statistical software, researching and writing a literature review, developing a research proposal based on a literature review, instrument design, research methods planning, and IRB application drafting. Prerequisites: SOCW 151, SOCW 210, SOCW 220, SOCW 240, and SOCW 260. Prerequisite or Corequisite: MATH 110	
<b>SOCW 366</b>	<b>Research and Statistics: Implementation</b>	3 Cr.
	This course involves application of the previously planned content from SOCW365. Students will implement the research projects that were planned (proposal, methods, instrumentation, IRB) previously. This includes data collection, data analysis, presentation (oral and poster) preparation and implementation, and research paper writing. May be used to fulfil the Quantitative Analysis component of the General Education Requirements. Prerequisite: SOCW 365.	
<b>SOCW 376</b>	<b>Junior Integrative Seminar</b>	2 Cr.
	Taken concurrently with SOCW 356 and SOCW 386, students apply frameworks and skills learned to work with real client systems in the agency context of practice. This course provides junior students with an integrative seminar and entry-level field experience where they are introduced to the overarching social work core competency educational model and begin to develop a professional social work identity in the delivery of that model. Prerequisites: SOCW 151, SOCW 210, SOCW 220, SOCW 240, and SOCW 260. Corequisites: SOCW 356 and SOCW 386.	
<b>SOCW 386</b>	<b>Junior Field Experience</b>	2 Cr.
	This course represents the entry level field experience portion of the junior social work practice experience. Utilizing the Core Competency Educational Curriculum model, students apply learning to an educationally directed field practicum of 100 hours in a community social service setting. Background checks needed. Prerequisites: SOCW 151, SOCW 210, SOCW 220, SOCW 240, and SOCW 260. Corequisites: SOCW 356 and SOCW 376.	
<b>SOCW 390</b>	<b>Advanced Topics in Social Work</b>	2-3 Cr.
	A study of selected topics reflective of contemporary issues of practice or methodology in social work, such as family therapy, supervision, community organization, and integrating social work into other fields. Listings are announced. Junior standing or consent of the department chair required. May be repeated if topics are different.	

<b>SOCW 395</b>	<b>Independent Study</b>	1-3 Cr.
	This curricular offering gives students an opportunity to independently examine a topic in depth beyond the traditional social work courses. Credit is based on the anticipated length and rigor of the project. Students are required to be in good standing and have at least a 2.500 grade point average. Students are assigned a faculty mentor for the project based on faculty expertise and workload. Prerequisite: junior standing and consent of the chair of the department.	
<b>SOCW 410</b>	<b>Social Welfare Policy: Analysis and Advocacy</b>	3 Cr.
	An intensive study of the contemporary and historical forces that shape social welfare policy in the United States. Particular attention is given to interpreting and applying ethical principles to social policy, analyzing competing vested interests and their influence, and tracing the implementation process. Students collectively advocate for policy change at the state level. Each student selects a specific policy to analyze using course content. Sophomore standing and SOCW 210.	
<b>SOCW 455</b>	<b>Generalist Practice with Families and Groups</b>	3 Cr.
	This course expands the focus of theory and practice to work with families and groups. Students practice engaging, assessing, and intervening at the micro and mezzo level. Prerequisite: SOCW 356.	
<b>SOCW 456</b>	<b>Generalist Practice with Organizations and Communities</b>	3 Cr.
	This course extends the focus of theory and practice to work with organizations and communities. This macro-level class is experientially based and entails the planning and execution of projects and events in the Department of Social Work, the University, and the city of Valparaiso more broadly. Prerequisite: SOCW 410.	
<b>SOCW 475</b>	<b>Senior Integrative Seminar I</b>	3 Cr.
	This course is the first segment of the senior social work practice sequence where students prepare for competent and effective social work as beginning generalist practitioners by reflecting upon and integrating course work with the field experience. Senior standing and Social Work major required. Prerequisites: SOCW 356, and SOCW 386. Corequisites: SOCW 455 and SOCW 485.	
<b>SOCW 476</b>	<b>Senior Integrative Seminar II</b>	3 Cr.
	This course is the continuation of and the final professional foundation course in the senior social work practice sequence where students prepare for competent and effective social work as beginning generalist practitioners by reflecting upon and integrating course work with the field experience. Senior standing and Social Work major required. Prerequisites: SOCW 455 and SOCW 485. Corequisite: SOCW 456 and SOCW 486.	
<b>SOCW 485</b>	<b>Senior Field Experience I</b>	4 Cr.
	This course represents the field experience portion of the senior social work practice sequence where students prepare for competent and effective social work as beginning generalist practitioners by reflecting upon and integrating course work with the field experience. Utilizing the Core Competency Educational Curriculum model, students apply learning to an educationally directed field practicum of 225 hours in a community social service setting. Background checks are needed. Senior standing and Social Work major required. Prerequisites: SOCW 356 and SOCW 386. Corequisites: SOCW 455 and SOCW 475.	
<b>SOCW 486</b>	<b>Senior Field Experience II</b>	4 Cr.
	This course is the continuation and final professional foundation course in the senior social work practice sequence where students prepare for competent and effective social work as beginning generalist practitioners by reflecting upon and integrating course work with the field experience. Utilizing the Core Competency Educational Curriculum model, students apply learning to an educationally directed field practicum of 225 hours in a community social service setting. Senior standing and Social Work major required. Prerequisites: SOCW 455 and SOCW 485. Corequisite: SOCW 456 and SOCW 476.	
<b>SOCW 497</b>	<b>Honors Work in Social Work</b>	3 Cr.
	See Honors Work, page 56.	
<b>SOCW 498</b>	<b>Honors Candidacy in Social Work</b>	3 Cr.
	See Honors Work, page 56.	

# Sociology and Criminology

Learn more about the [Department of Sociology and Criminology](#) at Valpo online.

**Professors D. Bartusch, Yogan; Associate Professor Lavin-Loucks (interim chair); Assistant Professors Blake, Raridon.**

The Department of Sociology encompasses the disciplines of sociology, criminology, and anthropology, 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 complex ways social institutions shape behavior, 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 and social structures in a wide variety of cultural and social settings.

The department's programs seek to help students achieve awareness of the world in which they live, and of the causes and consequences of human social behavior. Its basic objective is to help students 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 world 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 coursework that prepares students for a range of intellectual, professional, and occupational interests. Students who major in sociology may elect to concentrate either in general sociology or criminology. The department also offers minors in both general sociology and criminology.

## **General Sociology Major**

The general sociology major is intended for students interested in understanding society and social behavior. This major 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 general sociology major also prepares students for graduate study in sociology and/or law. Students who seek careers involving agency administration should consider the Fundamentals of Business Minor (page 350).

## **Sociology Major with Criminology Concentration**

Students who are interested in the study of crime and criminal behavior are encouraged to concentrate in criminology. This concentration encourages students to think critically about crime, law, and justice. Students will complete coursework in subjects such as juvenile delinquency, criminological theory, policing and society, or the sociology of law. Students must complete at least one internship during their junior or senior year.

## **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.

**Bachelor of Arts – General Sociology Major (Minimum 33 Cr.)**

<b>Common Core</b>		<b>21 Cr.</b>
SOC 102	Introductory Professional Development in Sociology	1.5 Cr.
SOC 110	Introduction to Sociology	3 Cr.
SOC 275	Inequality in America	3 Cr.
SOC 302	Advanced Professional Development in Sociology	1.5 Cr.
SOC 310	Development of Sociological Theory	3 Cr.
SOC 319	Research Methods I: Quantitative Survey Analysis	3 Cr.
SOC 320	Research Methods II: Data Analysis	3 Cr.
SOC 493	Senior Seminar	3 Cr.
<b>Sociology Concentration</b>		<b>12 Cr.</b>
<b>Two additional 200-level Sociology courses</b>		
<b>Two additional 300- or 400-level Sociology courses</b>		

**Bachelor of Arts – Sociology Major with Criminology Concentration (Minimum 36 Cr.)**

<b>Common Core</b>		<b>21 Cr.</b>
SOC 102	Introductory Professional Development in Sociology	1.5 Cr.
SOC 110	Introduction to Sociology	3 Cr.
SOC 275	Inequality in America	3 Cr.
SOC 302	Advanced Professional Development in Sociology	1.5 Cr.
SOC 310	Development of Sociological Theory	3 Cr.
SOC 319	Research Methods I: Quantitative Survey Analysis	3 Cr.
SOC 320	Research Methods II: Data Analysis	3 Cr.
SOC 493	Senior Seminar	3 Cr.
<b>Criminology Concentration</b>		<b>15 Cr.</b>
SOC 130	The Criminal Justice System	3 Cr.
SOC 311	Criminological Theory	3 Cr.
SOC 386	Internship in Sociology/Criminology	3 Cr.
<b>One course from the following options:</b>		
SOC 270	Juvenile Delinquency	3 Cr.
SOC 280	Media and Crime	3 Cr.
SOC 350	Police in Society	3 Cr.
SOC 360	Penology	3 Cr.
SOC 370	Sociology of Law	3 Cr.
SOC 391	Issues in Criminology	3 Cr.
<b>One additional Sociology course at 200-level or higher</b>		<b>3 Cr.</b>

**Sociology Minor (Minimum 18 Cr.)**

SOC 110	Introduction to Sociology	3 Cr.
SOC 275	Inequality in America	3 Cr.
SOC 310	Development of Sociological Theory	3 Cr.
<b>Two 200- or 300-level Sociology courses</b>		<b>6 Cr.</b>
<b>One 300- or 400-level Sociology course</b>		<b>3 Cr.</b>

**Criminology Minor (Minimum 18 Cr.)**

<b>SOC 130</b>	The Criminal Justice System	3 Cr.
<b>SOC 275</b>	Inequality in America	3 Cr.
<b>SOC 311</b>	Criminological Theory	3 Cr.
<b>Three courses from the following options:</b>		
<b>SOC 270</b>	Juvenile Delinquency	3 Cr.
<b>SOC 280</b>	Media and Crime	3 Cr.
<b>SOC 286</b>	Criminal Justice in Norway	3 Cr.
<b>SOC 291</b>	Topics in Criminology	3 Cr.
<b>SOC 350</b>	Police in Society	3 Cr.
<b>SOC 360</b>	Penology	3 Cr.
<b>SOC 370</b>	Sociology of Law	3 Cr.
<b>SOC 386</b>	Internship in Sociology/Criminology	3 Cr.
<b>SOC 391</b>	Issues in Criminology	3 Cr.

**Credit by Examination**

Credit for SOC 110 may be earned through the College Level Examination Program in Introductory Sociology.

**Plan of Study**

Students pursuing a major or minor in sociology must have a plan of study approved by their departmental advisor. Students are advised to take SOC 102 when they begin work toward the major; SOC 110, SOC 130, and SOC 275 during their freshman or sophomore year; SOC 310, SOC 311, SOC 319, and SOC 320 during their junior year; and SOC 302 and SOC 493 during their senior year. The internship course (SOC 386) may be taken during the junior or senior year.

**General Education Requirements**

With the exception of SOC 102 and SOC 302, courses in sociology partially fulfill the Social Science Requirement of the General Education Requirements. Two sociology courses (SOC 210 and SOC 275) partially fulfill the Cultural Diversity Requirement of the General Education Requirements. One sociology course (SOC 319) fulfills the Quantitative Analysis Requirement of the General Education Requirements.

**Level I Courses**

Level I courses are designed to give students a broad overview of sociology. These courses typically expose the student to many different sociological topics and are taught at the introductory level.

<b>SOC 102</b>	<b>Introductory Professional Development in Sociology</b>	1.5 Cr.
This course exposes students to the various careers that people with an undergraduate degree in sociology or criminology may pursue. Topics include professional skill development, introduction to sociological research, and ways to maximize the student's experience as a sociology major. Graded on an S/U basis. May not be used to fulfill the Social Science component of the General Education requirements.		
<b>SOC 110</b>	<b>Introduction to Sociology</b>	3 Cr.
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. Normally offered every semester.		
<b>SOC 130</b>	<b>The Criminal Justice System</b>	3 Cr.
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 semester.		

## **Level II Courses**

Level II courses focus on one broad sociological topic and provide information about fundamental concepts and theoretical approaches used within sociology. No prerequisites.

<b>SOC 210</b>	<b>Contemporary Social Problems</b>	3 Cr.
	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. Specific topics can include poverty, homelessness, racism, sexism, drug abuse, crime, juvenile delinquency, and violence. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Normally offered during the summer.	
<b>SOC 220</b>	<b>The Family</b>	3 Cr.
	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.	
<b>SOC 235</b>	<b>Education and Society</b>	3 Cr.
	This course explores the question of whether schools effectively level the playing field for those most disadvantaged in our society or exacerbate trenchant disparities. The course considers historical perspectives regarding the purpose of education; theoretical approaches to inequality in education; demographic differences in educational outcomes over time; family, peer, school context, and neighborhood effects on education; and the effect of social policies on schools and educational outcomes.	
<b>SOC 240</b>	<b>Food Systems</b>	3 Cr.
	This course uses a sociological lens to trace the history of agricultural transformations in the United States and abroad, and the political dynamics of where, why, and how we grow, harvest, process, package, distribute, eat, and dispose of food. Students will consider their own relationships to food and agriculture and evaluate how they can make local and global food systems more sustainable and just.	
<b>SOC 245</b>	<b>Social Psychology</b>	3 Cr.
	The social-psychological study of the ways society influences the behavior of the individual. Course focuses on the theoretical approaches of symbolic interaction, social exchange, and dramaturgical analysis. Normally offered during the spring semester.	
<b>SOC 255</b>	<b>Sociology of Health and Health Care</b>	3 Cr.
	This course examines the social sources and social distribution of illness in the United States and other countries. Other topics which are examined include aging, mental illness, bioethics, the profession of medicine, and health care institutions. University students work off-site with local residents to examine the effects of aging, stress, and other demographic characteristics on health. Normally offered every fall.	
<b>SOC 260</b>	<b>Deviance</b>	3 Cr.
	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 deviation. Field trips may be scheduled. Normally offered during the fall semester.	
<b>SOC 270</b>	<b>Juvenile Delinquency</b>	3 Cr.
	A criminological course that focuses specifically on crime committed by youth, typically early through late adolescence. This course explores the nature and extent of delinquency, theory and research, and societal responses to delinquency. Normally offered every fall.	
<b>SOC 275</b>	<b>Inequality in America</b>	3 Cr.
	This course examines inequality in the U.S. based on the categories of race, ethnicity, class, gender, and sexuality. It examines how these categories are socially constructed and how social institutions maintain inequalities based on them. The course also considers mechanisms of social change to address inequality in America. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Normally offered every semester.	

<b>SOC 280</b>	<b>Media and Crime</b>	3 Cr.
	This course examines the complex relationships among media, crime, and the criminal justice system. Special emphasis is placed on television news media and the pervasiveness of crime and criminological theory in Hollywood cinema. Course content includes an evaluation of how the media reports and frames crime, fundamentally influencing public perception. In addition, students will develop a sense of how the media simultaneously acts as a catalyst for, a consequence of, and a solution to the crime problem. Normally offered in the fall of even numbered years.	
<b>SOC 285</b>	<b>Ireland: An Interdisciplinary Experience</b>	3 Cr.
	This short-term study abroad course provides a cultural immersion experience in Ireland. Lectures and experiential learning encompass a variety of topics including healthcare in Ireland, Irish history, and conflict resolution with a focus on the “Troubles” of Northern Ireland. Tours of health care related facilities, schools, and universities, as well as relevant historical sites will be included. Travel to Ireland is required. Graded on an S/U basis. May be used to fulfill the Social Science component of the General Education requirements.	
<b>SOC 286</b>	<b>Criminal Justice in Norway</b>	3 Cr.
	This short-term study abroad course provides a cultural immersion experience in Norway. Lectures and experiential learning provide an opportunity to understand criminal justice in Norway, including the construction of laws, policing practices, sentencing, and correctional alternatives. Tours of prisons will be included. Travel to Norway is required. Graded on an S/U basis. May be used to fulfill the Social Science component of the General Education requirements.	
<b>SOC 290</b>	<b>Topics in Sociology</b>	3 Cr.
	A survey course focusing on topics from a sociological perspective generally involving the interplay between social structure(s) and social interaction(s). The exact topic of the course may vary each time this course is offered. Topics may include: criminal investigations, sport and society, cyber communities, religion and society, high school culture and education, healthcare and/or organizational behavior. May be repeated for credit if topics are different.	
<b>SOC 291</b>	<b>Topics in Criminology</b>	3 Cr.
	A survey course focused on gaining understanding of topics from a criminological perspective. The exact topics addressed by the course may vary each time this course is offered. Topics may include: criminal investigations, cybercrime, comparative justice systems, interpersonal violence, white collar crime, or other central themes in criminology. May be repeated for credit if topics are different.	

### **Level III Courses**

Level III courses are designed to provide depth of experience and understanding in narrow subject areas.

<b>SOC 302</b>	<b>Advanced Professional Development in Sociology</b>	1.5 Cr.
	This course provides an opportunity to develop and refine professional skills that are relevant to a variety of careers that individuals with an undergraduate degree in sociology or criminology may pursue. Topics include resume preparation, employment interview skills, and graduate and law school application procedures. Graded on an S/U basis. May not be used to fulfill the Social Science component of the General Education requirements. Prerequisite: Junior standing and SOC 102.	
<b>SOC 310/510</b>	<b>Development of Sociological Theory</b>	3 Cr.
	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. Prerequisite: Grade of C- or higher in SOC 110. Normally offered every fall.	
<b>SOC 311/511</b>	<b>Criminological Theory</b>	3 Cr.
	Study of the major sociological theories of crime. Considers how crime is defined and measured, and how society responds to criminal behavior. Required of all sociology majors with the concentration in criminology. Prerequisite: Grade of C- or higher in SOC 110 or 130. Normally offered every spring.	

**SOC****315/515****Mass Media and Society**

3 Cr.

This course examines the overall structure and scope of the media as a social institution. Students will explore the social factors (e.g., economics, politics, technology, law, and culture) that shape media messages and the way in which media images and meanings frame social issues and affect public discourse and individual beliefs. Topics include social inequality (based on race, ethnicity, social class, and gender), media representations, social change, and public policy, among others. Prerequisite: SOC 110 or consent of the instructor. Normally offered in the spring of odd numbered years.

**SOC****319/519****Research Methods I: Quantitative Survey Analysis**

3 Cr.

This course will provide students with the skills necessary to collect, understand, compute, analyze, and interpret introductory-level quantitative data. Students will develop and apply increasingly sophisticated quantitative reasoning techniques with an existing dataset. Students will also create and distribute a survey and analyze the resulting data. This course will enable students to become critical consumers of statistical information presented in other classes, the media, politics, workplaces, and throughout their daily lives. Required of all majors. May be used to fulfill the Quantitative Analysis component of the General Education requirements. Prerequisite: Grade of C- or higher in SOC 110. Prerequisite or Corequisite: MATH 110 (or placement higher than MATH 110 on the math placement exam). Normally offered every fall.

**SOC****320/520****Research Methods II: Data Analysis**

3 Cr.

An applied introduction to collecting and analyzing primary data. Students will practice data collection and analysis techniques used by social scientists, and specifically sociologists. Students will conduct survey analysis, participant observations, in-depth interviews, and content analysis of existing artifacts, and practice how to document, code, analyze, and present data they collect. Students will also critique examples of sociological research and draft a proposal for the Senior Seminar research project. Required of all majors. A Writing in the Discipline course. Prerequisite: Grade of C- or higher in SOC 319. Normally offered every spring.

**SOC****325/525****Urban Sociology**

3 Cr.

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 fall of even numbered years.

**SOC****340/540****Gender**

3 Cr.

An introduction to 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 those are interpreted through history, language, sexuality, race, family structure, dating patterns, religion, and work environments. Prerequisite: SOC 110, SOC 275, or consent of the instructor. Normally offered each spring of odd-numbered years.

**SOC****350/550****Police in Society**

3 Cr.

An examination of the history, structure, and behavior of the police in American society and other selected countries/societies. Students will learn about the history of American policing, police practices, the relationship of the police system to the constitution and local and national society. Overall emphasis is on the description and analysis of the police as part of a culture's broader system of social control. Prerequisite: SOC 110, SOC 130, or consent of the instructor. Normally offered each spring of even-numbered years.

**SOC****360/560****Penology**

3 Cr.

A critical social scientific examination of prisons, jails, community corrections, and paroling authorities with emphasis on both historical development and current trends. Field trips may be scheduled. Prerequisite: SOC 110, SOC 130, or consent of the instructor. Normally offered each fall of even-numbered years.

**SOC****370/570****Sociology of Law**

3 Cr.

The study of the place of law in society, the relationship between law and social change, law and other social institutions. Prerequisite: SOC 110, SOC 130, or consent of the instructor. Normally offered each spring of odd-numbered years.

<b>SOC 380</b>	<b>Inside-Out Prison Exchange: Rethinking Crime, Justice, and Behavior</b>	3 Cr.
	(Also offered as PSY 380.) This Inside-Out Prison Exchange course brings together students from Valparaiso University and residents of a local correctional facility to engage in meaningful dialogue about crime, justice, the criminal justice system, imprisonment, and human behavior. It is an opportunity for all participants to gain a deeper understanding of these topics from both theoretical and practical perspectives. "Inside" and "outside" students will work together, share ideas and perceptions, and learn from one another over the course of the semester. The course is limited to juniors and seniors, and to Sociology and Psychology majors. Inclusion in the course requires completion of an application and interview, and consent of the instructors. Normally offered each spring.	
<b>SOC 386</b>	<b>Internship in Sociology/Criminology</b>	3 Cr.
	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. Experience and workload vary with both the field of study and the agency assignment. Required of all criminology students, recommended for all others. Graded on an S/U basis. Fulfills the Social Science General Education requirement. Prerequisites: Junior standing, consent of the internship coordinator, and grade of C- or higher in SOC 110 or SOC 130. Normally offered each spring and second summer session.	
<b>SOC 390/590</b>	<b>Issues in Sociology</b>	3 Cr.
	An exploration of some of the issues debated by sociologists today. Issues may include racism, aging in America, class structures in the US, religion and the media, or other current social issues. May be repeated for credit if the issues are different. Prerequisite: SOC 110, SOC 130 or consent of the instructor.	
<b>SOC 391/591</b>	<b>Issues in Criminology</b>	3 Cr.
	An exploration of some of the issues debated by criminologists today. Issues may include feminist or Marxist criminology, criminal deviance, victimology, and cross-cultural comparative crime. May be repeated for credit if the issues are different. Prerequisite: SOC 110, SOC 130 or consent of the instructor.	
<b>SOC 481</b>	<b>Cooperative Education in Sociology/Criminology I</b>	1-3 Cr.
	Work experience in a cooperating public or private service agency. Written reports required. Prerequisites: Junior standing and approval of the chair of the department.	
<b>SOC 482</b>	<b>Cooperative Education in Sociology/Criminology II</b>	1-3 Cr.
	Continuation of SOC 481. Prerequisites: SOC 481 and approval of the chair of the department.	
<b>SOC 483</b>	<b>Cooperative Education in Sociology/Criminology III</b>	1-3 Cr.
	Continuation of SOC 482. Prerequisites: SOC 482 and approval of the chair of the department. May be repeated beyond 483 for additional credit.	
<b>SOC 486</b>	<b>Internship in Sociology/Criminology II</b>	3 Cr.
	Continuation of SOC 386 internship or second internship opportunity. Graded on an S/U basis. Prerequisite: SOC 386.	
<b>SOC 493</b>	<b>Senior Seminar</b>	3 Cr.
	An integrative reading, discussion, and research course that applies prior sociological knowledge to contemporary concerns and problems. Required of all majors. Prerequisites: Grade of C- or higher in SOC 320, and either SOC 310 or SOC 311. Normally offered every fall.	
<b>SOC 495</b>	<b>Independent Study in Sociology/Criminology</b>	1-4 Cr.
	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.	
<b>SOC 497</b>	<b>Honors Work in Sociology</b>	3 Cr.
	See Honors Work, page 56.	
<b>SOC 498</b>	<b>Honors Candidacy in Sociology</b>	3 Cr.
	See Honors Work, page 56.	

# Theatre

Learn more about the [Department of Theatre](#) at Valpo online.

## Professors Heckler, A. Kessler (chair), Orchard, R.A. White; Assistant Professor Gutshall.

The Theatre Department prepares students for service to a society in which knowledge of the theatre arts is critical 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 serves: (1) majors and minors who are preparing for careers in theatre and allied disciplines or in industries where knowledge of theatre 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 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. Moreover, the study of dramatic literature is given special prominence in the curriculum.

## Specialized Minors

### Acting Minor (Minimum 18 Cr.)

<b>THTR 134</b>	Voice and Diction	3 Cr.
<b>THTR 136</b>	Movement for the Theatre	3 Cr.
<b>THTR 230</b>	Costume and Makeup	2+2, 3 Cr.
<b>THTR 235</b>	Acting I	2+2, 3 Cr.
<b>THTR 335</b>	Acting II	2+2, 3 Cr.

Three additional credits of approved THTR electives

### Musical Theatre Minor (Minimum 18 Cr.)

<b>THTR 134</b>	Voice and Diction	3 Cr.
<b>THTR 136</b>	Movement for the Theatre	3 Cr.
<b>THTR 235</b>	Acting I	2+2, 3 Cr.
<b>THTR 289</b>	Dance Styles and Techniques	3 Cr.
<b>THTR 297</b>	Musical Theatre Dance	3 Cr.

Three additional credits of THTR electives 200-level or higher.

### Theatre Production Minor (Minimum 18 Cr.)

<b>THTR 129</b>	Basic Stagecraft	2+2, 3 Cr.
<b>THTR 230</b>	Costume and Makeup	2+2, 3 Cr.
<b>THTR 235</b>	Acting I	2+2, 3 Cr.
<b>THTR 431</b>	Play Directing	2+2, 3 Cr.

One course from the following options:

<b>THTR 238</b>	Theatre and Culture I	3 Cr.
<b>THTR 239</b>	Theatre and Culture II	3 Cr.
<b>THTR 337</b>	American Theatre	3 Cr.
<b>THTR 390</b>	Topics and Projects	3 Cr.

Three additional credits of approved THTR electives

### Theatre Design Minor (Minimum 18 Cr.)

<b>THTR 129</b>	Basic Stagecraft	2+2, 3 Cr.
<b>THTR 230</b>	Costume and Makeup	2+2, 3 Cr.
<b>THTR 231</b>	Scenery and Lighting	2+2, 3 Cr.

One course from the following options:

<b>THTR 238</b>	Theatre and Culture I	3 Cr.
<b>THTR 239</b>	Theatre and Culture II	3 Cr.
<b>THTR 337</b>	American Theatre	3 Cr.
<b>THTR 390</b>	Topics and Projects	3 Cr.

Six additional credits of approved THTR electives

## Approval of Schedules

All students pursuing a major or minor in Theatre must have their schedules approved by the chair of the department or a designated departmental advisor at the beginning of each semester.

## The University Theatre

A co-curricular venue for the study and practice of theatre art, 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 four major productions, an annual concert of dance, experimental theatre, student-directed plays, 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.

## Theatre Courses

<b>THTR 101</b>	<b>Introduction to Theatre</b>	3 Cr.
	An introduction to the field of theatre, surveying the development of performance and design, technology and dramatic literature, especially during the past twenty-five years. Field trip to Chicago. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 129</b>	<b>Basic Stagecraft</b>	2+2, 3 Cr.
	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.	
<b>THTR 130</b>	<b>Theatre Practicum: Stage Management</b>	0+2, 1 Cr.
	Theatre is an endeavor that is best learned through practice. This course serves as a laboratory in stage management. This course may be repeated up to maximum of two credit hours.	
<b>THTR 131</b>	<b>Theatre Practicum: Scenery and Lighting</b>	0+2, 1 Cr.
	Theatre is an endeavor that is best learned through practice. This course serves as a laboratory in the construction and handling of scenery, lighting, and sound properties. This course may be repeated up to maximum of two credit hours.	
<b>THTR 132</b>	<b>Theatre Practicum: Costume and Makeup</b>	0+2, 1 Cr.
	Theatre is an endeavor that is best learned through practice and this course serves as a laboratory in the construction and handling of costumes, hair, and makeup. This course may be repeated up to maximum of two credit hours.	
<b>THTR 133</b>	<b>Theatre Practicum: Performance</b>	0+2, 1 Cr.
	Students may receive academic credit for their work in a faculty directed stage production. Admission by audition only. This course may be repeated for credit.	
<b>THTR 134</b>	<b>Voice and Diction</b>	3 Cr.
	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.	
<b>THTR 136</b>	<b>Movement for the Theatre</b>	3 Cr.
	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 spring semester.	
<b>THTR 230</b>	<b>Costume and Makeup</b>	2+2, 3 Cr.
	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. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 231</b>	<b>Scenery and Lighting</b>	2+2, 3 Cr.
	An introduction to the process of designing scenery and lighting for the stage. The course covers the basics in conceptualizing, drafting, drawing, and presenting of scenic and lighting designs. Offered spring semester, odd-numbered years. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 129.	

<b>THTR 232</b>	<b>Educational Outreach Theatre</b>	2+2, 3 Cr.
	Students will be introduced to the theories, methods, and performance practices of Educational Outreach Theatre and will explore theatre techniques used outside of traditional theatre professions, focusing especially on theatre's use in instruction and social interaction. Fieldwork for this course will include performances of plays, developed and rehearsed in class, in local schools. This interdisciplinary course will be useful for students preparing for a variety of professions. Offered in the spring semester, even-numbered years. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 235</b>	<b>Acting I</b>	2+2, 3 Cr.
	An introduction to basic acting technique. Students examine ways to construct the interior, physical, and vocal life of a character and learn warm-up procedures, rehearsal strategies, and staging principles. Experiences include scene study and character analysis; performance of monologues and improvisations; field trips. Offered spring semester. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 238</b>	<b>Theatre and Culture I</b>	3 Cr.
	A study of European theatre history and dramatic literature from ancient Greece to the Renaissance, featuring an integrated analysis of visual art, architecture, music, drama, and social history. Development of dramatic and theatrical art is traced through media presentations, live performances, lectures, and discussions. Prerequisite: sophomore standing or approval of the chair of the department. Offered fall semester, odd-numbered years. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 239</b>	<b>Theatre and Culture II</b>	3 Cr.
	A study of European and American theatre history and dramatic literature from the Renaissance through the modern period, featuring an integrated analysis of visual art, architecture, music, drama, and social history. Development of dramatic and theatrical art is traced through media presentations, live performances, lectures, and discussions. Prerequisite: sophomore standing or approval of the chair of the department. Offered spring semester, odd-numbered years. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 252</b>	<b>Writing for Stage and Screen</b>	3 Cr.
	Devoted to the study of creative writing in dramatic form, giving special attention to the particular requirements of stage, film, and television. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: Sophomore standing or consent of the instructor.	
<b>THTR 289</b>	<b>Dance Styles and Techniques</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance. Ballet, modern, and jazz dance techniques will be introduced. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 292</b>	<b>Ballet Technique I</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance and classical ballet technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 293</b>	<b>Modern Technique I</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance and classical modern technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 294</b>	<b>Jazz Technique I</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance, classical jazz, and contemporary jazz technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 295</b>	<b>Lyrical Jazz Technique I</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance and lyrical jazz technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 296</b>	<b>Tap Technique I</b>	3 Cr.
	Introductory performance-based course in the foundations of concert dance and classical tap technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	
<b>THTR 297</b>	<b>Musical Theatre Dance</b>	3 Cr.
	Introductory performance-based course in the foundations of musical theatre dance technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.	

<b>THTR 298</b>	<b>Dance Composition</b>	3 Cr.
	An introduction to the craft of choreography through the creation and performance of solos and small group dance works. Previous dance experience and a readiness to create are requisite. Instructor approval required. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: One course from (THTR 289, THTR 292, THTR 293, THTR 294, THTR 295, THTR 296, THTR 297), and consent of the chair of the department.	
<b>THTR 335</b>	<b>Acting II</b>	2+2, 3 Cr.
	A continuation of work in acting theory and technique, featuring intensive training in comic, dramatic, and lyric scene performance. Students consider the methods of influential acting teachers and apply advanced techniques such as active analysis. Coursework culminates in the annual Acting/Directing Showcase. Two evening rehearsals during the week of the showcase are required. Offered most fall semesters. Prerequisite: THTR 235.	
<b>THTR 337/537</b>	<b>American Theatre</b>	3 Cr.
	A study of American theatre and drama, with particular emphasis given to the development of musical theatre and to significant American playwrights and theatre practitioners of the modern and postmodern periods. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: junior standing or consent of the chair of the department.	
<b>THTR 386</b>	<b>Internship in Theatre</b>	1-3 Cr.
	Students may arrange, in consultation with the theatre faculty and on-site supervisors, for field work that provides intensive experience in a particular area of theatre, dance, film, or television. May be repeated for up to 6 credits. Prerequisite: consent of the chair of the department.	
<b>THTR 390/590</b>	<b>Topics and Projects</b>	1-3 Cr.
	Specific projects or specialty courses based on interests of students and faculty. Example topics: Chicago Theatre, Musical Theatre, The London Stage (study abroad course), Contemporary and Postmodern Theatre, Theatre of the Non-Western World, The Vampire Tradition, Auditioning, Acting for the Camera, Scene Painting, Design for the Theatre. May be repeated for credit, provided topics are different.	
<b>THTR 392</b>	<b>Ballet Technique II</b>	3 Cr.
	A performance-based course in intermediate and advanced concert dance and classical ballet technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 292 or consent of the chair of the department.	
<b>THTR 393</b>	<b>Modern Technique II</b>	3 Cr.
	A performance-based course in intermediate and advanced concert dance and classical modern technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 293 or consent of the chair of the department.	
<b>THTR 394</b>	<b>Jazz Technique II</b>	3 Cr.
	A performance-based course in intermediate and advanced concert dance, classical jazz, and contemporary jazz technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 294 or consent of the chair of the department.	
<b>THTR 395</b>	<b>Lyrical Jazz Technique II</b>	3 Cr.
	A performance-based course in intermediate and advanced concert dance and lyrical jazz technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 295 or consent of the chair of the department.	
<b>THTR 396</b>	<b>Tap Technique II</b>	3 Cr.
	A performance-based course in intermediate and advanced concert dance and classical tap technique. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements. Prerequisite: THTR 296 or consent of the chair of the department.	
<b>THTR 399</b>	<b>Theatre Colloquium</b>	0 Cr.
	A required course for theatre majors which provides weekly opportunities to examine a variety of theatre-related topics and vocations. All theatre majors are required to register for THTR 399 each semester they are on campus.	

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<b>THTR 431</b>	<b>Play Directing</b>	2+2, 3 Cr.
Study in the theories and studio practice in the art of directing for the theatre, including the process of play selection and analysis, methods of casting, principles of collaboration, staging techniques, and rehearsal procedures. Coursework culminates in a public performance in the annual Acting/Directing Showcase. Serves as Senior Capstone course. Offered fall semester. Prerequisites: THTR 129, THTR 230, THTR 231, THTR 235 and one course in theatre literature (THTR 238, THTR 239, THTR 337, or THTR 390), or consent of the chair of the department.		
<b>THTR 435</b>	<b>Acting III</b>	3 Cr.
A course in advanced acting techniques for performing period styles. Students will concentrate on scene study with emphasis on voice, movement, gesture, character, language, tempo, and special techniques for performing material such as classical Greek tragedy, Shakespeare, Comedy of Manners, Commedia dell' Arte, Brechtian Drama, Theatre of the Absurd, and other stylistic challenges. Prerequisite THTR 335 or consent of the instructor.		
<b>THTR 497</b>	<b>Honors Work in Theatre</b>	3 Cr.
See Honors Work, page 56.		
<b>THTR 498</b>	<b>Honors Candidacy in Theatre</b>	3 Cr.
See Honors Work, page 56.		

# World Languages and Cultures

Learn more about the [Department of World Languages and Cultures](#) at Valpo online.

**Professors S. DeMaris, Duvick, Hoult-Saros, Malchow, Miguel-Pueyo, Tomasik (chair); Associate Professor Zamora-Breckenridge; Assistant Professors Lien, López Martín; Clinical Assistant Professor Jennings; Visiting Assistant Professor Caliva; Lecturer Alagna.**

To study another language is to see the world through the eyes of another culture, and true understanding of a culture requires knowledge of its language. In our increasingly global community, such meaningful engagement with multiple cultures is essential. World language study is thus an important facet of any area of University study. The Department of World Languages and Cultures offers a diverse range of courses that not only teach students to express themselves in another language but also allow them to explore other cultural traditions, both past and present. By immersing themselves in these other traditions, students gain insight into their own languages and cultures while deepening their understanding of what it means to be human, a central concern of the liberal arts.

The department provides students with linguistic and cultural skills that can be effectively applied in their chosen professions. A major or minor in a world language thus prepares students for success in a variety of careers ranging from international business, education, law, engineering, and government service to social work, the ministry, translation, and medical professions.

## Learning Objectives

Students pursuing study in world languages and cultures will work toward the following objectives:

**1. Students will demonstrate a high level of communicative proficiency in the target language.**

This proficiency encompasses interpersonal, interpretive, and presentational modes in the modern languages and, in Greek and Roman Studies, emphasizes the interpretive mode.

*Interpersonal:* Students will interact and negotiate meaning in spoken and written conversations to share information, reactions, feelings, and opinions.

*Interpretive:* Students will understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.

*Presentational:* Students will present information, concepts, and ideas in both writing and speech to inform, explain, persuade, and narrate on a variety of topics for various audiences and in multiple genres (e.g., narration, argumentation, correspondence, analyses of cultural products, and reports on research).

**2. Students will interpret a variety of cultural products in the target language from a critical perspective.**

**3. Students will use sources of information appropriately in the target language and in English.**

Appropriately using sources involves students finding, evaluating, engaging with, and correctly citing them, mindful of how these sources support their own academic work.

**4. Students will apply wide-ranging knowledge of culture (past and present) in speech and writing.**

**5. Students will engage in cross-cultural dialogue and experiences through participation in curricular, co-curricular, and/or study abroad programs.**

## World Languages across the University

In addition to language majors and minors, the University offers a variety of interdisciplinary majors and minors that incorporate the study of a world language. Please visit the following sections for more information about these programs and relevant courses.

### Global Studies

- Asian Studies concentration
- Global Service concentration
- International Economics and Cultural Affairs concentration

### Latin American and Latino Studies

Beyond these departmental programs, the University also offers other programs that include the study of a world language:

Certificate in Business Spanish

Cinema and Media Studies

Enhanced International Business in German

International Business

Valparaiso International Engineering Program (VIEP) in China, France, Germany, and Spain

## Study Abroad

Through University programs and affiliations, an opportunity to study abroad is afforded students of any of the world languages. World language majors and minors are strongly encouraged to study abroad. See page 18 for details.

## **World Language General Education Requirement**

### **General Education Requirement for Bachelor of Arts, Bachelor of Music, Bachelor of Social Work Degree**

**8 credits:** Course number 102 in a world language in which the student has no more than one year of high school credit, or course number 203 in any world language. A student who has completed a second-year language course in high school will not be granted credit toward degree requirements for level 101 in that language at Valparaiso University (see page 43).

### **General Education Requirement for College of Business**

**8 credits:** One of the following options: Courses numbered 102 and 203 in a world language in which the student has more than one year of high school credit. Courses numbered 101 and 102 in a world language which the student has not taken before (see page 267).

### **General Education Requirement for the College of Engineering**

**4 credits:** Students may fulfill the World Language/Diversity requirement with any four-credit world language course at the 102 level or higher. (See page 325)

### **Special Exceptions to World Language Requirement**

International students whose native language is not English and who are studying on a nonimmigrant visa are exempt from the world language requirement provided that they have successfully completed ENGL 101, ENGL 102, ENGL 103, or ENGL 200.

Continuing Education students and other nontraditional students who have completed Level II of a second 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 world language requirement. Students should consult with the dean of the Graduate School and Continuing Education.

### **Placement and Retroactive Credit**

Before beginning the study of a world 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. Those students must complete level 102 to fulfill the world language requirement.

Students who have completed Level II of a world language in high school and also place into 101 of that language may enroll in 101 for elective credit only, but must complete level 203 to fulfill the world language requirement.

Students who place directly into level 203 of a language shall receive 4 credit hours for level 102 and 4 credit hours for level 203 when they pass course 203 at Valparaiso University.

Students who place directly into level 204 or higher in a language shall receive 4 credit hours for level 102, 4 credit hours for level 203 and the credit hours for the course into which they have placed when they pass this latter course at Valparaiso University.

### **Advanced Placement by Examination**

It is also possible to fulfill the world language General Education requirement through the Advanced Placement Program of the College Entrance Examination Board or through the College Level Examination Program. Students who earn a score of 4 or 5 on an Advanced Placement exam or a score of 45-50 on CLEP exams are eligible to receive credit for certain language courses. See page 374 for more information.

### **Transfer Credit**

Students with potential transfer credit for one or more languages must submit a copy of any official university transcript(s). To continue in a language at Valparaiso University, students are still encouraged to take the placement exam to confirm that they will be starting at the appropriate course level.

Students who have taken the equivalent of level 203 at another institution will not be awarded retroactive credit. However, they will have fulfilled their Valparaiso University world language requirement.

### **Degree**

Completion of the degree requirements of the College of Arts and Sciences with a major in 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 World Language major. Eligible students are normally junior or senior World Language majors who have completed 12 credits beyond the third semester of their language with a cumulative grade point average of 3.000 in their world language courses. Cooperative Education may be repeated for up to 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 57, and consult the department chair.

## **Approval of Schedules**

All students who take a major or minor in the department and all students who plan to teach a world language must have their schedules approved by their World Language advisors prior to registration. A list of specific courses required of teaching majors is available from the chair of the Education Department.

## **Chinese**

### **Study Abroad Opportunities**

Hangzhou Program is available fall semester only. See page 20 for details. Students considering study abroad should consult with the department chair and their academic advisor as early as possible.

### **Valparaiso University International Engineering Program in China (VIEP in China)**

Engineering students who wish to enhance their program with Chinese language study, study abroad, and an overseas cooperative education placement should see page 293 for details about the VIEP in China program.

## **Chinese Courses**

<b>CHIN 101</b>	<b>Beginning Chinese I</b>	4 Cr.
	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. Refer to world language credit policies stated beginning on page 125.	
<b>CHIN 102</b>	<b>Beginning Chinese II</b>	4 Cr.
	Continuation of CHIN 101. Prerequisite: CHIN 101 or equivalent. May not be taken by students who have taken language study courses in China.	
<b>CHIN 200</b>	<b>Contemporary Chinese Culture</b>	3 Cr.
	Taught in English, this course is an introduction to modern and contemporary Chinese culture through poetry, popular fiction, film, television, music, politics, food, and/or internet culture. Topics may also include American perceptions and attitudes vis-à-vis China, Hollywood adaptations and re-conceptions of Chinese culture, and cultural differences between China, Japan, and Korea. This course is ideal for any student who wishes to gain insight into contemporary Chinese society in preparation for international careers or other fields requiring cross-cultural understanding and sensitivity. May be used to fulfill the Cultural Diversity component of the General Education Requirements. Either CHIN 200 or CHIN 291 may be counted toward the Chinese minor, but not both.	
<b>CHIN 203</b>	<b>Intermediate Chinese I</b>	4 Cr.
	Development of CHIN 101 and CHIN 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: CHIN 102 or permission of the instructor.	
<b>CHIN 204</b>	<b>Intermediate Chinese II</b>	4 Cr.
	Continuation of CHIN 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: CHIN 203 or permission of the instructor.	
<b>CHIN 290</b>	<b>Topics in Chinese</b>	3 Cr.
	A study of selected themes or issues in the literature, civilization or language of the Chinese-speaking world. May be repeated for credit if the topic varies. Prerequisite: CHIN 204.	
<b>CHIN 291</b>	<b>Topics in World Cinema</b>	3 Cr.
	(Also offered as CVA 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.	
<b>CHIN 305</b>	<b>Advanced Chinese</b>	1-4 Cr.
	This course is for all students who have completed or placed out of Intermediate Chinese II (CHIN 204) and wish to further their study of Chinese language. Overall emphasis will be on continued improvement of communication, interpretation, and expression, with particular emphases dependent on student preparation levels and interest. May be repeated for credit provided there is no duplication of material. Prerequisite: CHIN 204 or permission of the instructor.	

<b>CHIN 481</b>	<b>Cooperative Education in Chinese I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond CHIN 203 and approval of the chair of the department. S/U grade.	
<b>CHIN 482</b>	<b>Cooperative Education in Chinese II</b>	0.5-3 Cr.
	Continuation of CHIN 481. Prerequisites: CHIN 481 and approval of the chair of the department. S/U grade.	
<b>CHIN 483</b>	<b>Cooperative Education in Chinese III</b>	0.5-3 Cr.
	Continuation of CHIN 481. Prerequisites: CHIN 482 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>CHIN 486</b>	<b>Internship in Chinese</b>	1-4 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency, involving significant use of Chinese. May not be applied to a minor in Chinese. S/U grade only. Prerequisite: consent of the chair of the department.	
<b>CHIN 495</b>	<b>Supervised Reading and Research in Chinese</b>	1-4 Cr.
	A guided study of Chinese language and literature. Prerequisites: CHIN 204 or equivalent and consent of the chair of the department.	

## French

### French Minor (Minimum 17 Cr.)

<b>FREN 203</b>	Intermediate French I	4 Cr.
<b>FREN 204</b>	Intermediate French II	4 Cr.
<b>FREN 220</b>	Approaches to French Studies	3 Cr.

**Six additional credits in French beyond FREN 203. At least one course (three credits) must be 300-level or higher.**

### Special Placement

Students who place directly into, and complete, a course higher than level 203 may count retroactive credit for FREN 203, but no other retroactive credit, towards the minor.

### Teaching Programs

Students who plan to teach French in elementary, middle, or secondary schools with a major or minor in French should consult their departmental advisor and the Education Department for specific requirements.

### Valparaiso University International Engineering Program in French (VIEP - French)

Engineering students who wish to enhance their program with French language study, study abroad, and an overseas cooperative education placement should see page 293 for details about the VIEP - French program.

### Study Abroad Opportunities

- Paris Internship Program (available fall or spring semester)
- IES Abroad Nantes (available fall or spring semester)
- La Rochelle International Business School (available spring semester)
- Université de Technologie de Compiègne Exchange Program (available full year only)

See the section beginning on page 21 for details; students considering study abroad should consult with the department chair and their academic advisor as early as possible.

### The Roger and Hazel Guillaumant Award

See page 31 for details.

### The Patterson MacLean Friedrich Scholarship

See page 31 for details.

## French Courses

<b>FREN 101</b>	<b>Beginning French I</b>	4 Cr.
An introduction to French language and culture with emphasis on spoken and written communication skills. Refer to world language credit policies stated beginning on page 125.		
<b>FREN 102</b>	<b>Beginning French II</b>	4 Cr.
A continuation of FREN 101. Prerequisite: FREN 101 or equivalent.		
<b>FREN 200</b>	<b>French and Francophone Literary Studies</b>	3 Cr.
Study of selected works of French or Francophone literature in English translation. Readings represent significant genres and literary periods presented in biographical, historical, and cultural context. The course provides instruction and practice in the writing of careful critical analysis of the readings. May not be counted toward a major or minor in French. May be used to fulfill the Humanities: Literature component of the General Education Requirement.		
<b>FREN 203</b>	<b>Intermediate French I</b>	4 Cr.
A consolidation of French language skills with emphasis on interpersonal, interpretive, and presentational communication. Students increase control of grammatical structures, broaden vocabulary, and become more familiar with French and Francophone cultures. Prerequisite: FREN 102 or equivalent.		
<b>FREN 204</b>	<b>Intermediate French II</b>	4 Cr.
A review and expansion of French language skills with emphasis on interpersonal, interpretive, and presentational communication. Students refine grammatical accuracy, write on varied topics, participate in extensive oral practice, and read literature and other authentic texts while building on their understanding of French and Francophone cultures. Prerequisite: FREN 203 or equivalent. May be repeated for credit at the Paris Centers or similarly accredited programs.		
<b>FREN 220</b>	<b>Approaches to French Studies</b>	3 Cr.
An introduction to the strategies of reading, interpreting, and writing about French texts. Reading and discussion of works from a variety of genres with particular attention to textual analysis. May be used to fulfill the Humanities: Literature component of the General Education requirements. Some sections may be used to fulfill the Writing Intensive Course (WIC) General Education Requirement. Prerequisite: FREN 204.		
<b>FREN 230</b>	<b>Contemporary France</b>	3 Cr.
An introduction to contemporary French culture and society, focusing on current institutions, issues, and events. Prerequisite: FREN 204.		
<b>FREN 240</b>	<b>French Phonetics</b>	3 Cr.
A study of the principles of French phonetics with special emphasis on the difficulties encountered by American students. Brief introduction to the history of the French language. Prerequisite: FREN 204.		
<b>FREN 270</b>	<b>French Conversation</b>	1 Cr.
A course that develops spoken communication skills in French. May be repeated for elective credit, but counted toward a major or minor in French only once. Prerequisite: FREN 204.		
<b>FREN 271</b>	<b>French Play Production</b>	1-3 Cr.
Rehearsal and performance of a play or excerpts of a play in French. No prior acting experience required. Prerequisite: FREN 203. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>FREN 290</b>	<b>Topics in French</b>	3 Cr.
A study of selected themes or issues in French or Francophone literature, language, or civilization. May be repeated for credit if the topic varies. Prerequisite: FREN 204.		
<b>FREN 291</b>	<b>Topics in World Cinema</b>	3 Cr.
(Also offered as CVA 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.		
<b>FREN 300</b>	<b>Topics in French and Francophone Cultures</b>	3 Cr.
A study of critical cultural contributions of France and the Francophone world. All work done in English. May be repeated for credit if the topic varies. May not be counted toward a major or minor in French. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Prerequisite: Sophomore standing or above.		

<b>FREN 301</b>	<b>Advanced Oral Expression</b>	3 Cr.
	Development of advanced speaking and oral comprehension skills through intensive oral practice. Through discussion, role-play, debate, and other activities, students improve fluency, increase vocabulary, refine grammatical accuracy, and learn to use appropriate linguistic register. Prerequisite: FREN 204.	
<b>FREN 302</b>	<b>Advanced Written Expression</b>	3 Cr.
	Development of advanced writing skills in French. Using a variety of source materials including film, fiction, and nonfiction writing, students develop vocabulary, improve grammatical accuracy, and refine their ability to write in a variety of styles and genres for various occasions. Prerequisite: FREN 204.	
<b>FREN 306</b>	<b>Contemporary French Language and Communication</b>	3 Cr.
	This course develops advanced language skills and cultural knowledge through work with contemporary French-language media, including newspapers, magazines, television, cinema, and the internet. Prerequisite: FREN 204.	
<b>FREN 307</b>	<b>Professional French</b>	3 Cr.
	A study of the French language as it is used in the international business world, including general commercial technology, correspondence, and the basic workings of French business. Prerequisite: FREN 204.	
<b>FREN 351</b>	<b>French Texts and Society: From Feudalism to Humanism</b>	3 Cr.
	An interdisciplinary survey of French literature and cultural history from the Middle Ages through the Renaissance. Culturally significant texts (literary, historical, philosophical, and artistic) are examined within the context of medieval and early modern French society. Prerequisite: FREN 220.	
<b>FREN 352</b>	<b>French Texts and Society: From Absolutism to Revolution</b>	3 Cr.
	An interdisciplinary survey of French literature and cultural history from the Classical Age through the end of the <i>Ancien Régime</i> . Culturally significant texts (literary, historical, philosophical, and artistic) are examined within the context of classicism and enlightenment in prerevolutionary French society. Prerequisite: FREN 220.	
<b>FREN 353</b>	<b>French Texts and Society: From Romanticism to the Fifth Republic</b>	3 Cr.
	An interdisciplinary survey of French literature and cultural history from the Napoleonic era to present. Culturally significant texts (literary, historical, philosophical, and artistic) are examined within the context of French society of the last two centuries. Prerequisite: FREN 220.	
<b>FREN 390</b>	<b>Seminar in French</b>	3 Cr.
	A study of selected themes or issues in French or Francophone literature, language, or civilization. May be repeated for credit if the topic varies. Prerequisite: FREN 220 or consent of the instructor.	
<b>FREN 481</b>	<b>Cooperative Education in French I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond FREN 203 and approval of the chair of the department. S/U grade.	
<b>FREN 482</b>	<b>Cooperative Education in French II</b>	0.5-3 Cr.
	Continuation of FREN 481. Prerequisites: FREN 481 and approval of the chair of the department. S/U grade.	
<b>FREN 483</b>	<b>Cooperative Education in French III</b>	0.5-3 Cr.
	Continuation of FREN 481. Prerequisites: FREN 481 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>FREN 486</b>	<b>Internship in French</b>	1-4 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency, involving significant use of French. May not be applied to a major or minor in French. S/U grade only. Prerequisite: consent of the chair of the department.	
<b>FREN 493</b>	<b>Senior French Seminar</b>	3 Cr.
	A senior-level capstone course which integrates knowledge and skills from previous French courses. Language skills (speaking, listening, writing, and 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.	
<b>FREN 495</b>	<b>Supervised Reading and Research in French</b>	1-4 Cr.
	Intended for students capable of doing independent study in French language, civilization, and literature. Prerequisite: consent of the chair of the department.	

<b>FREN 497</b>	<b>Honors Work in French</b>	3 Cr.
	See Honors Work, page 56.	
<b>FREN 498</b>	<b>Honors Candidacy in French</b>	3 Cr.
	See Honors Work, page 56.	

## German

### German Major (Minimum 30 Cr.)

<b>GER 203</b>	Intermediate German I	4 Cr.
<b>GER 204</b>	Intermediate German II	4 Cr.
<b>GER 220</b>	Approaches to German Studies	3 Cr.

Two courses from the following options

<b>GER 351</b>	German Studies: The Middle Ages and Humanism	3 Cr.
<b>GER 352</b>	German Studies: Enlightenment and Revolution	3 Cr.
<b>GER 353</b>	German Studies: Constructing a Modern Nation	3 Cr.
<b>WLC 493</b>	Senior Seminar in World Languages and Cultures	3 Cr.

Ten additional credits in German beyond GER 203.

### German Minor (Minimum 17 Cr.)

<b>GER 203</b>	Intermediate German I	4 Cr.
<b>GER 204</b>	Intermediate German II	4 Cr.
<b>GER 220</b>	Approaches to German Studies	3 Cr.

Six additional credits in German beyond GER 203.

### Special Placement

Students who place directly into, and complete, a course higher than level 203 may count retroactive credit for GER 203, but no other retroactive credit, toward the major or minor.

### Teaching Programs

Students who plan to teach German in elementary, middle, or secondary schools with a major or minor in German should consult their departmental advisor and the Education Department for specific requirements.

### Enhanced International Business in German (EIB-German)

International Business students who wish to enhance their program with a German major, study abroad, and an overseas cooperative education placement should see page 263 for details about the EIB-German program.

### Valparaiso University International Engineering Program in German (VIEP - German)

Engineering students who wish to enhance their program with German language study, study abroad, and an overseas cooperative education placement should see page 293 for details about the VIEP - German program.

### Study Abroad Opportunities

- Reutlingen Program (fall semester for students in the College of Business or College of Engineering; spring semester for students in the College of Business, the College of Arts and Sciences, and the College of Nursing and Health Professions)
- Rottenburg am Neckar (available spring semester only)
- Tübingen Program (available full year only)

See page 19 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 32 for details.

### Thora Moulton Prize

See page 31 for details.

Also available for select upper class students: Reutlingen Semester Scholarship, Tübingen Orientation Scholarship, and Giebel Scholarship.

**German Courses**

<b>GER 101</b>	<b>Beginning German I</b>	4 Cr.
An introduction to German language and culture with emphasis on spoken and written communication skills. Refer to world language credit policies stated beginning on page 125.		
<b>GER 102</b>	<b>Beginning German II</b>	4 Cr.
A continuation of GER 101. Prerequisite: GER 101 or equivalent.		
<b>GER 200</b>	<b>German Literary Studies</b>	3 Cr.
Study of selected works of German literature in English translation. Readings represent significant genres and literary periods presented in biographical, historical, and cultural context. The course provides instruction and practice in the writing of careful critical analysis of the readings. May not be counted toward a major or minor in German. Fulfills the Humanities: Literature component of the General Education Requirements.		
<b>GER 203</b>	<b>Intermediate German I</b>	4 Cr.
A consolidation of German language skills with emphasis on interpersonal, interpretive, and presentational communication. Students increase control of grammatical structures, broaden vocabulary, and become more familiar with German-language cultures. Prerequisite: GER 102 or equivalent.		
<b>GER 204</b>	<b>Intermediate German II</b>	4 Cr.
A review and expansion of German language skills with emphasis on interpersonal, interpretive, and presentational communication. Students refine grammatical accuracy, write on varied topics, participate in extensive oral practice, and read literature and other authentic texts while building on their understanding of German-language cultures. Prerequisite: GER 203 or equivalent. May be repeated for credit at Reutlingen Center.		
<b>GER 220</b>	<b>Approaches to German Studies</b>	3 Cr.
An introduction to the strategies of reading, interpreting, and writing about German texts. Reading and discussion of works from a variety of genres with particular attention to textual analysis. Fulfills the Humanities: Literature component of the General Education Requirement. Prerequisite: GER 204.		
<b>GER 271</b>	<b>German Play Production</b>	1-3 Cr.
Rehearsal and performance of a play or an excerpt from a play in German. No prior acting experience required. Prerequisite: GER 204. May be repeated for additional credit. May be used to fulfill the Fine and Performing Arts component of the Humanities General Education Requirement.		
<b>GER 272</b>	<b>Advanced German Grammar Topics</b>	1 Cr.
Targeted review and practice of grammar structures in German. May be repeated for elective credit if the topic varies, but counted toward a major or minor in German only once. Prerequisite: concurrent registration in a German course above 204 or consent of the chair of the department.		
<b>GER 290</b>	<b>Topics in German</b>	3 Cr.
A study of selected themes or issues in German literature, language, or culture. May be repeated for credit if the topic varies. Prerequisite: GER 220 or consent of the chair of the department.		
<b>GER 291</b>	<b>Topics in World Cinema</b>	3 Cr.
(Also offered as CVA 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.		
<b>GER 300</b>	<b>Topics in German-Language Culture</b>	3 Cr.
A study of cultural products from German speaking countries. All work done in English. May be repeated for credit if the topic varies. May not be counted toward a major or minor in German. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Prerequisite: Sophomore standing or above.		
<b>GER 305</b>	<b>German in the Professions</b>	3 Cr.
A study of the German language as used in the world of business and technology, including basic commercial and technical vocabulary, workplace correspondence, and professional presentation. Advanced communication skills are developed. Prerequisite: GER 204.		

<b>GER 306</b>	<b>German in the Media</b>	3 Cr.
	A study of German language and contemporary society through the media, including newspapers, magazines, radio, television, film, and the internet. Advanced communication skills are developed. Prerequisite: GER 204.	
<b>GER 341</b>	<b>History of the German Language</b>	3 Cr.
	A historical study of the development of the German language. Students are introduced to the basics of linguistics, to linguistic change from Indo-European to the present, and to contemporary dialect variation in German. Prerequisite: GER 220.	
<b>GER 351</b>	<b>German Studies: The Middle Ages and Humanism</b>	3 Cr.
	A study of German-language literature and culture from the emergence of the Holy Roman Empire of the German Nation to Luther and the early modern era. Intellectual and aesthetic works (e.g., architecture, art, drama, music, philosophy, poetry, prose fiction) are examined in cultural historical context. Prerequisite: GER 220. A Writing in the Discipline course.	
<b>GER 352</b>	<b>German Studies: Enlightenment and Revolution</b>	3 Cr.
	A study of German-language literature and culture from the beginnings of the modern era to the failed revolution of 1848. Intellectual and aesthetic works (e.g., architecture, art, drama, music, philosophy, poetry, prose fiction) are examined in cultural-historical context. Prerequisite: GER 220.	
<b>GER 353</b>	<b>German Studies: Constructing a Modern Nation</b>	3 Cr.
	A study of German-language literature and culture from the emergence of the first unified German nation-state in the nineteenth century to the present. Intellectual and aesthetic works (e.g., architecture, art, drama, music, philosophy, poetry, prose fiction) are examined in cultural-historical context. A Writing in the Discipline course. Prerequisite: GER 220.	
<b>GER 390</b>	<b>Seminar in German</b>	3 Cr.
	A study of selected themes or issues in German literature, language, or civilization. May be repeated for credit if the topic varies. Prerequisite: one course from the following: GER 351, GER 352, or GER 353.	
<b>GER 481</b>	<b>Cooperative Education in German I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond GER 203 and approval of the chair of the department. S/U grade.	
<b>GER 482</b>	<b>Cooperative Education in German II</b>	0.5-3 Cr.
	Continuation of GER 481. Prerequisites: GER 481 and approval of the chair of the department. S/U grade.	
<b>GER 483</b>	<b>Cooperative Education in German III</b>	0.5-3 Cr.
	Continuation of GER 481. Prerequisites: GER 481 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>GER 486</b>	<b>Internship in German</b>	1-4 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency, involving significant use of German. May not be applied to a major or minor in German. S/U grade only. Prerequisite: consent of the chair of the department.	
<b>GER 493</b>	<b>Senior German Seminar</b>	3 Cr.
	A senior-level capstone course which integrates knowledge and skills from previous German courses. Language skills (speaking, listening, writing, and 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.	
<b>GER 495</b>	<b>Supervised Reading and Research in German</b>	1-4 Cr.
	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.	
<b>GER 497</b>	<b>Honors Work in German</b>	3 Cr.
	See Honors Work, page 56.	
<b>GER 498</b>	<b>Honors Candidacy in German</b>	3 Cr.
	See Honors Work, page 56.	

## Greek and Roman Studies

### Teaching Programs

Students who plan to teach Latin in secondary schools should consult their departmental advisor and the Education Department for specific requirements.

### Scholarships

Special scholarships for Greek and Roman Studies students include The Rev. and Mrs. Arthur L. Reinke and the Rev. and Mrs. Augustus Reinke Memorial Scholarship, the John and Dorothea Helms Endowed Scholarship, and the Delta Upsilon Chapter of Beta Sigma Phi Scholarships.

### Study Abroad Opportunities

- College Year in Athens (available fall, spring, summer)
- American School of Classical Studies at Athens (available summer only)
- Archaeological Field Work (available summer only)
- Three-week guided study trips to Greece and Italy in alternate summers

See page 25 for details; students considering study abroad should consult with the department chair and their academic advisor as early as possible.

## Greek and Roman Studies Courses

<b>GKRO 200</b>	<b>Tales of Heroism: Greek and Roman Epic Poetry</b>	3 Cr.
A study of Greek or Roman epic poetry in translation with emphasis on cultural background, value, and influence. Close, critical reading and discussion of works from Homer, Vergil, and the epic cycle. Introduction to literary analysis and critical writing. No knowledge of Greek or Latin required. This course may be used to fulfill the Humanities: Literature component of the General Education Requirements.		
<b>GKRO 201</b>	<b>Antiquity on Stage: Drama in Greece and Rome</b>	3 Cr.
A study of Greek and Roman drama in translation with emphasis on cultural background, value, and influence. Close reading and discussion of works from Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Terence, and Seneca. Introduction to literary analysis and critical writing. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: Literature component of the General Education Requirements.		
<b>GKRO 202</b>	<b>Greek and Latin Roots of English</b>	3 Cr.
A study of the etymology of the English language through close analysis of word roots from the original Greek and Latin languages. Critical reading, writing, and communication skills emphasized together with the historical, conceptual, and linguistic influence of Greek and Roman cultures. No knowledge of Greek or Latin required. May be used to fulfill the Cultural Diversity component of the General Education Requirements.		
<b>GKRO 220</b>	<b>Approaches to Greek and Roman Archaeology</b>	3 Cr.
A close examination of Greek and Roman archaeological sites including sculpture, painting, and architecture, and their relationship to the political and cultural history of the ancient Mediterranean world. Field trip to a major museum. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>GKRO 250</b>	<b>Greek and Roman Monuments in Context</b>	3 Cr.
A travel course in which the study of ancient Greek or Roman artistic expression takes place in Europe. Focus on archaeological sites and museum collections. Study trips will be conducted to Greece, Italy, or Roman Germany. Offered summers only. May be repeated for credit if the trips are different. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>GKRO 251</b>	<b>Greek and Roman Mythology</b>	3 Cr.
Survey of Greek and Roman myths and their influence on enduring works of art, architecture, literature, and other media. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirements.		
<b>GKRO 290</b>	<b>Topics in Greek and/or Roman Studies</b>	3 Cr.
A study of selected themes or issues in the culture, values, and diversity of the Greek and Roman world and how they impact modern society through literature, film, or other media. Possible topics include Women in Antiquity, Ancient Athletics, Slavery and Race in Ancient Greece and Rome, and Cultural Diversity in ancient Greece and Rome, Barbarians and the “Other” in Antiquity, Egyptomania in Rome. No knowledge of Greek or Latin required. May be repeated for credit provided there is no duplication of material. May be used to fulfill the Cultural Diversity component of the General Education Requirements.		

<b>GKRO 291</b>	<b>Topics in World Cinema</b>	3 Cr.
	(Also offered as CVA 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.	
<b>GKRO 310</b>	<b>Greek Civilization and Culture</b>	3 Cr.
	(Also offered as HIST 310.) A study of Greek civilization from the late Bronze Age through the Hellenistic period, with emphasis on cultural, social, and political developments. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: History component of the General Education Requirements. Prerequisite: sophomore standing or consent of the chair of the department.	
<b>GKRO 311</b>	<b>Roman Civilization and Culture</b>	3 Cr.
	(Also offered as HIST 311.) A study of Roman civilization from the 8th century B.C. to the Council of Nicea in A.D. 325, with emphasis on cultural, social, and political developments. No knowledge of Greek or Latin required. May be used to fulfill the Humanities: History component of General Education Requirements. Prerequisite: sophomore standing or consent of the chair of the department.	
<b>GKRO 321</b>	<b>Fieldwork in Archaeology</b>	1-3 Cr.
	Student participation in an approved excavation of an archaeological site studying the cultures of ancient Greece and/or Rome. Participants must receive some on-site instruction in excavation goals and methods. Two weeks of work will normally earn one credit. Presentation of research required. Prerequisites: GRK 102 or LAT 102, GKRO 220, either GKRO 310 or GKRO 311, and approval of both the department chair and the excavation director.	
<b>GKRO 390</b>	<b>Seminar in Greek and/or Roman Studies</b>	3 Cr.
	Study of selected themes or issues in Greek and Roman literature, language or civilization. Topics may include discussions of specific textual and material evidence from Greece and Rome (e.g., Lyric Poetry, Satire, Epistolography), or modern receptions and adaptations of it (e.g., How to Persuade People: Tips from Ancient Rhetoric, Greece and Rome in the American Midwest, The Art of Writing Letters: Ancient and Modern). May be repeated for credit provided there is no duplication of material. May be used to fulfill the Humanities: Literature component of the General Education Requirements. Prerequisite: sophomore standing and one course from the following: GRK 305, LAT 305, GKRO 200, GKRO 201, GKRO 220, GKRO 251, GKRO 310, or GKRO 311.	
<b>GKRO 481</b>	<b>Cooperative Education in Greek and Roman Studies I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits (through coursework or placement) of Greek or Latin; either GKRO 310 or GKRO 311, and approval of department chair. S/U grade.	
<b>GKRO 482</b>	<b>Cooperative Education in Greek and Roman Studies II</b>	0.5-3 Cr.
	Continuation of GKRO 481. Prerequisites: GKRO 481 and approval of the department chair. S/U grade.	
<b>GKRO 483</b>	<b>Cooperative Education in Greek and Roman Studies III</b>	0.5-3 Cr.
	Continuation of GKRO 482. Prerequisites: GKRO 482 and approval of the department chair. S/U grade.	
<b>GKRO 486</b>	<b>Internship in Greek and Roman Studies</b>	1-4 Cr.
	Direct, supervised experience in a museum; cooperating business; government, educational or service agency dedicated to the preservation and promotion of the languages and cultures of the ancient Mediterranean, especially Greece and Rome. May not be applied to a major or minor in Greek and Roman Studies. Prerequisite: sophomore standing and approval of the department chair. S/U grade.	
<b>GKRO 493</b>	<b>Senior Greek and Roman Studies Seminar</b>	3 Cr.
	A senior-level capstone course that integrates knowledge and skills from previous language and culture courses in Greek and Roman Studies. Language skills (particularly reading, writing, interpretation and in-depth analysis) are refined as depth and nuance are added to the understanding of Greek and Roman history, literature, culture and modern reception. Prerequisites: senior standing, GKRO 310 or 311, and approval of the department chair.	
<b>GKRO 495</b>	<b>Supervised Reading and Research in Greek and Roman Studies</b>	1-4 Cr.
	Intended for students capable of doing independent study in Greek and Roman Studies. Final Project required. Prerequisites: junior or senior standing, GKRO 310 or 311, and approval of the department chair.	
<b>GKRO 497</b>	<b>Honors Work in Greek and Roman Studies</b>	3 Cr.
	See Honors Work, page 56.	
<b>GKRO 498</b>	<b>Honors Candidacy in Greek and Roman Studies</b>	3 Cr.
	See Honors Work, page 56.	

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## Greek Courses

<b>GRK 101</b>	<b>First Semester Ancient/Biblical Greek</b>	4 Cr.
An introduction to the ancient Greek language and culture with emphasis on reading, comprehension, and textual interpretation.		
<b>GRK 102</b>	<b>Second Semester Ancient/Biblical Greek</b>	4 Cr.
A continuation of GRK 101 with readings from ancient Greek and/or New Testament authors. Prerequisite: GRK 101 or equivalent.		
<b>GRK 203</b>	<b>Third Semester Ancient/Biblical Greek</b>	4 Cr.
A continuation of GRK 102 with readings and close interpretation of ancient Greek and/or New Testament authors and their cultural context. Prerequisite: GRK 102 or equivalent.		
<b>GRK 305</b>	<b>Advanced Ancient/Biblical Greek</b>	2 Cr.
Application of language skills to the reading and interpretation of specific texts in the original language. Focuses on a major author, genre or period of Greek prose or poetry. May be repeated provided there is no duplication of material. Prerequisite: GRK 203 or equivalent.		
<b>GRK 495</b>	<b>Supervised Reading and Research in Ancient/Biblical Greek</b>	1-4 Cr.
Intended for students capable of doing independent study in the ancient Greek language and literature. Final project required. Prerequisite: junior or senior standing, GRK 305, and approval of the department chair.		
<b>GRK 497</b>	<b>Honors Work in Ancient/Biblical Greek</b>	3 Cr.
See Honors Work, page 56.		
<b>GRK 498</b>	<b>Honors Candidacy in Ancient/Biblical Greek</b>	3 Cr.
See Honors Work, page 56.		

## Latin Courses

<b>LAT 101</b>	<b>First Semester Latin</b>	4 Cr.
An introduction to the Latin language and ancient Roman culture with emphasis on reading, comprehension, speaking, and textual interpretation. Refer to world language credit policies stated beginning on page 125.		
<b>LAT 102</b>	<b>Second Semester Latin</b>	4 Cr.
A continuation of LAT 101, with readings from ancient and Medieval Latin authors. Prerequisite: LAT 101 or equivalent.		
<b>LAT 203</b>	<b>Third Semester Latin</b>	4 Cr.
A continuation of LAT 102 with readings and close interpretation of ancient Latin authors and their cultural context. Prerequisite: LAT 102 or equivalent.		
<b>LAT 305</b>	<b>Advanced Latin</b>	2 Cr.
Application of language skills to the reading and interpretation of specific texts in the original language. Focuses on a major author, genre or period of Latin prose or poetry. May be repeated provided there is no duplication of material. Prerequisite: LAT 203 or equivalent.		
<b>LAT 495</b>	<b>Supervised Reading and Research in Latin</b>	1-4 Cr.
Intended for students capable of doing independent study in the interpretation of Latin language, literature, and Roman culture. Final project required. Prerequisite: junior or senior standing, LAT 305, and approval of the department chair.		
<b>LAT 497</b>	<b>Honors Work in Latin</b>	3 Cr.
See Honors Work, page 56.		
<b>LAT 498</b>	<b>Honors Candidacy in Latin</b>	3 Cr.
See Honors Work, page 56.		

## Hebrew Courses

<b>HEB 101</b>	<b>First Semester Hebrew</b>	4 Cr.
Elements of Hebrew grammar stressing oral and reading ability. Refer to world language credit policies stated beginning on page 125.		
<b>HEB 102</b>	<b>Second Semester Hebrew</b>	4 Cr.
A continuation of HEB 101, with reading of simpler prose sections of the Old Testament. Prerequisite: HEB 101 or equivalent.		
<b>HEB 495</b>	<b>Supervised Reading and Research in Hebrew</b>	1-2 Cr.
Intended for students who wish to pursue study in Hebrew language and literature beyond the first-year sequence of HEB 101-102. Content can be tailored to student objectives, including readings in Biblia Hebraica and other classical Hebrew texts, study of advanced grammar and syntax, and/or original research into the Hebrew language and literature. May be repeated for credit if the topic varies. Prerequisite: HEB 102 or consent of the chair of the department.		

## Japanese

### Study Abroad Opportunities

- Kansai Gaidai Program (available fall and/or spring semesters)

See page 22 for details. Students considering study abroad should consult with the department chair and their academic advisor as early as possible.

## Japanese Courses

<b>JAPN 101</b>	<b>Beginning Japanese I</b>	4 Cr.
An introduction to the basic grammar of Japanese. Refer to world language credit policies stated beginning on page 125.		
<b>JAPN 102</b>	<b>Beginning Japanese II</b>	4 Cr.
A continuation of JAPN 101. Prerequisite: JAPN 101 or equivalent.		
<b>JAPN 200</b>	<b>Japanese Literary Studies</b>	3 Cr.
Study of selected works of Japanese literature in English translation. Readings represent significant genres and literary periods presented in biographical, historical, and cultural context. The course provides instruction and practice in the writing of careful critical analysis of the readings. May not be counted toward a minor in Japanese. Fulfills the Humanities: Literature component of the General Education Requirement.		
<b>JAPN 203</b>	<b>Intermediate Japanese I</b>	4 Cr.
Reading, writing, and discussion in Japanese on the intermediate level, with a review of Japanese grammar. Prerequisite: JAPN 102 or equivalent.		
<b>JAPN 204</b>	<b>Intermediate Japanese II</b>	4 Cr.
A continuation of JAPN 203. Prerequisite: JAPN 203 or equivalent.		
<b>JAPN 250</b>	<b>Topics in Japanese Literature and the Fine Arts</b>	3 Cr.
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. The topic Japanese Poetry and Calligraphy may be used to fulfill the Humanities: Fine and Performing Arts component of the General Education Requirement.		
<b>JAPN 305</b>	<b>Advanced Japanese I</b>	4 Cr.
Continuation of JAPN 204. Introduction of extended prose readings. Simple conversation in everyday Japanese. Prerequisite: JAPN 204 or equivalent.		
<b>JAPN 306</b>	<b>Advanced Japanese II</b>	4 Cr.
Continuation of JAPN 305. Emphasis on syntax of prose texts; review of grammar. Conversation in everyday Japanese. Composition in the expository style. Prerequisite: JAPN 305 or equivalent.		
<b>JAPN 322</b>	<b>Readings in Modern Japanese Literature</b>	3 Cr.
Readings in a variety of fictional works by twentieth-century authors in the original Japanese. Discussion of themes and narrative techniques; emphasis on skills required in the study of literary texts. Prerequisite: JAPN 305 or consent of the instructor.		

<b>JAPN 481</b>	<b>Cooperative Education in Japanese I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond JAPN 203 and approval of the chair of the department. S/U grade.	
<b>JAPN 482</b>	<b>Cooperative Education in Japanese II</b>	0.5-3 Cr.
	Continuation of JAPN 481. Prerequisites: JAPN 481 and approval of the chair of the department. S/U grade.	
<b>JAPN 483</b>	<b>Cooperative Education in Japanese III</b>	0.5-3 Cr.
	Continuation of JAPN 481. Prerequisites: JAPN 481 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>JAPN 486</b>	<b>Internship in Japanese</b>	1-4 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency, involving significant use of Japanese. May not be applied to a minor in Japanese. S/U grade only. Prerequisite: consent of the chair of the department.	
<b>JAPN 495</b>	<b>Supervised Reading and Research in Japanese</b>	1-4 Cr.
	Intended for students capable of doing independent study in Japanese language, civilization, and literature. Research paper required. Prerequisite: consent of the chair of the department.	

## Spanish

### Spanish Major (Minimum 27 Cr.)

<b>SPAN 204</b>	Intermediate Spanish II	4 Cr.
<b>SPAN 220</b>	Approaches to Hispanic Literary Studies	3 Cr.
<b>SPAN 230</b>	Spain: Studies in Culture and Society	4 Cr.
<b>OR</b>		
<b>SPAN 231</b>	Latin America: Studies in Culture and Society	4 Cr.
<b>SPAN 321</b>	Literature of Spain	3 Cr.
<b>OR</b>		
<b>SPAN 322</b>	Literature of Latin America	3 Cr.
<b>SPAN 493</b>	Senior Spanish Seminar	3 Cr.

Ten additional credits in Spanish beyond SPAN 203.

### Spanish Minor (Minimum 14 Cr.)

<b>SPAN 204</b>	Intermediate Spanish II	4 Cr.
<b>One course from the following options:</b>		
<b>SPAN 220</b>	Approaches to Hispanic Literary Studies	3 Cr.
<b>SPAN 230</b>	Spain: Studies in Culture and Society	4 Cr.
<b>SPAN 231</b>	Latin America: Studies in Culture and Society	4 Cr.

Six to seven additional credits in Spanish beyond SPAN 203; at least one course at the 300 level or higher

### Special Placement

Students who place directly into a course higher than level 204 need not complete level 204 but must complete all other requirements for the major or minor, including the required total of 27 credit hours (major) or 14 credit hours (minor).

### Teaching Programs

Students who plan to teach Spanish in secondary schools with a major or minor in Spanish should consult their departmental advisor and the Education Department for specific requirements.

### Valparaiso International Engineering Program in Spanish (VIEP - Spanish)

Engineering students who wish to enhance their program with Spanish language study, study abroad, and an overseas cooperative education placement should see page 293 for details about the VIEP - Spanish program.

**Study Abroad Opportunities**

- Granada, Spain (available fall semester or for the full year but not for the spring semester)
- Zaragoza, Spain (available fall, spring, or full year)
- Puebla, México (available fall, spring, or full year)
- Viña del Mar, Chile (available fall, spring, or full year)
- San José, Costa Rica (available fall, spring, or full year)

See the section beginning on page 20 for details; students considering study abroad should consult with the department chair and their academic advisor as early as possible.

**Spanish Courses**

<b>SPAN 101</b>	<b>Beginning Spanish I</b>	4 Cr.
An introduction to Spanish language and Hispanic cultures with emphasis on spoken and written communication skills. Refer to world language credit policies stated beginning on page 125.		
<b>SPAN 102</b>	<b>Beginning Spanish II</b>	4 Cr.
A continuation of SPAN 101. Prerequisite: SPAN 101 or equivalent.		
<b>SPAN 200</b>	<b>Hispanic Literary Studies</b>	3 Cr.
Study of selected works of Spanish language literature in English translation. Readings represent significant genres and literary periods presented in biographical, historical, and cultural context. The course provides instruction and practice in the writing of careful critical analysis of the readings. May not be counted toward a major or minor in Spanish. Fulfills the literature component of the Humanities General Education Requirement.		
<b>SPAN 203</b>	<b>Intermediate Spanish I</b>	4 Cr.
A consolidation of Spanish language skills with emphasis on interpersonal, interpretive, and presentational communication. Students increase control of grammatical structures, broaden vocabulary, and become more familiar with Hispanic cultures. Prerequisite: SPAN 102 or equivalent.		
<b>SPAN 204</b>	<b>Intermediate Spanish II</b>	4 Cr.
A review and expansion of Spanish language skills with emphasis on interpersonal, interpretive, and presentational communication. Students refine grammatical accuracy, write on varied topics, participate in extensive oral practice, and read literature and other authentic texts while building on their understanding of Hispanic cultures. Prerequisite: SPAN 203 or equivalent.		
<b>SPAN 220</b>	<b>Approaches to Hispanic Literary Studies</b>	3 Cr.
The reading and discussion of works of Hispanic literature representative of various literary genres, with emphasis on the techniques of literary analysis. Some sections may be used to fulfill both the Writing Intensive Course (WIC) and Humanities: Literature components of the General Education requirements. Prerequisite: one of SPAN 204, SPAN 230, or SPAN 231.		
<b>SPAN 230</b>	<b>Spain: Studies in Culture and Society</b>	4 Cr.
A course intended to further the student's knowledge of the varied elements of Spanish history and culture. Lectures and discussion in Spanish. Prerequisite: one of SPAN 204, SPAN 220, or SPAN 231.		
<b>SPAN 231</b>	<b>Latin America: Studies in Culture and Society</b>	4 Cr.
A course intended to further the student's knowledge of the varied elements of Latin American history and culture. Lectures and discussion in Spanish. Prerequisite: one of SPAN 204, SPAN 220, or SPAN 230.		
<b>SPAN 270</b>	<b>Spanish Conversation</b>	1 Cr.
A course that develops spoken communication skills in Spanish. May be repeated for elective credit, but counted toward a major or minor in Spanish only once. Prerequisite: SPAN 204.		
<b>SPAN 290</b>	<b>Topics in Spanish</b>	3 Cr.
A study of selected themes or issues in the literature, civilization, or language of the Spanish-speaking world. May be repeated for credit if the topic varies. Prerequisite: SPAN 204.		
<b>SPAN 291</b>	<b>Topics in World Cinema</b>	3 Cr.
(Also offered as CVA 291.) Students examine and analyze the cinema of a particular country or region both in its cultural context and in its relation to global film production and exhibition. May be repeated for credit if topics are different. May be used to fulfill the Humanities: Fine and Performing Arts or Cultural Diversity component of the General Education requirements.		

<b>SPAN 303</b>	<b>Advanced Communication in Spanish</b>	3 Cr.
	Students work toward mastery of the more difficult aspects of Spanish grammar. Intensive practice in oral and written expression provides the opportunity to advance students' abilities to communicate effectively in a variety of personal and professional settings. Prerequisite: SPAN 220, SPAN 230, or SPAN 231.	
<b>SPAN 306</b>	<b>Contemporary Social Issues in Hispanic Media</b>	3 Cr.
	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: one of SPAN 220, SPAN 230 or SPAN 231.	
<b>SPAN 307</b>	<b>Spanish for Business</b>	3 Cr.
	A study of the Spanish language as it is used in the international business world, with particular emphasis on business in Hispanic societies. It includes general commercial terminology, communication, and the basic workings of Spanish business. Prerequisite: one of SPAN 220, SPAN 230, or SPAN 231.	
<b>SPAN 308</b>	<b>Spanish for Service Professionals</b>	3 Cr.
	Designed for students intending to use Spanish in the service professions (medicine, social work, education, church work, etc.). Students learn discipline-related vocabulary, expand content knowledge in relevant service fields, and polish their Spanish-language skills. Prerequisite: SPAN 220, SPAN 230, or SPAN 231.	
<b>SPAN 309</b>	<b>Latinx Studies</b>	3 Cr.
	A study of Latinx cultures in the United States through literature, film, music and the visual arts. Prerequisite: SPAN 220, SPAN 230, or SPAN 231.	
<b>SPAN 321</b>	<b>Literature of Spain</b>	3 Cr.
	A study of representative works of the literature of Spain from the Middle Ages to the present. Prerequisite: SPAN 220.	
<b>SPAN 322</b>	<b>Literature of Latin America</b>	3 Cr.
	A study of representative works of Latin American literature from the Encounter to the present. Prerequisite: SPAN 220.	
<b>SPAN 390</b>	<b>Seminar in Spanish</b>	3 Cr.
	A study of selected themes or issues in Spanish or Spanish American literatures, language, or civilization. May be repeated for credit if the topic varies. Prerequisite: one of SPAN 220, SPAN 230, or SPAN 231.	
<b>SPAN 481</b>	<b>Cooperative Education in Spanish I</b>	0.5-3 Cr.
	Work experience with a cooperating employer. Written report required. Prerequisites: 12 credits beyond SPAN 203 and approval of the chair of the department. S/U grade.	
<b>SPAN 482</b>	<b>Cooperative Education in Spanish II</b>	0.5-3 Cr.
	Continuation of SPAN 481. Prerequisites: SPAN 481 and approval of the chair of the department. S/U grade.	
<b>SPAN 483</b>	<b>Cooperative Education in Spanish III</b>	0.5-3 Cr.
	Continuation of SPAN 481. Prerequisites: SPAN 481 and approval of the chair of the department. S/U grade. May be repeated beyond 483 for additional credit.	
<b>SPAN 486</b>	<b>Internship in Spanish</b>	1-4 Cr.
	Direct, supervised experience in a cooperating business, government agency, or service agency, involving significant use of Spanish. May be applied to a major or minor in Spanish. Prerequisite: consent of the department chair.	
<b>SPAN 493</b>	<b>Senior Spanish Seminar</b>	3 Cr.
	A senior-level capstone course which integrates knowledge and skills from previous Spanish courses. Language skills (speaking, listening, writing, and reading) are refined as depth and nuance are added to the understanding of Hispanic history, literature, culture and contemporary events. Prerequisites: SPAN 220, senior standing, and consent of the chair of the department.	
<b>SPAN 495</b>	<b>Supervised Reading and Research in Spanish</b>	1-4 Cr.
	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.	
<b>SPAN 497</b>	<b>Honors Work in Spanish</b>	3 Cr.
	See Honors Work, page 56.	
<b>SPAN 498</b>	<b>Honors Candidacy in Spanish</b>	3 Cr.
	See Honors Work, page 56.	

# Global Studies

**Coordinator: Professor Hoult-Saros (World Languages and Cultures).**

**Administrative Committee: Professors Lin (Political Science), Longan (Geography and Meteorology), Nelson (Psychology), Pati (Theology), Schaefer (History), Tomasik (World Languages and Cultures); Associate Professors Gundersen (Economics), Prough (Christ College); Assistant Professor Lien (World Languages and Cultures).**

Learn more about [Global Studies](#) at Valpo online.

The Department of World Languages and Cultures offers a Bachelor of Arts (B.A.) degree in Global Studies with a choice of three concentrations: Asian Studies, Global Service, and International Economics and Cultural Affairs. This interdisciplinary major is designed to assist students in meeting career objectives leading to employment in foreign service, international organizations, international business, non-governmental organizations, philanthropic organizations, and communication or education fields, among many others. The department combines interdisciplinary approaches to area studies — Africa, Asia, Latin America, and Europe — with thematic issues such as globalization, humanitarian aid, sustainable development, human rights, social justice, global security, migration, transnationalism, environmental issues, and poverty reduction. Anchored in the study of world languages and cultures, the Global Studies major integrates course work in ethnology, cultural awareness, economics, geography, history, political science, theology, and study abroad, all leading to a faculty-mentored senior research project.

**Regional Emphasis:** All Global Studies majors choose a regional emphasis to focus their coursework on a particular area of the world. In addition to completing the Global Studies Core and specific concentration requirements below, students are required to complete a major or minor in French, German, or Spanish, or a minimum of 16 credits in Chinese or Japanese language.

## Global Studies Core (6 Cr.)

### Introductory Course:

WLC 150	Global Perspectives	3 Cr.
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### Senior Seminar:

WLC 493	Senior Seminar	3 Cr.
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Candidates for a Bachelor of Arts degree in Global Studies choose one of the following concentrations:

**Asian Studies Concentration (Minimum 21 Cr.)**

Courses with an asterisk (\*) have prerequisites.

<b>Core Course</b>		<b>3 Cr.</b>
<b>ASIA 140</b>	Introduction to Asian Culture	3 Cr.
<b>Support Core</b>		<b>18 Cr.</b>
Choose 18 credits in the following list of electives, from at least two different disciplines, in consultation with the Asian Studies advisor:		
<b>ASIA 290</b>	Topics in Asian Studies	3 Cr.
<b>ASIA 390*</b>	Seminar in Asian Studies	3 Cr.
<b>ASIA 386*</b>	Internship in Asian Studies	1-4 Cr.
<b>ASIA 495</b>	Supervised Reading and Research	1-3 Cr.
<b>CHIN 200</b>	Contemporary Chinese Culture	3 Cr.
<b>CHIN 291</b>	Topics in World Cinema (when on Asian topics)	3 Cr.
<b>ECON 290/390*</b>	Topics in Economics (when on Asian topics)	3 Cr.
<b>GEO 301*</b>	Regional Geographies of the World (when on Asia)	3 Cr.
<b>HIST 341*</b>	Revolution and Its Roots: The Making of Modern China	3 Cr.
<b>HIST 342*</b>	Tragedy and Triumph: The Making of Modern Japan	3 Cr.
<b>HIST 393*</b>	History Through Film (when on Asian film)	3 Cr.
<b>JAPN 200</b>	Japanese Literary Studies	3 Cr.
<b>JAPN 250</b>	Topics in Japanese Literature and the Fine Arts	3 Cr.
<b>PHIL 220*</b>	Asian Philosophy	3 Cr.
<b>POLS 332*</b>	Politics of China and East Asia	3 Cr.
<b>PSY 325*</b>	Cross-Cultural Psychology	3 Cr.
<b>PSY 365*</b>	Psychology and Religion	2 Cr.
<b>and PSY 367*</b>	Buddhist Perspectives on Psychology and Religion	1 Cr.
<b>THEO 363*</b>	Religions of China and Japan	3 Cr.
<b>WLC 280*</b>	Experiential Learning in World Languages and Cultures	1-3 Cr.
<b>WLC 290</b>	Topics in World Languages and Cultures (Asian topic)	3 Cr.
<b>WLC 486*</b>	World Languages and Cultures Internship	1-3 Cr.

**Global Service Concentration (Minimum 21 Cr.)**

Courses with an asterisk (\*) have prerequisites.

<b>Service Core</b>		<b>12 Cr.</b>
<b>ECON 136</b>	The Economics of Health, Education, and Welfare	3 Cr.
<b>POLS 231*</b>	Politics of Developing States	3 Cr.
One course from the following two options:		
<b>WLC 320*</b>	Global Humanitarianism Examined (if not taken for Support Core)	3 Cr.
<b>POLS 343</b>	Principles of Peace and Social Justice (if not taken for Support Core)	3 Cr.
One course from the following two options:		
<b>WLC 280*</b>	Experiential Learning in World Languages and Cultures	3 Cr.
<b>WLC 486*</b>	World Languages and Cultures Internship	3 Cr.
<b>Support Core</b>		<b>9 Cr.</b>
Choose 9 credits from one of the following service categories, in consultation with the Global Service advisor:		
<i>Humanitarian Aid &amp; Service:</i>		
<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>ECON 336*</b>	Economics of Developing Nations	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>GEO 265</b>	Sustainability: Environment, Economy, Society	3 Cr.
<b>HIST 304</b>	European Imperialism and the Colonial Experience	3 Cr.
<b>WLC 320*</b>	Global Humanitarianism Examined (if not taken for Service Core)	3 Cr.

### World Languages and Cultures

<b>POLS 343</b>	Principles of Peace and Social Justice (if not taken for Service Core)	3 Cr.
<b>POLS 352*</b>	Model United Nations	3 Cr.
<b>POLS 438*</b>	Gender and Public Policy in Global Perspective	3 Cr.
<b>POLS 450*</b>	International Regimes and Global Governance	3 Cr.
<b>SOCW 260*</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>TESOL:</b>		
<b>ENGL 368</b>	Teaching of English to Speakers of Other Languages: Theory and Methods	3 Cr.
<b>ENGL 369*</b>	Teaching of English to Speakers of Other Languages: Methods and Practices	3 Cr.
<b>ENGL 384*</b>	Observation in TESOL	1 Cr.
<b>ENGL 487*</b>	Practicum in TESOL	2 Cr.
<b>Global Missions &amp; Ministry:</b>		
<b>THEO 345*</b>	The Church in the World	3 Cr.
<b>THEO 347*</b>	Christian Responses to Social Victims	3 Cr.
<b>One course from the following two options:</b>		
<b>THEO 333*</b>	Black Theology and Black Church	3 Cr.
<b>THEO 36_*</b>	One course in Religions in the World, depending on Regional Emphasis	3 Cr.

### International Economics and Cultural Affairs Concentration (Minimum 21 Cr.)

Courses with an asterisk (\*) have prerequisites.

<b>Economics Core</b>		<b>12 Cr.</b>
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>Select two courses from:</b>		
<b>ECON 236*</b>	Contending Economic Theories	3 Cr.
<b>ECON 326*</b>	International Economics	3 Cr.
<b>ECON 336*</b>	Economics of Developing Nations	3 Cr.
<b>ECON 337*</b>	Public Economics	3 Cr.
<b>Support Core</b>		
Choose 9 credits from this list of electives, selected from at least two different disciplines, in consultation with the IECA advisor; two of the three courses must be at the 300-level or higher.		
<b>GEO 101</b>	World Human Geography	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>GEO 201*</b>	Economic Geography	3 Cr.
<b>GEO 265</b>	Sustainability: Environment, Economy, Society	3 Cr.
<b>GEO 301*</b>	Regional Geographies of the World	3 Cr.
<b>GEO 470</b>	Political Geography	3 Cr.
<b>HIST 100</b>	European History	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.
<b>HIST 140</b>	Introduction to East Asian Culture	3 Cr.
<b>HIST 232</b>	Latin American History and Society	3 Cr.
<b>HIST 235</b>	Modern Mexico: Competing Visions of the Nation	3 Cr.
<b>HIST 250</b>	African History and Society	3 Cr.
<b>HIST 304*</b>	European Imperialism and the Colonial Experience	3 Cr.
<b>HIST 313*</b>	History of Modern Britain	3 Cr.
<b>HIST 315*</b>	Contemporary Europe: Century of Violence	3 Cr.
<b>HIST 317*</b>	Hitler and the Third Reich	3 Cr.
<b>HIST 329*</b>	Revolution! Insurgence in Latin America	3 Cr.
<b>HIST 333*</b>	Latin America in the Cold War Era	3 Cr.
<b>HIST 341*</b>	Revolution and its Roots: The Making of Modern China	3 Cr.
<b>HIST 342*</b>	Tragedy and Triumph: The Making of Modern Japan	3 Cr.
<b>HIST 350*</b>	Colonialism and Independence: Understanding Modern Africa	3 Cr.
<b>HIST 355*</b>	Modern Middle Eastern History	3 Cr.
<b>HIST 390*</b>	Topics in History (when topic is contemporary, non-US)	3 Cr.
<b>HIST 393*</b>	History through Film (when topic is contemporary, non-US)	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.

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<b>POLS 150</b>	International Relations	3 Cr.
<b>POLS 210*</b>	Research Methods in Political Science	3 Cr.
<b>POLS 231*</b>	Politics of Developing States	3 Cr.
<b>POLS 291</b>	Topics in International Relations	3 Cr.
<b>POLS 330*</b>	Politics of Industrialized States	3 Cr.
<b>POLS 332*</b>	Politics of China and East Asia	3 Cr.
<b>POLS 333*</b>	Politics of Africa	3 Cr.
<b>POLS 334*</b>	Politics of the Middle East	3 Cr.
<b>POLS 336*</b>	Politics of Latin America	3 Cr.
<b>POLS 343*</b>	Principles of Peace and Social Justice	3 Cr.
<b>POLS 351*</b>	American Foreign Policy	3 Cr.
<b>POLS 352*</b>	Model United Nations	3 Cr.
<b>POLS 391*</b>	Advanced Topics in International Relations I	3 Cr.
<b>POLS 437*</b>	Comparative Public Policy	3 Cr.
<b>POLS 438*</b>	Gender and Public Policy in Global Perspective	3 Cr.
<b>POLS 450*</b>	International Regimes and Global Governance	3 Cr.
<b>POLS 454*</b>	International Political Economy	3 Cr.
<b>POLS 456*</b>	War and Conflict	3 Cr.
<b>THEO 363*</b>	Religions of China and Japan	3 Cr.
<b>WLC 280*</b>	Experiential Learning in World Languages and Cultures	1-3 Cr.
<b>WLC 290</b>	Topics in World Languages and Cultures	3 Cr.
<b>WLC 320*</b>	Global Humanitarianism Examined	3 Cr.
<b>WLC 390*</b>	Seminar in World Languages and Cultures	3 Cr.
<b>WLC 486*</b>	World Languages and Cultures Internship	1-3 Cr.

## ***Latin American/Latino Studies***

**Coordinator: Professor Zamora-Breckenridge (World Languages and Cultures).**

**Administrative Committee: Professor Hoult-Saros (World Languages and Cultures; Associate Professor Johnson (Political Science and International Relations).**

### **Objectives**

The LALS interdisciplinary minor is designed for students in the Humanities, Social Sciences, and professional programs who are considering careers in international business, nonprofit agencies, or government, in the United States or abroad, as well as students who foresee working with the increasing Latino population in the United States, particularly in education, ministry, nursing, or other professional or service careers. Students with a Latin American/Latino Studies (LALS) Minor will study the language, histories, politics, cultures, and societies of Latin America and the Latino communities in the United States.

## **Latin American/Latino Studies Minor (Minimum 19 Cr.)**

Classes in History, Political Science, Spanish, and other applicable fields provide a solid Latin American and Latino studies background, situated within the larger context of contemporary global issues. The number of credits required will vary depending on student placement in Spanish language courses, and by some elective choices. See detailed requirements below.

<b>HIST 232</b>	Latin American History and Society	3 Cr.
<b>POLS 336</b>	Politics of Latin America	3 Cr.
<b>SPAN 231</b>	Latin America: Studies in Culture and Society	4 Cr.
<b>Three courses from the following options:</b>		
<b>CVA 290</b>	Topics in World Cinema (when Latin American)	3 Cr.
<b>GEO 301</b>	Regional Geographies of the World (when Latin American)	3 Cr.
<b>HIST 225</b>	Alternate Perspectives of United States History (when Latino)	3 Cr.
<b>HIST 235</b>	Modern Mexico: Competing Visions of the Nation	3 Cr.
<b>HIST 329</b>	Revolution! Insurgence in Latin America	3 Cr.
<b>HIST 333</b>	Latin America in the Cold War Era	3 Cr.
<b>HIST 390</b>	Topics in History (when Latin American or Latino)	3 Cr.
<b>POLS 290</b>	Topics in Political Science (when Latino)	3 Cr.
<b>SPAN 290</b>	Topics in Spanish (when Latin American or Latino)	3 Cr.
<b>SPAN 306</b>	Contemporary Social Issues in the Hispanic World	3 Cr.
<b>SPAN 309</b>	Latinx Studies	3 Cr.
<b>SPAN 322</b>	Latin American and US Latino Literature	3 Cr.
<b>SPAN 390</b>	Seminar in Spanish (when Latin American or Latino)	3 Cr.
<b>THEO 369</b>	Topics in Religion in the Americas (when Latin American)	3 Cr.

## **Asian Studies Courses**

<b>ASIA 140</b>	<b>Introduction to Asian Culture</b>	3 Cr.
	An exploration of the main political, social, and cultural values in Asia and of the ways that they flourish today. May be used to fulfill the Cultural Diversity course component of the General Education requirements.	
<b>ASIA 290</b>	<b>Topics in Asian Studies</b>	3 Cr.
	A study of particular topics related to issues in Asian culture and society. May be repeated for credit, provided topics are different.	
<b>ASIA 386</b>	<b>Internship in Asian Studies</b>	1-4 Cr.
	A formal internship in an institution in the U.S. or abroad engaging in Asia-related activities. Internships may require competency in an Asian language. This course requires an approved job description, an evaluation from the employers, and submission of a final written report. S/U grade. May be repeated for additional credit. Prerequisite: consent of the chair of the department.	
<b>ASIA 390</b>	<b>Seminar in Asian Studies</b>	3 Cr.
	A study of particular topics related to issues in Asian culture and society. May be repeated for credit, provided topics are different. Prerequisite: sophomore standing or above.	
<b>ASIA 495</b>	<b>Supervised Reading and Research in Asian Studies</b>	1-3 Cr.
	Intended for students capable of doing independent study in Asian Studies. Prerequisite: consent of the chair of the department.	
<b>ASIA 497</b>	<b>Honors Work in Asian Studies</b>	3 Cr.
	See Honors Work, page 56.	
<b>ASIA 498</b>	<b>Honors Candidacy in Asian Studies</b>	3 Cr.
	See Honors Work, page 56.	

## **World Languages and Cultures Courses**

<b>WLC 150</b>	<b>Global Perspectives</b>	3 Cr.
	An interdisciplinary introduction to the concept of culture from both the Western and non-Western view, to the meaning of culture for the development of religious, economic, political, and social institutions, and to the significance of cultural perspective in approaching global ideas. May be used to fulfill the Cultural Diversity course component of the General Education Requirements.	
<b>WLC 280</b>	<b>Experiential Learning in World Languages and Cultures</b>	1-3 Cr.
	Supervised collaboration with a cooperating business, government agency, educational institution, or service agency that involves substantial experience focused on the relevant language or culture. A maximum of 1 credit may be applied to a world language major or minor, up to 3 credits may be applied to a concentration in Global Studies, but credits may not count towards both. May be repeated for additional credit. Prerequisite: level 203 in the relevant language and department chair approval.	
<b>WLC 290</b>	<b>Topics in World Languages and Cultures</b>	3 Cr.
	A study of selected themes or issues in international affairs or global studies that may be used to fulfill requirements in the Global Studies major. May be repeated for credit, provided topics are different.	
<b>WLC 320</b>	<b>Global Humanitarianism Examined</b>	3 Cr.
	The course examines humanitarian service in global perspective. It assesses both the historical and contemporary records of development aid, religiously motivated efforts, human rights modalities, bi and multilateral aid at the government level, and the latest ventures in sustainable development. The course is designed around case studies, group projects, and grant writing—the foundation of humanitarian efforts. The aim of the course is to make students aware of the pitfalls associated with the record of humanitarian aid, but resolute in their determination to improve the world wisely. Prerequisite: WLC 150, or consent of the department chair.	

<b>WLC 335</b>	<b>Perspectives on Health Care in Costa Rica</b>	3 Cr.
	This class provides an in-depth study of health care topics relating to gender roles, environment issues, and immigrant status. Students will delve into the study of health through an introduction to demography, social factors related to health and illness, epidemiology, and comparative health systems. The class also assesses the ethics of universal health care in a developing nation. Field trips to public and private hospitals, neighborhood health centers, HIV centers, and urban immigrant communities will provide a broad understanding of the sociology of healthcare in Costa Rica. Fulfills the Social Science General Education requirement. Costa Rica Center only.	
<b>WLC 337</b>	<b>Ethnology and History of Costa Rica</b>	3 Cr.
	Through readings, discussion, lectures, films, field trips, and personal interviews, students will be introduced to the historical, political, economic, and environmental factors which shape the Central American reality. Special attention will be given to racial, ethnic, and social diversity present in Costa Rica. In addition, students will gain perspective on the role of the United States in the region, the effects of globalization, and ongoing struggles for social change. Fulfills the Humanities: History General Education requirement. Costa Rica Center only.	
<b>WLC 484</b>	<b>Study Abroad Preparation</b>	0.5 Cr.
	This course prepares students for study abroad by introducing them to issues such as culture shock, cross-cultural communications, and the experience of living abroad, including money management, travel planning, and health & safety.	
<b>WLC 485</b>	<b>Study Abroad Re-entry</b>	0.5 Cr.
	This course assists students in reintegration back into life in America by requiring them to read and reflect on reentry literature. It also provides a forum for students to communicate their experiences with each other and the instructor. It is recommended that all students register for this class upon returning to Valparaiso University.	
<b>WLC 486</b>	<b>World Languages and Cultures Internship</b>	1-3 Cr.
	Direct supervised experience in a cooperating business, government agency, or service organization, abroad or in the United States. Prerequisite: consent of the chair.	
<b>WLC 493</b>	<b>Senior Seminar in World Languages and Cultures</b>	3 Cr.
	A senior-level capstone course which integrates knowledge and skills from previous courses in the Department of World Languages and Cultures. Writing and reading skills in a target language are refined. Depth and nuance are added to the understanding of the history, literature, culture, and contemporary events of the student's major area of study. A thematic focus and a comparative approach help students to see the major culture of study in a broader context, through interactions with students from other majors in the Department. A combination of English and the relevant target languages may be used. Prerequisites: senior standing and department chair approval.	
<b>WLC 495</b>	<b>Supervised Reading and Research in World Languages and Cultures</b>	1-4 Cr.
	Intended for students capable of doing independent study in World Languages and Cultures. Research paper required. Prerequisite: consent of the chair of the department.	
<b>WLC 497</b>	<b>Honors Work in World Languages and Cultures</b>	3 Cr.
	See Honors Work, page 56.	
<b>WLC 498</b>	<b>Honors Candidacy in World Languages and Cultures</b>	3 Cr.
	See Honors Work, page 56.	

# Christ College

*The Honors College*

Learn more about [Christ College](#) online.

**Interim Dean Jennifer Prough, Ph.D.  
Assistant Dean Anna R. Stewart, Ph.D.**

**Professors Buggeln, T. Howard; Associate Professors Graber, Jakelić, Prough, Smith, Upton; Assistant Professor Puffer; Adjunct Assistant Professors Creech, A. Howard.**

Christ College is the honors college of Valparaiso University. Established in 1967, Christ College celebrates over fifty years of providing honors-level liberal arts education that enables 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, Engineering, or Nursing and Health Professions--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 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 beginning on page 259.

Christ College is dedicated to the cultivation of intellectual, moral, and spiritual virtues. The college's name suggests its compatibility with Valparaiso University's definition of itself as a university in the Christian intellectual tradition, comprised of people of many faiths and beliefs.

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 landscaped courtyard, a multipurpose refectionary, 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 and service in their faith communities.

## Admission and Membership in Christ College

### First-year Admission

To be considered for membership in Christ College beginning in their first year, students must first be admitted to Valparaiso University. Admitted students with superior academic records, strong SAT or ACT scores (optional), 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. Approximately 90 first-year students are accepted into the Christ College First-Year Program each fall.

The Christ College First-Year Program 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. Other activities include producing an original musical and participating in the Oxford debates.

## **Upper Class Admission**

Students with superior records of academic achievement may be invited to join Christ College later than the start of the first 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 Scholar graduation distinction.

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.

## **Transfer Admission**

Christ College welcomes students transferring to Valparaiso University from other colleges and universities, especially if students have taken honors courses at their previous institutions, including at junior colleges. A transfer student should discuss interest in Christ College with the transfer admission coordinator and speak with the dean of Christ College.

The student must submit the Application to Christ College. If approved, an academic advisor from Christ College will determine, in consultation with the student and the major advisor, which Christ College courses would best fit the student's needs and interests.

Typically, a transfer student who has fulfilled the general education requirement of the two-semester CORE, may earn Christ College Scholar honors by completing a minimum of 16 credit hours of CC courses numbered 200 and above, plus one additional 3 credit seminar (CC 300 or CC 325).

## **Membership in Christ College**

A student formally admitted to Christ College, either as a first-year or upper class student, 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 advisor.

Continuing academic achievement at the honors level includes 1) a cumulative grade point average of 3.300 in all coursework completed at the University and 2) a cumulative grade point average of 3.300 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 Scholar distinction requires a 3.300 cumulative average for work in both Christ College and Valparaiso University. In some cases students will be asked to meet with their advisor and/ or the dean to discuss their status, and may be counseled not to continue in Christ College.

However, continuing membership in Christ College is not determined solely by 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 complete circumstances and direction of each student's total academic career and role in Christ College, and retain the right to maintain or terminate a student's membership in Christ College in light of these conditions. The final approval for those who graduate with the designation of Christ College Scholar is made by the dean upon recommendation of 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**

The assistant dean serves as the academic advisor for all Christ College students. Students are encouraged to confer regularly with their Christ College advisor 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 advisor, students have an advisor in the other college in which they are simultaneously enrolled, and are expected to confer regularly with that advisor as well.

Each student is responsible 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. 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 3.300 in all coursework completed at the University and in all coursework completed in Christ College for the Scholar designation.
3. A minimum of 16 credit hours beyond the Christ College First-Year Program courses CC 110 and CC 115. A student who enters the college after the first 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 Scholar designation.

<b>CC 110A</b>	Texts and Contexts I: First Half Fall Semester	3 Cr.
<b>CC 110B</b>	Texts and Contexts I: Second Half Fall Semester	3 Cr.
<b>CC 110L</b>	Drama Workshop Fall Semester	2 Cr.
<b>CC 115A</b>	Texts and Contexts II: First Half Spring Semester	3 Cr.
<b>CC 115B</b>	Texts and Contexts II: Second Half Spring Semester	3 Cr.
<b>CC 115L</b>	Debate Workshop Spring Semester	2 Cr.
<b>CC 215</b>	The Christian Tradition	3 Cr.

### One course from the following options:

<b>CC 205</b>	Word and Image	3 Cr.
<b>CC 255</b>	Interpretation: Self, Culture, and Society	3 Cr.

### Three courses from the following options, at least one of which must

#### be CC 325:

<b>CC 300</b>	Seminar (may be repeated)	3 Cr.
<b>CC 325</b>	Seminar (may be repeated)	3 Cr.
<b>CC 455</b>	Inquiry in the Liberal Arts	3 Cr.

### **OR an approved course through study abroad or immersion programs**

<b>CC 499</b>	Senior Colloquium	1 Cr.
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## Complementary Major in Humanities (Minimum 24 Cr.)

The complementary major 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 complementary major in humanities.

### One course from the following options:

<b>CC 205</b>	Word and Image	3 Cr.
<b>CC 255</b>	Interpretation: Self, Culture, and Society	3 Cr.

### Seven courses from the following options, at least one of which must

#### be CC 325:

<b>CC 300</b>	Seminar (may be repeated)	3 Cr.
<b>CC 325</b>	Seminar (may be repeated)	3 Cr.
<b>CC 455</b>	Inquiry in the Liberal Arts	3 Cr.

### **OR an approved course through study abroad or immersion programs**

A course used to fulfill the requirements of a complementary major in humanities may not be used to fulfill the minimum requirements of any other major or minor.

## **Humanities Minor (Minimum 18 Cr.)**

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.

### **One course from the following options:**

<b>CC 205</b>	Word and Image	3 Cr.
<b>CC 255</b>	Interpretation: Self, Culture, and Society	3 Cr.

### **Five courses from the following options, at least one of which must be**

#### **CC 325:**

<b>CC 300</b>	Seminar (may be repeated)	3 Cr.
<b>CC 325</b>	Seminar (may be repeated)	3 Cr.
<b>CC 455</b>	Inquiry in the Liberal Arts	3 Cr.

**OR an approved course through study abroad or immersion programs**

A course used to fulfill the requirements of a minor in humanities may not be used to fulfill the requirements of any other major or minor.

## **Christ College Courses**

### **The First-Year Program**

<b>CC 110A</b>	<b>Texts and Contexts I: First Half Fall Semester</b>	3 Cr.
	Critical reading, discussion, and writing about great works in religious, philosophical, and literary traditions. The close reading of classic primary texts is accompanied by a survey of the wider aspects of the historical epoch or milieu appropriate to each text. The course includes both plenary lectures and discussion seminars. The course is graded S/U only, though advisory grades (A-F) are given throughout the course. Partially fulfills the CORE General Education requirement.	
<b>CC 110B</b>	<b>Texts and Contexts I: Second Half Fall Semester</b>	3 Cr.
	A continuation of CC 110A. The course is graded S/U only, though advisory grades (A-F) are given throughout the course. May fulfill the Humanities: Philosophy General Education requirement.	
<b>CC 110L</b>	<b>Drama Workshop Fall Semester</b>	2 Cr.
	Based on themes and ideas discovered in readings for CC 110, the CC first-year class creates, stages, and performs an original play with music. Participation in the workshop is graded A-F. Partially fulfills the CORE General Education requirement.	
<b>CC 115A</b>	<b>Texts and Contexts II: First Half Spring Semester</b>	3 Cr.
	Critical reading, discussion, and writing about great works in religious, philosophical, and literary traditions. The close reading of classic primary texts is accompanied by a survey of the wider aspects of the historical epoch or milieu appropriate to each text. The course includes both plenary lectures and discussion seminars. Graded A-F. Partially fulfills the CORE General Education requirement.	
<b>CC 115B</b>	<b>Texts and Contexts II: Writing Intensive – Second Half Spring Semester</b>	3 Cr.
	Each student chooses from seminar topics offered by the program faculty. Each student conducts a major investigation of a problem formulated within the seminar and completes a substantive research paper as a final project. Graded A-F. May fulfill the Social Science General Education requirement.	
<b>CC 115L</b>	<b>Debate Workshop Spring Semester</b>	2 Cr.
	The CC first-year class divides into teams to research, explain, and argue for and against propositions concerning significant current international, national, regional, and campus issues in Oxford-style debates. Participation in the debate workshop is graded A-F. Partially fulfills the CORE General Education requirement.	

**Sophomore-Junior-Senior Curriculum**

<b>CC 201</b>	<b>Christ College Symposium</b>	0 Cr.
	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 when in residence. Only Christ College members may register for the course, but all students are welcome to attend. S/U grade.	
<b>CC 205</b>	<b>Word and Image</b>	3 Cr.
	A study of selected literary, philosophical, and religious texts, with special emphasis on the relationship of these texts to works of art. These classic texts are read, analyzed, and discussed in seminar settings, supplemented by a weekly plenary session devoted to lectures and discussions of visual images. May fulfill the Humanities: Fine Arts General Education requirement. Prerequisites: CC 115 or CORE 115 and membership in Christ College or consent of the dean.	
<b>CC 215</b>	<b>The Christian Tradition</b>	3 Cr.
	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. Fulfills the THEO 200 General Education requirement. Some sections of this course may be used to fulfill the Writing Intensive Course (WIC) General Education Requirement. Prerequisites: CC 115 or CORE 115 and membership in Christ College or consent of the dean.	
<b>CC 255</b>	<b>Interpretation: Self, Culture, and Society</b>	3 Cr.
	A study of principles of interpretation in the social sciences and relevant classic texts and theories. The course examines some basic interpretive problems using selected areas such as psychology, social theory, literature, anthropology, and history. May fulfill the Social Science General Education requirement. Prerequisite: CC 115 or CORE 115 and membership in Christ College or consent of the dean.	
<b>CC 300</b>	<b>Seminar</b>	3-4 Cr.
	Each semester Christ College offers numerous seminars dealing with themes of social, intellectual, cultural, spiritual, or artistic importance. These courses are interdisciplinary in nature and are frequently cross-listed with academic departments in other colleges of the University. Seminars may focus on topics, historical periods, or persons, but are not limited to these designations. May be repeated for credit provided topics are different. Prerequisite: membership in Christ College or consent of the dean.	
<b>CC 325</b>	<b>Seminar</b>	3-4 Cr.
	Each semester Christ College offers a range of interdisciplinary seminars taught by Christ College faculty dealing with themes of social, intellectual, cultural, spiritual, or artistic importance. Seminars may focus on topics, historical periods, or persons, but are not limited to these designations. As a capstone for the Christ College curriculum, CC 325 seminars all include an interdisciplinary paper assignment. May be repeated for credit provided topics are different. Prerequisite: membership in Christ College or consent of the dean.	
<b>CC 455</b>	<b>Inquiry in the Liberal Arts</b>	3 Cr.
	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, membership in Christ College, and consent of the dean. S/U grade.	
<b>CC 495</b>	<b>Independent Study in Humanities</b>	1-4 Cr.
	A special independent study project arranged with a member of the faculty. Approval of this project must be obtained from the faculty prior to registration. Prerequisite: membership in Christ College and consent of the dean.	
<b>CC 499</b>	<b>Senior Colloquium</b>	1 Cr.
	A capstone, integrative experience for seniors 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, membership in Christ College, and consent of the dean.	

# College of Business

Visit the [College of Business](#) online.

**Dean Niclas L. Erhardt, Ph.D.  
Assistant Dean Mary H. Bandstra, M.A.**

**Professors Gingerich, Jin, Pinar; Associate Professors S. Jha, Kumar, Lewis, Liu, Luth, Wilder; Assistant Professors J. Chen, Dong, Karbasi, Sariol, Van Solt; Instructor L. Chen, Monarch; Lecturers Y. Jha, Steele.**

The College of Business offers two degrees: a Bachelor of Science in Business Administration with majors in accounting, business analytics, finance, supply chain and logistics management, international business, management, and marketing and a Bachelor of Science in Integrated Business and Engineering. In addition, the college offers a Master's in Business Administration (see the **VALPARAISO UNIVERSITY GRADUATE CATALOG** for details and description).

## **Accreditation**

The college's degree programs are fully accredited by AACSB International. 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.

## **Mission**

The mission of the College of Business is to cultivate values-based leaders in a dynamic and global environment. 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 for the Bachelor of Science in Business Administration**

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 major in accounting, business analytics, finance, international business, management, or marketing for the degree in business administration. The requirements for each major are set forth in the curricula described beginning on page 268.

The undergraduate degree requires that the students devote at least one-half of their time to required and elective courses outside the College of Business.

## **The Major Field for the Bachelor of Science in Integrated Business and Engineering**

The BS in Integrated Business and Engineering degree allows you to combine your interest in both business and engineering in a way that creates multiple career pathways within technology and technical organizations. BSIBE graduates are prepared to enter careers in technical sales, new business development, technical support, brand management, production planning, purchasing, operations analysis and management, plant accounting, and project management.

The program incorporates engineering and business curricula. It includes coursework in math, science, engineering, business, and general education. Along with this major, students are able to earn up to two minors, one in engineering (Mechanical and Engineering) and one in business (Business Administration, Business Analytics, Entrepreneurship, and Supply Chain and Logistics Management).

## **Minor in Business Administration**

The College offers this minor for non-business students who desire a more advanced preparation in business than is provided by the Fundamentals of Business Minor. For more information and the requirements of these two minors, see page 349 for the Minor in Business Administration and page 350 for the Fundamentals of Business Minor.

## **Minor in Business Analytics**

The college offers this minor to all Valparaiso University students who want to enhance their skills through the effective use of data. For more information and the requirements of this minor, see page 350.

## **Minor in Entrepreneurship**

The college offers this minor to all Valparaiso University students who want to acquire an understanding of the venture creation process including how to generate and develop a new business concept, apply quantitative and qualitative methods and analytical tools to identify and evaluate entrepreneurial opportunities, use data and analysis to create and evaluate a business plan, and evaluate different funding sources for a new venture. For more information and requirements of this minor, see page 272.

## **Minor in Supply Chain & Logistics Management**

The college offers this minor to all Valparaiso University students who want to acquire an understanding every element of an organization, including purchasing, planning, transportation, production, storage, and all the threads that connect all the different elements of business. A supply chain manager is someone who impacts the overall success of a business to ensure the organization can control their expenses, increase their sales, and effectively maximize profits. For more information and requirements of this minor, see page 273.

## **Credit by Examination**

Credit through the College Level Examination Program (CLEP) can be earned for the following courses:

- For ACC 205 with the subject examination in Financial Accounting
- For BLAW 104 with the subject examination in Introductory Business Law
- For non-business majors only: MGT 304 with the subject examination Principles of Management
- For non-business majors only: MKT 304 with the subject examination Principles of Marketing

## **Minors/Certificates for Business Students**

In addition to minors in programs outside the College of Business, business students may complete the requirements for an interdisciplinary minor in International Business and Global Studies (available to business students only, see page 272), Business Analytics (see page 350), or in Supply Chain and Logistics Management (see page 274). In addition, business students may pursue one of the two minors in the Reserve Officer Training Core – Military Leadership: Air Force Minor or Military Leadership: Army Minor (see page 364). Business students may also pursue the Certificate in Business Spanish to communicate to employers their ability to converse with Hispanic customers, employees, and/or managers; see page 274 for a description and requirements for this certificate.

A business student may declare a minor in the College of Arts and Sciences. No more than two courses of specified non-business courses required for a College of Business degree may be used in fulfilling the requirements of a minor except for interdisciplinary minors, the minor in mathematics, and the minor in computer science where three courses may be used to simultaneously satisfy the requirements of the major and the minor. Students must earn a 2.250 grade point average in a minor for it to be noted on the student's official academic record.

## **Honors College**

The College of Business encourages those students who are qualified to participate in the Christ College Honors program. Business students enrolled in Christ College also have an advisor in Christ College. A College of Business student in Christ College may graduate as a Christ College Scholar (see page 259).

## **Double Major in the College of Business**

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.

## **Enhanced International Business in German (EIB-German)**

EIB-German is a nine-semester program that combines a major in International Business, a major in German, and one academic year of study and work in Germany. The program allows students to gain linguistic and cultural proficiency in the German language and prepares them for careers with German or US companies that operate globally. Students fulfill all requirements for both majors; participate in Valparaiso University's study abroad program in Reutlingen, Germany, in the seventh semester; enroll in at least two German-language business courses while in Reutlingen; work in a cooperative-education placement in Germany during the eighth semester and ensuing summer; return to campus for the capstone ninth semester; and reside in the Kade-Duesenberg German House and Cultural Center for at least two semesters. EIB-German is coordinated jointly by the College of Business and the German section of the

Department of World Languages and Cultures. Students who wish to enroll in EIB-German should see their business advisor and a German instructor as early as possible.

## **Assessment Center**

The CoB Assessment Center is not a place, but an event. It evaluates each student in the major soft skills of business management. Students are assessed on their problem solving, communication, leadership, teamwork, and interpersonal skills. Students receive individualized results. The College uses group results to assess the business curriculum.

For freshman and transfer students, the Assessment Center is offered as a lab to BUS 100, required of all incoming students. For senior students, the Assessment Center is required as a lab to the capstone course MGT 475. A \$60-75 fee is required of all students, per lab, to be paid to the Collegiate Assessment Partners, who administer the materials and results.

## **Cooperative Education**

Cooperative Education in the College of Business 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:

1. A student may participate in Cooperative Education after achieving junior standing with a minimum cumulative grade point average of 2.250.
2. A student works under the advisement of the CoB's advising and practical experience coordinator, who monitors the work experience, evaluates the required written journal and oral presentation, and assigns the course grade taking into account the employer's evaluation of the co-op student.
3. Placements require prior approval of both the CoB advising and practical experience 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:

1. A student may participate in Internships after achieving junior standing with a minimum cumulative grade point average of 2.250.
2. A student works under the advisement of the CoB's advising and practical experience coordinator, who monitors the work experience, evaluates the required written journal, and assigns the course grade taking into account the employer's evaluation of the interning student.
3. Placements require the prior approval of the CoB advising and practical experience coordinator. 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. A student registers for a total of one credit for each internship placement.
6. Retroactive credit will not be granted.

## **Admission**

The general requirements for admission to the University and to the college are found beginning on page 372 of this catalog.

## **Transfers**

Students currently enrolled at Valparaiso University and wishing to transfer into the College of Business, as well as those from other universities who wish to enter, must have a minimum cumulative grade point average of 2.250. Transfer students should refer to page 378 regarding theology requirements and to page 11 for the First Year Core requirement.

Business courses completed by transfer students may or may not fulfill major requirements. Evaluation of such credit is made by the dean and may be articulated as elective credit only. Any course work completed at other colleges or universities with a grade lower than C- does not transfer. At least fifty percent of the business credit hours required for the business degree must be taken at Valparaiso University.

## **Residence Requirements**

In addition to the general residence requirements specified by the University for all bachelor's degree programs (see page 389), all candidates for baccalaureate degrees from the College of Business must satisfy the following residence requirements:

1. At least one-half of the number of total combined credit hours required for the Business Core and declared Business Major must be taken in residence.
2. At least one-half of the number of total credit hours required for the declared major must be taken in residence.

## **Progression Standards**

The College of Business requires each student to maintain a minimum University cumulative grade point average of 2.250, a minimum business cumulative grade point average of 2.250, and a minimum major or minor cumulative grade point average of 2.250. Courses to be included in the business grade point average are those identified with the prefix ACC, BLAW, BUS, ENT, FIN, IDS, MGT, MKT, or SCM. Courses to be included in the major grade point average are those specifically identified under the major. Students must earn a grade of C- or better in all business prefix courses in order to graduate.

1. A student shall receive a Letter of Academic Deficiency at the end of the first semester in which he or she has a grade point average of less than 2.250 in either overall cumulative, business cumulative, or major cumulative.
2. A student shall be placed on college probation if he or she had a grade point average of less than 2.250 in either overall cumulative, business cumulative, or major or minor cumulative and the student has received a Letter of Academic Deficiency within the last two regular semesters.
3. A student shall be suspended from the college for at least one semester if he or she has a grade point average of less than 2.250 in overall cumulative, business cumulative, or major or minor cumulative and the student has been placed on probation within the last two regular semesters.
4. A suspended student will not be allowed to enroll in courses within the college except repeated courses to raise the business and/or major grade point average(s), provided he or she meets the course prerequisites. A suspended student must wait a minimum of one semester to apply for readmission to the College of Business. In order to be readmitted to the college after suspension, the student must have a minimum University cumulative grade point average of 2.250, a minimum business cumulative grade point average of 2.250, and a minimum major or minor cumulative grade point average of 2.250. A student suspended from the College of Business may apply for admission to another college within the University. A copy of all deficiency, probation, and suspension letters shall be placed in the student's folder and a copy given to his or her advisor.
5. If a student's overall cumulative grade point average falls below 1.000 during any semester, the dean of the College of Business will evaluate the student's situation to determine if the student should continue in the college (under deficiency or probation) or be suspended immediately.

## **Graduation Requirements**

To be eligible for the Bachelor of Science in 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 the Graduation section beginning on page 391).

## **S/U Grading Option**

Business students may not take business courses required for their business degree or declared business major using the S/U grade option, unless

1. the course is only graded on the S/U basis, or
2. the course is a free elective that is not from the student's declared business major.

The S/U option is not permitted in the nonbusiness courses of ECON 221, ECON 222, ECON 223, MATH 124, PHIL 145, PSY 110, PSY 111, the economics and world language requirements for the International Business major and International Business and Global Studies (IBGS) minor, and any nonbusiness course used in the Applied Statistics minor or the Certificate in Business Spanish. See page 384 for the University guidelines for the S/U grading option.

## **Course Intensification Option**

Any junior or senior student in good standing with a business grade point average of 2.700 or above may enhance one course in the major or a major field requirement for one additional credit. The general procedures for filing for course intensification are found on page 384.

## **Advisement**

Advisement of students admitted to the college is under the direction of the academic advisor, who assists freshmen through seniors in selecting courses and interpreting the requirements for an orderly progression toward a degree. It is each student's responsibility to know curriculum requirements, prerequisites for courses, academic policies and procedures, and deadline dates.

## **Student Organizations**

Students are encouraged to join one or more of the following College of Business 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.

### **Epsilon Nu Tau (Entrepreneurship Fraternity)**

This coed professional organization was founded in the spring of 2008. Epsilon Nu Tau is based on the principles and ideals of entrepreneurship, brotherhood, professionalism, sales, and ethical business practices.

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### **Future Business Leaders of America/Phi Beta Lambda**

Phi Beta Lambda is the postsecondary nonprofit education association dedicated to preparing students for careers in business and business-related fields. FBLA-PBL's National Awards Program recognizes and rewards excellence in a broad range of business and career-related areas. Through state-based competition at the spring State Leadership Conferences, students compete in events testing their business knowledge and skills. Top state winners then are eligible to compete for honors at the National Leadership Conference each summer.

### **Financial Management Association**

The FMA was created in order to give students the opportunity to apply their knowledge and sharpen their skills in finance related fields. This will allow the students to work on their skills in an environment where the costs of mistakes are low, and where they will receive equal support for their growth in addition to their performance.

## **Honor Societies**

### **Beta Gamma Sigma**

Beta Gamma Sigma is a national honor society which recognizes outstanding academic achievements of students in AACSB accredited business programs. The upper ten 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.

### **Decision Sciences and Information Systems Honor Society—Alpha Iota Delta**

Sponsored by the Decision Science Institute to recognize academic excellence in the field of decision sciences and information systems.

**Bachelor of Science in Business Administration**

Students who choose the Business Administration degree may select from seven majors: Accounting, Business Analytics, Finance, Supply Chain and Logistics Management, International Business, Management, or Marketing.

**General Education**

<b>Freshman Core Program</b>	<b>8 Cr.</b>
<b>CORE 110</b> The Human Experience	4 Cr.
<b>CORE 115</b> The Human Experience	4 Cr.
<b>Theology</b>	<b>3 Cr.</b>
<b>THEO 200</b> The Christian Tradition	3 Cr.
<b>Writing Intensive Course (WIC)</b>	<b>3 Cr.</b>
<b>Cultural Diversity</b>	<b>11 Cr.</b>
<b>World Language</b>	8 Cr.
<b>One of the following options:</b>	
Courses numbered 102 and 203 in a world language in which the student has more than one year of high school credit	
Courses numbered 101 and 102 in a world language which the student has not taken before	
For nonimmigrant visa international students whose native language is not English, there is no world language requirement providing they have completed ENGL 101, ENGL 102, ENGL 103, or ENGL 200: Literary Studies	
<b>Cultural Diversity Course</b>	3 Cr.
<b>One of the following options:</b>	
<b>Three-credit course from a specified list of approved diversity courses</b>	
Semester abroad in one of the International Study Programs, or the Washington Semester Program	
<b>Humanities</b>	<b>3 Cr.</b>
<b>One course from the following options:</b>	
<b>Fine and Performing Arts</b>	
History	
Literature	
Philosophy (except PHIL 145 and PHIL 345)	
<b>Social Science</b>	<b>3 Cr.</b>
Choose one three-credit course from geography (designated), political science and international relations, social work (designated), sociology, or gender studies (Note 4)	
<b>Natural Science</b>	<b>7-8 Cr.</b>
<b>PSY 110</b> General Psychology	3 Cr.
<b>PSY 111</b> Laboratory in General Experimental Psychology	0+2.5, 1 Cr.
At least three credits with a laboratory component from astronomy, biology, chemistry, physical geography, meteorology, physics, or natural science	3-4 Cr.
<b>Quantitative Analysis</b>	<b>4 Cr.</b>
<b>MATH 124</b> Finite Mathematics	4 Cr.
<b>Healthy Lifestyles</b>	<b>1 Cr.</b>
<b>One of the following options:</b>	
<b>KIN 100</b> Healthy Lifestyles	1 Cr.
<b>KIN 101</b> Wellness and Stress	1 Cr.
<b>PHIL 145</b> Elementary Logical and Critical Thinking	3 Cr.
<b>ECON 221</b> Principles of Microeconomics	3 Cr.
<b>ECON 222</b> Principles of Macroeconomics	3 Cr.
<b>ENGL 210</b> Introduction to Business and Professional Writing	3 Cr.
<b>Total General Education</b>	<b>56-57 Cr.</b>

**Business Core****Freshman/Sophomore Core Courses**

<b>BUS 100</b>	The Business Experience	3 Cr.
<b>BUS 100L</b>	The Business Experience Lab	0 Cr.
<b>BLAW 104</b>	Legal Environment of Business	3 Cr.
<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>ACC 206</b>	Managerial Accounting	3 Cr.
<b>IDS 115</b>	Business Applications for Decision-Making	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.

**Total**

18 Cr.

**Junior/Senior Core Courses**

<b>FIN 304</b>	Financial Management	3 Cr.
<b>MGT 304</b>	Management and Organizational Behavior	3 Cr.
<b>MGT 305</b>	Business Ethics	3 Cr.
<b>MKT 304</b>	Marketing Management	3 Cr.
<b>IDS 306</b>	Global Operations and Supply Chain Management	3 Cr.
<b>IDS 310</b>	Introduction to Business Analytics	3 Cr.

**One course from the following options:**

<b>MGT 395</b>	Internship Experience in Business Administration I	1 Cr.
<b>MGT 381</b>	Cooperative Education in Business Administration I	2 Cr.
<b>MGT 475</b>	Business Policy and Strategy	3 Cr.
<b>MGT 475L</b>	Business Policy and Strategy Lab	0 Cr.

**Total**

22-23 Cr.

**Total Business Core****40-41 Cr.****Notes:**

1. The free electives in the BSBA degree for the majors of Accounting, Business Analytics, Finance, International Business, Management, Marketing, and Supply Chain and Logistics Management vary depending upon whether the student takes a 3 or 4 credit natural science course (with lab). If a student takes a 3-credit natural science with lab, then the student has the greater value for free electives; if a student takes a 4 credit natural science with lab, then the student has the lesser value for free electives. The free electives by majors are Accounting: 4 or 5 credits, Business Analytics: 6 credits; Finance: 6 or 7 credits; International Business: 4 or 5 credits; Management: 7 or 8 credits; Marketing: 7 or 8 credits; Supply Chain and Logistics Management: 7 credits.
2. No more than six credits combined from performance music, ensemble music, and KIN 100-149 may be applied toward a degree; one credit is applied directly to KIN 100, up to three credits can be applied toward the Humanities Fine and Performing Arts, and any excess credits are applied as free electives.
3. No more than six credits from cooperative education and/or internship may be applied toward the degree; two credits are applied directly to cooperative education and/or internship requirement and any excess credits are applied as free electives.
4. Courses in economics **do not** satisfy the social science requirement in the College of Business.

**Accounting Major**

ACC 310	Intermediate Financial Accounting I	3 Cr.
ACC 311	Intermediate Financial Accounting II	3 Cr.
ACC 315	Accounting Information Systems	3 Cr.
ACC 320	Cost Accounting	3 Cr.
ACC 350	Concepts of Taxation I	3 Cr.
ACC 413	Auditing and Assurance Services	3 Cr.
ACC 430	Research and Analysis in Accounting	3 Cr.

**One course from the following options:**

ACC 316	Governmental and Not-for-Profit Accounting	3 Cr.
ACC 411	Advanced Accounting	3 Cr.
ACC 412	Concepts of Taxation II	3 Cr.

**International Business Requirement****One course from the following options:**

FIN 430	International Finance	3 Cr.
MGT 440	Cross-Cultural Management	3 Cr.
MKT 430	International Marketing	3 Cr.
<b>Total</b>		<b>27 Cr.</b>

**Free Electives (Notes 1, 2, and 3)**

<b>Grand Total</b>	<b>125 Cr.</b>
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**Business Analytics Major**

BUS 315	Analytical Modeling	3 Cr.
BUS 330	Database Management	3 Cr.
IDS 340	Statistics for Decision Making	3 Cr.
BUS 370	Visual Effects	3 Cr.
BUS 440	Data Mining	3 Cr.
BUS 470	Business Analytics Practicum	3 Cr.
<b>Total</b>		<b>18 Cr.</b>

**Major field requirement****Two non-core business courses numbered above 300**

<b>Free Electives (Notes 1, 2, and 3)</b>	<b>6 Cr.</b>
<b>Grand Total</b>	<b>125 Cr.</b>

**Finance Major**

IDS 340	Statistics for Decision Making	3 Cr.
FIN 330	Financial Systems and Institutions	3 Cr.
FIN 410	Theory of Corporate Finance	3 Cr.
FIN 420	Investment Management	3 Cr.
FIN 430	International Finance	3 Cr.
FIN 470	Financial Strategy and Policy	3 Cr.
<b>Total</b>		<b>18 Cr.</b>

**Major field requirement****Two non-core business courses numbered above 300**

<b>Free electives (Notes 1, 2 and 3)</b>	<b>6 Cr.</b>
<b>Grand Total</b>	<b>125 Cr.</b>

**International Business Major**

<b>FIN 430</b>	International Finance	3 Cr.
<b>MGT 440</b>	Cross-Cultural Management	3 Cr.
<b>MKT 430</b>	International Marketing	3 Cr.
<b>One course from the following options:</b>		
<b>ECON 326</b>	International Marketing	3 Cr.
<b>ECON 336</b>	Economics of Developing Nations	3 Cr.
<b>MGT 471</b>	International Business Environment and Global Strategy	3 Cr.
<b>Total</b>		<b>15 Cr.</b>
<b>Major field requirement</b>		
<b>Two non-core business courses numbered above 300</b>		
A 300-level international economics course, not previously taken to meet the International Business requirements, may be selected to fulfill one of the two major field requirements.		
<b>Modern World Language: 203 or higher</b>		
<b>OR</b> for international students with English as a second language, TOEFL scores that satisfy University standards		
<b>OR</b> for students with English as a second language, completion of a proficiency test in an approved modern world language		
<b>Free electives (Notes 1, 2, and 3)</b>		4-5 Cr.
<b>Grand Total</b>		<b>125 Cr.</b>

An international study semester is required unless the student has had a minimum of six consecutive months of non-U.S./Canada residency after fourteen years of age.

**Management Major**

<b>MGT 310</b>	Managing Human Resources	3 Cr.
<b>MGT 315</b>	Leadership and Interpersonal Skills	3 Cr.
<b>MGT 470</b>	High Performance Organizations	3 Cr.
<b>Total</b>		<b>9 Cr.</b>
<b>Major field requirement</b>		
<b>Two non-core business courses numbered above 300</b>		
<b>Take one of the following groupings:</b>		
<b>Human Resource Emphasis</b>		
<b>CVA 366</b>	Negotiation and Conflict Resolution	3 Cr.
<b>MGT 311</b>	Selection, Training, and Development	3 Cr.
<b>MGT 312</b>	Performance Management and Compensation	3 Cr.
<b>MGT 410</b>	Strategic Human Resource Management	3 Cr.
<b>Project Management Emphasis</b>		
<b>BUS 320</b>	SAP Concepts, Configurations, and Management	3 Cr.
<b>MGT 321</b>	Fundamentals of Project Management	3 Cr.
<b>MGT 322</b>	Project Management Tools and Techniques	3 Cr.
<b>MGT 421</b>	Cases in Applied Project Management	3 Cr.
<b>Free electives (Notes 1, 2, and 3)</b>		3-4 Cr.
<b>Grand Total</b>		<b>125 Cr.</b>

**Marketing Major**

<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>MKT 310</b>	Marketing Research	3 Cr.
<b>MKT 320</b>	Sales Management	3 Cr.
<b>MKT 330</b>	Buyer Behavior	3 Cr.
<b>International Business Requirement</b>		
<b>MKT 430</b>	International Marketing	3 Cr.
<b>MKT 470</b>	Marketing Strategy and Policy	3 Cr.
<b>Total</b>		<b>18 Cr.</b>
<b>Major field requirement</b>		
<b>Two non-core business courses numbered above 300</b>		
<b>Free electives (Notes 1, 2, and 3)</b>		7 Cr.
<b>Grand Total</b>		<b>125 Cr.</b>

**Supply Chain and Logistics Management Major**

<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>SCM 310</b>	Global Logistics Management	3 Cr.
<b>BUS 315</b>	Analytical Modeling	3 Cr.
<b>SCM 330</b>	Enterprise Resource Planning Systems	3 Cr.
<b>SCM 402</b>	Advanced Analytical Methods for SCM	3 Cr.
<b>SCM 405</b>	Supply Chain Strategy – Capstone	3 Cr.
<b>At least two global/international focus courses from the following options</b>		
<b>MKT 430</b>	International Marketing	3 Cr.
<b>FIN 430</b>	International Finance	3 Cr.
<b>MGT 440</b>	Cross-Cultural Management	3 Cr.
<b>Total</b>		<b>24 Cr.</b>
<b>Free electives (Notes 1, 2, and 3)</b>		7 Cr.
<b>Grand Total</b>		<b>125 Cr.</b>

**Bachelor of Science in Integrated Business and Engineering**

The Bachelor of Science in Integrated Business and Engineering requires each student to maintain a minimum University cumulative grade point average of 2.250, a minimum business cumulative grade point average of 2.250, and a minimum engineering/math/science core grade point average of 2.000. Courses to be included in the business grade point average are those identified with the prefix ACC, BLAW, BUS, ENT, FIN, IDS, MGT, MKT, or SCM. Students must earn a grade of C- or better in all business prefix courses in order to graduate.

Students transferring from Engineering into the Bachelor of Science in Integrated Business and Engineering degree may choose not to have one or more of the following engineering/math/science courses count in their GPA calculation. The courses are as follows: ME 209, ME/CE 215 (cross-listed), and/or ECE 221. While these will not be counted for GPA calculation or credit, they will show on the transcript with a grade of X followed by the earned letter grade.

**General Education**

<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>MATH 131</b>	Calculus I	4 Cr.
<b>MATH 132</b>	Calculus II	4 Cr.
<b>One of the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>PHYS 141</b>	Physics I	3 Cr.
<b>PHYS 141L</b>	Physics I Laboratory	1 Cr.
<b>PHYS 142</b>	Physics II	3 Cr.
<b>CHEM 115</b>	Chemistry I	4 Cr.
<b>One of the following options:</b>		
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition	3 Cr.
<b>Humanities</b>		<b>3 Cr.</b>
<b>One course from the following options:</b>		
Fine and Performing Arts		
History		
Literature		
Philosophy (except PHIL 145 and PHIL 345)		
<b>Social Science</b>		<b>3 Cr.</b>
<b>Choose one three-credit course from geography (designated), political science and international relations, social work (designated), sociology, or gender studies (Note 4)</b>		

<b>Cultural Diversity</b>		3 Cr.
<b>Cultural Diversity Course</b>		3 Cr.
<b>One of the following options:</b>		
<b>Three-credit course from a specified list of approved diversity courses</b>		
<b>Semester abroad in one of the International Study Programs, or the Washington Semester Program</b>		
	<b>Total General Education</b>	<b>49 Cr.</b>
<b>Engineering</b>		
<b>GE 100</b>	Fundamentals of Engineering	2 Cr.
<b>GE 109</b>	Statics	3 Cr.
<b>ME 125</b>	Computer Programming for Mechanical Engineers and Bioengineers	1 Cr.
<b>One course from the following options:</b>		
<b>ME 102</b>	Computer-Aided Design	1 Cr.
<b>CE 151</b>	Introduction to Computer-Aided Drafting	1 Cr.
<b>One course from the following options:</b>		
<b>ME 201</b>	Technical Writing for Mechanical Engineers and Bioengineers	1 Cr.
<b>ECE 211</b>	Technical Writing for Electrical and Computer Engineers	1 Cr.
<b>CE 213</b>	Technical and Professional Writing in Civil and Environmental Engineering	1 Cr.
<b>ME 261</b>	Analog Circuits Laboratory	0.5 Cr.
<b>ECE 281</b>	Fundamentals of Electrical Engineering	2.5 Cr.
<b>Engineering Course Electives</b>		<b>15 Cr.</b>
	<b>Total Engineering</b>	<b>26 Cr.</b>
<b>Business Core</b>		
<b>BUS 100</b>	The Business Experience	3 Cr.
<b>BUS 100L</b>	The Business Experience Lab	0 Cr.
<b>BLAW 104</b>	Legal Environment of Business	3 Cr.
<b>IDS 115</b>	Business Applications for Decision-Making	3 Cr.
<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>ACC 206</b>	Managerial Accounting	3 Cr.
<b>FIN 304</b>	Financial Management	3 Cr.
<b>MGT 304</b>	Management and Organizational Behavior	3 Cr.
<b>MGT 305</b>	Business Ethics	3 Cr.
<b>MKT 304</b>	Marketing Management	3 Cr.
<b>IDS 306</b>	Global Operations and Supply Chain Management	3 Cr.
<b>IDS 310</b>	Introduction to Business Analytics	3 Cr.
<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>MGT 395</b>	Internship Experience in Business Administration I	1 Cr.
<b>MGT 475</b>	Business Policy and Strategy	3 Cr.
<b>MGT 475L</b>	Business Policy and Strategy Lab	0 Cr.
<b>Business Electives</b>		<b>12 Cr.</b>
	<b>Total Business</b>	<b>52 Cr.</b>
	<b>Total</b>	<b>127 Cr.</b>

Note: ME 201 is a pre/corequisite of ME 209. ECE 211 is a pre/corequisite of ECE 263.

## Entrepreneurship Minor

Entrepreneurship and the ability to recognize opportunities to create viable, sustainable solutions are skills needed across all disciplines. The Entrepreneurship minor gives students the opportunity to develop the mindset and behavior of successful entrepreneurs. Students explore the principles and concepts associated with entrepreneurship in startup, social, creative, and corporate endeavors. This minor complements majors in all of Valparaiso University's academic colleges and schools and encourages the application of entrepreneurial concepts in support of students' passions. The minor affords students the chance to explore entrepreneurship as a career option and acquire the skills that can ensure success.

Students completing the minor will acquire an understanding of the venture creation process including how to generate and develop a new business concept, apply quantitative and qualitative methods and analytical tools to identify and evaluate entrepreneurial opportunities, use data and analysis to create and evaluate a business plan, and evaluate different funding sources for a new venture. A critical element of the program is an entrepreneurship consulting opportunity in which students conduct an audit of an existing entrepreneurial firm in the local community.

Upon completion of the minor in Entrepreneurship, students will be able to:

1. Demonstrate an understanding of the role of entrepreneurship in the contemporary global business environment.
2. Identify, analyze, and evaluate viable entrepreneurial opportunities that create value in an ethical manner.
3. Assess the risk and reward associated with each opportunity.
4. Demonstrate an ability to work collaboratively in entrepreneurial contexts.
5. Communicate effectively about themselves and their ideas.
6. Construct a sustainable business model and identify the appropriate resources to pursue it.

#### **Required Courses**

<b>ENT 100</b>	Introduction to Entrepreneurship	3 Cr.
<b>ENT 200</b>	Creativity and Innovation	3 Cr.
<b>ENT 330</b>	Business Planning and Venture Finance	3 Cr.
<b>One course from the following options:</b>		
<b>ENT 420</b>	Entrepreneurial Consulting	3 Cr.
<b>ENT 450</b>	Entrepreneurship and Product Development	3 Cr.
<b>ENT 470</b>	Entrepreneurship: Contemporary Issues and Challenges	3 Cr.
<b>Total</b>		<b>15 Cr.</b>

## **International Business and Global Studies Minor**

**Administrative Committee: Intercollegiate Advisory Committee: Department Chairs of Economics, World Languages and Cultures, Geography, History, and Political Science and International Relations.**

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 interdependent global environment in which business is conducted. 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. However, the maximum hours can be reduced in this minor by applying up to a two-course overlap with other requirements within general education, a major, or a minor. In addition, students who complete the International Study Abroad Track within the International Elective Track will have the requirements reduced by six credit hours by studying abroad. In any case, there may not be more than a total of a two course overlap in this minor with other requirements, whether within general education or within a major or minor.

#### **Required Core Courses**

<b>Three courses from the following international business options:</b>		
<b>FIN 430</b>	International Finance	3 Cr.
<b>MGT 440</b>	Cross-Cultural Management	3 Cr.
<b>MGT 471</b>	International Business Environment and Global Strategy	3 Cr.
<b>MKT 430</b>	International Marketing	3 Cr.
<b>Total</b>		<b>9 Cr.</b>

#### **Modern World Language Requirement**

<b>One of the following language sequences:</b>		
<b>East Asian Region</b>		
<b>JAPN 102</b>	Beginning Japanese II	4 Cr.
<b>JAPN 203</b>	Intermediate Japanese I	4 Cr.
<b>CHIN 102</b>	Beginning Chinese II	4 Cr.
<b>CHIN 203</b>	Intermediate Chinese I	4 Cr.
<b>EAST 109</b>	Intensive Elementary Chinese	5 Cr.
<b>EAST 110</b>	Intensive Elementary Chinese: Conversation	5 Cr.
<b>European Region</b>		
<b>FREN 203</b>	Intermediate French I	4 Cr.
<b>FREN 204</b>	Intermediate French II	4 Cr.
<b>GER 203</b>	Intermediate German I	4 Cr.
<b>GER 204</b>	Intermediate German II	4 Cr.
<b>SPAN 203</b>	Intermediate Spanish I	4 Cr.

<b>SPAN 204</b>	Intermediate Spanish II	4 Cr.
<b>Latin American Region</b>		
<b>SPAN 203</b>	Intermediate Spanish I	4 Cr.
<b>SPAN 204</b>	Intermediate Spanish II	4 Cr.
<b>General International Track</b>		
<b>Two courses from any of the single-language sequences listed above</b>		

**International Elective Tracks****One of the following tracks:**

<b>East Asian Region</b>	<b>6 Cr.</b>
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**Two courses from the following options:**

<b>GEO 301</b>	Regional Geographies of the World (Asia regional course)	3 Cr.
<b>HIST 140</b>	Introduction to East Asian Culture	3 Cr.
<b>HIST 341</b>	Revolution and Its Roots: The Making of Modern China	3 Cr.
<b>HIST 342</b>	Tragedy and Triumph: The Making of Modern Japan	3 Cr.
<b>THEO 363</b>	Religions of China and Japan	3 Cr.

<b>European Region</b>	<b>6 Cr.</b>
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**Two courses from the following options:**

<b>GEO 301</b>	Regional Geographies of the World (Europe regional course)	3 Cr.
<b>HIST 313</b>	History of Modern Britain	3 Cr.
<b>HIST 315</b>	Contemporary Europe: Century of Violence	3 Cr.

<b>Latin American Region</b>	<b>6 Cr.</b>
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**Two courses from the following options:**

<b>GEO 301</b>	Regional Geographies of the World (Latin America regional course)	3 Cr.
<b>HIST 232</b>	Latin American History and Society	3 Cr.
<b>HIST 329</b>	Revolution! Insurgence in Latin America	3 Cr.

<b>General International Track</b>	<b>6 Cr.</b>
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**One course from two of the following groups:**

<b>GEO 101</b>	World Human Geography	3 Cr.
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>HIST 110</b>	The World in the Twentieth Century	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>POLS 330</b>	Politics of Industrialized States	3 Cr.
<b>POLS 335</b>	Politics of Developing States	3 Cr.

<b>International Study Abroad Track</b>	<b>0 Cr.</b>
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Attendance at an approved Valparaiso University international study program, or an alternative international study program approved by the Administrative Committee

**Supply Chain and Logistics Management Minor (Minimum 15 Cr.)****Supply Chain and Logistics Management Minor**

<b>IDS 205</b>	Business Statistics	3 Cr.
<b>IDS 306</b>	Global Operations and Supply Chain Management	3 Cr.
<b>At least two of the following courses</b>		
<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>SCM 310</b>	Global Logistics Management	3 Cr.
<b>BUS 315</b>	Analytical Modeling	3 Cr.
<b>SCM 330</b>	Enterprise Resource Planning Systems	3 Cr.
<b>SCM 402</b>	Advanced Analytical Methods for SCM	3 Cr.
<b>SCM 405</b>	Supply Chain Strategy – Capstone	3 Cr.

**At least one global/international focus course from the following options:**

<b>MKT 430</b>	International Marketing	3 Cr.
<b>FIN 430</b>	International Finance	3 Cr.
<b>MGT 440</b>	Cross-Cultural Management	3 Cr.

## Certificate in Business Spanish

### Objective

This certificate program is designed to provide business students with the needed knowledge to be able to converse in Spanish with business people who are from Hispanic backgrounds. The special feature of this program is a course that will prepare students for potential business situations they might encounter with Hispanic customers, employees, and managers.

### Certificate in Business Spanish (Minimum 14 Cr.)

Admission to one of the following programs is required prior to declaring this certificate: all Business Administration majors and minors (including the Fundamentals of Business Minor), International Economics and Cultural Affairs majors, Economics majors and minors, Actuarial Science majors or minors, Sports Management majors, and Music Industry majors. A minimum of 14 credit hours is required to complete this certificate.

#### One course from the following options:

<b>SPAN 204</b>	Intermediate Spanish II	4 Cr.
<b>SPAN 306</b>	Contemporary Social Issues in Hispanic Media	3 Cr.

#### One course from the following options:

<b>SPAN 230</b>	Spain: Studies in Culture and Society	4 Cr.
<b>SPAN 231</b>	Latin America: Studies in Culture and Society	4 Cr.
<b>SPAN 307</b>	Spanish for Business	3 Cr.
<b>MGT 335</b>	Spanish Communication in Business Transactions	3 Cr.

A minimum grade point average of 3.000 is required in the certificate with no less than a grade of B- in any of the courses.

Although not required, candidates for this certificate are strongly encouraged to participate in the University's study abroad centers in Granada, Spain and/or Puebla, Mexico or to seek an equivalent learning experience preapproved by the College of Business in another Spanish-speaking country. Candidates for the certificate must complete at least one-half of the credits, including MGT 335, at Valparaiso University. There cannot be more than a two course overlap with any other major or minor to earn the certificate.

**Business Courses**

In order to enroll in CoB courses numbered above 304, a student must have junior standing.

**Accounting Courses**

<b>ACC 205</b>	<b>Financial Accounting</b>	3 Cr.
	A study of basic accounting theory and practice, the nature of assets and equity, income measurement, and financial statement preparation. Prerequisites: MATH 111 or placement higher than MATH 111 in the math placement process, and sophomore standing.	
<b>ACC 206</b>	<b>Managerial Accounting</b>	3 Cr.
	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.	
<b>ACC 290</b>	<b>Topics in Accounting</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of accounting to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>ACC 310</b>	<b>Intermediate Financial Accounting I</b>	3 Cr.
	A study of the theoretical foundations underlying financial reporting, revenue recognition, the matching of expenses, and financial statement presentation, with a focus on asset measurement and income determination. Prerequisites: BLAW 104, ECON 221, ECON 222 or ECON 223, IDS 205, ACC 206, and completion or concurrent enrollment in IDS 115, and FIN 304.	
<b>ACC 311</b>	<b>Intermediate Financial Accounting II</b>	3 Cr.
	A study of the theoretical foundations underlying financial reporting, revenue recognition, the matching of expenses, and financial statement presentation, with a focus on liability valuation, stockholders' equity, and selected financial reporting topics. Prerequisite: ACC 310.	
<b>ACC 315</b>	<b>Accounting Information Systems</b>	3 Cr.
	A study of the use, evaluation, and design of accounting information systems. Prerequisites: BLAW 104, ECON 221, ECON 222 or ECON 223, IDS 205, ACC 206, and completion of or concurrent enrollment in IDS 115.	
<b>ACC 316</b>	<b>Governmental and Not-For-Profit Accounting</b>	3 Cr.
	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 course addresses the changing financial reporting environment in the non-for-profit sector of business as well as in government. Attention is given to issues both in external financial reporting and in managerial accounting analysis. Prerequisite: ACC 310.	
<b>ACC 320</b>	<b>Cost Accounting</b>	3 Cr.
	A study of the techniques used to accumulate, measure, plan, and control the costs of an organization's products and services. Prerequisites: BLAW 104, ECON 221, ECON 222 or ECON 223, IDS 205, ACC 206, and completion of or concurrent enrollment in IDS 115.	
<b>ACC 350</b>	<b>Concepts of Taxation I</b>	3 Cr.
	A study of taxation and its impact on business entities. The emphasis is primarily on the Internal Revenue Code and its implications when making business decisions. Prerequisite: ACC 205.	
<b>ACC 390</b>	<b>Topics in Accounting</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of accounting to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>ACC 411</b>	<b>Advanced Accounting</b>	3 Cr.
	A study of generally accepted accounting principles as applied to partnerships, corporate consolidations, and international operations. Prerequisite: ACC 311.	
<b>ACC 412</b>	<b>Concepts of Taxation II</b>	3 Cr.
	An in-depth study of taxation focusing primarily on compliance with the Internal Revenue Code. The emphasis will center on the taxation of individuals, corporations, and flow-through entities (especially partnerships and S-corporations). Prerequisite: ACC 350.	
<b>ACC 413</b>	<b>Auditing and Assurance Services</b>	3 Cr.
	A study of the independent accountant's assurance, attestation, and audit services. Topics include risk, evidence, standards, control, reports, liability, ethics, and the effect of regulation. Prerequisites: ACC 311 and ACC 315.	

<b>ACC 430</b>	<b>Research and Analysis in Accounting</b>	3 Cr.
	A study of the wide variety of resources available for research in accounting standards and analysis of accounting issues. This will be done through both a lecture format and hands-on problem solving. This course is designed to present both the materials necessary for research and the process for using them. Students will gain a knowledge base that they will be able to draw upon to both understand and use the resources available for accounting research and the analysis of accounting issues. Covers both print and, to the extent they are available, online sources.	
<b>ACC 432</b>	<b>Federal Tax Research</b>	1 Cr.
	(Also offered as LAW 432.) A study of the wide variety of resources required for federal tax research. This will be done through both a lecture format and hands-on problem solving. This course, as with all legal research courses, is designed to present both the materials necessary for research and the process for using them. Students will gain a knowledge base that they will be able to draw upon to both understand and use the resources of federal tax research. Covers both print and, to the extent they are available, online sources.	
<b>ACC 490</b>	<b>Topics in Accounting</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of accounting to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>ACC 495</b>	<b>Independent Study in Accounting</b>	1-3 Cr.
	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. Prerequisite: approved research proposal and permission of the dean.	

## **Business Law Courses**

<b>BLAW 104</b>	<b>Legal Environment of Business</b>	3 Cr.
	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: completion of 12 credit hours.	
<b>BLAW 404</b>	<b>Business Law</b>	3 Cr.
	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. Prerequisites: junior standing and BLAW 104.	

## **General Business Courses**

<b>BUS 100</b>	<b>The Business Experience</b>	3 Cr.
	This course provides students with an overview of today's business world, with a particular emphasis on values-based issues and perspectives. Students will learn to view a business not simply in terms of its financial performance, but also its social and environmental impacts. The course includes assessment and skills development components designed to help students improve some of the softer skills they will need for professional success. Students must also register for a corresponding lab of the course for assessment.	
<b>BUS 100L</b>	<b>The Business Experience Lab</b>	0 Cr.
	This lab will involve approximately one half-day of assessment activities. Students will participate in a series of exercises designed to evaluate their skill level in a variety of behavioral dimensions (e.g., communication, teamwork, problem-solving skills). Students will subsequently receive a personalized, detailed report. A \$60-70 fee is required of all students to be paid to Collegiate Assessment Partners, who administer the materials and results.	
<b>BUS 190</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to business is to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>BUS 290</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to business is to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>BUS 315</b>	<b>Analytical Modeling</b>	3 Cr.
	A study of the fundamentals of prescriptive analytics is offered with an emphasis on spreadsheet models. Students will learn to analyze decisions and apply a sensitivity analysis to improve outcomes. Topics covered may include: simulation, optimization, managing risk, and decision trees. Students will also communicate their results in written and oral formats appropriate for a general audience. Prerequisites: IDS 115 and MATH 124.	

<b>BUS 320</b>	<b>SAP Concepts, Configuration, and Management</b>	3 Cr.
	This course provides an in depth understanding of enterprise resources planning (ERP) systems, and addresses how integrated information systems improve business operations. Students will be studying concepts and receive practical experience on configuration of business processes using SAP ERP software.	
<b>BUS 330</b>	<b>Database Management Systems</b>	3 Cr.
	The study of computer-based information systems which allow for the storage of data through functions such as creating, reading, updating, and deleting. A database management system reduces data redundancy, insures data integrity, and provides for data security. Topics include: multidimensional databases and data cubes, data types and data validation; data normalization and data extraction; entity relationships, and structured query language. Data storage and public sources of data will be discussed and software will be used to apply the concepts learned in class. Prerequisite: IDS 115 or consent of the instructor.	
<b>BUS 370</b>	<b>Visual Effects</b>	3 Cr.
	The focus of this course is to explore different techniques for presenting a business case for the purpose of making it meaningful to an audience. Students will learn the strengths and weaknesses of various options using data from different functional areas. Balanced scorecards, dashboards, and index numbers will be used to facilitate the learning experience. Prerequisites: junior standing.	
<b>BUS 390</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to business is to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>BUS 420</b>	<b>SAP Finance and Controlling</b>	3 Cr.
	This course teaches the fundamentals needed to understand data integration across different departments and addresses how integrated information systems improve business operations. The course is heavily focused on the Financial and Controlling module of SAP. Prerequisite: BUS 320.	
<b>BUS 440</b>	<b>Data Mining</b>	3 Cr.
	Data Mining is the exploration and analysis of large quantities of data in order to discover meaningful patterns and rules. Structured and discovery approaches will be covered in this course. Students will also communicate their analyses in written and oral formats that are acceptable to specialists and non-specialists alike. Prerequisites: BUS 330, IDS 340.	
<b>BUS 470</b>	<b>Business Analytics Practicum</b>	3 Cr.
	This course is the culmination of the Business Analytics program. Students will learn about the role of Business Analytics in the firm. The course will be taught with an interdisciplinary view – accounting, finance, marketing, operations. Students will demonstrate their analytical thinking by using prerequisite skills and apply them to real-world problems. Students will be required to communicate their selected strategies in both a written and oral format that is acceptable to a specialist and also enables a non-specialist to understand the problem and respective recommendations. Prerequisites: BUS 440.	

## **Entrepreneurship Courses**

<b>ENT 100</b>	<b>Introduction to Entrepreneurship</b>	3 Cr.
An interdisciplinary survey course covering all dimensions of starting and operating a new business venture. Students will analyze and investigate the current trends and opportunities in entrepreneurship. Topics include entrepreneurship theory, opportunity recognition, the entrepreneurial process, entrepreneurship in a corporate context, the characteristics of entrepreneurs, market assessment, and entrepreneurial careers.		
<b>ENT 200</b>	<b>Creativity and Innovation</b>	3 Cr.
An examination of the techniques and processes of innovation and creativity that lead to new business development as an independent new venture or in existing organizations. Exposure to techniques, concepts, and methods for managing the creative process in individual and group contexts with emphasis on accountability for creative quality. Lectures, experiential learning, discussions, and guest speakers.		
<b>ENT 330</b>	<b>Business Planning and Venture Finance</b>	3 Cr.
A survey course focusing on development of business plans and raising capital. The components of a business plan are covered, including the research process required to gather necessary information. Sources of seed and growth capital are covered, as well as financial challenges faced by the entrepreneur. Students develop a comprehensive business plan that is presented to a panel of entrepreneurs and bankers.		
<b>ENT 420</b>	<b>Entrepreneurial Consulting</b>	3 Cr.
An experiential learning course in which students conduct an audit of an existing entrepreneurial firm in the local community. Included in the audit is a holistic investigation of the firm's internal and external environments, including each of the functional areas. Students learn to integrate and apply their knowledge in "real world" settings and test their analytical skills by confronting and solving complex business problems. Suggestions for improvement are offered based upon findings.		
<b>ENT 450</b>	<b>Entrepreneurship and Product Development</b>	3 Cr.
An interdisciplinary perspective on the interfaces between new product development, innovation, and technology. Examines product development capability as an essential element of successful business strategy and a key component of an "entrepreneurial mindset." Students develop a working prototype for a new product and a comprehensive new product plan including a market assessment.		
<b>ENT 470</b>	<b>Entrepreneurship: Contemporary Issues and Challenges</b>	3 Cr.
An integrative seminar designed as a capstone experience covering topics of current interest related to all aspects of entrepreneurship. The focus is on understanding through synthesis. Prerequisites: Senior Standing, ENT 100, ENT 330, and ENT 420 or ENT 450.		

## **Finance Courses**

<b>FIN 282</b>	<b>Personal Finance</b>	3 Cr.
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.		
<b>FIN 290</b>	<b>Topics in Finance</b>	1-3 Cr.
A detailed examination of selected topics pertinent to the field of finance to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.		
<b>FIN 304</b>	<b>Financial Management</b>	3 Cr.
A survey of the field of financial management. Major topics include the financial environment, financial statement analysis and forecasting, leverage, working capital management, assessment of risk, the time value of money, valuation of securities, and capital budgeting. Consideration is given to these topics as well as to ethical relationships among the firm's contract holders. Prerequisites: ACC 205, ECON 221, and completion of at least 48 credit hours.		
<b>FIN 330</b>	<b>Financial Systems and Institutions</b>	3 Cr.
A study of the U.S. financial system and the management of financial institutions. Topics covered include financial markets, financial institutions, central banking, monetary policy, and financial market regulation. Prerequisites: FIN 304, and IDS 115 or CS 157.		
<b>FIN 390</b>	<b>Topics in Finance</b>	1-3 Cr.
A detailed examination of selected topics pertinent to the field of finance to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.		

<b>FIN 410</b>	<b>Theory of Corporate Finance</b>	3 Cr.
	A study of the theory of corporate finance with emphasis on analytic and quantitative problem solving. Topics covered include risk measurement and management, the cost of capital, capital budgeting, capital structure and dividend policy, and valuation theory. Spreadsheets will be employed where applicable. Prerequisites: FIN 304, either IDS 115 or CS 157, and completion of or concurrent enrollment in IDS 340 or STAT 340.	
<b>FIN 420</b>	<b>Investment Management</b>	3 Cr.
	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: FIN 304, and IDS 115 or CS 157.	
<b>FIN 425</b>	<b>Financial Derivatives and Risk Management</b>	3 Cr.
	The specific types of derivative securities we examine include forward and futures contracts, swaps, and options. Topics covered in this class include the role of derivative instruments in the capital markets; the mechanics of forward and futures, swaps, and options; and hedging strategies based on derivatives for the purpose of mitigating various types of risk. We will also introduce basic pricing techniques that are derived from a no-arbitrage relationship in a well-functioning market. Prerequisite: FIN 304.	
<b>FIN 430</b>	<b>International Finance</b>	3 Cr.
	This course will cover issues related to both international financial markets and the financial operations of a firm within the international environment (multinational firms) Topics will include the structure and functioning of the international currency and money markets; identification, measurement, and management of the impact (risk) of exchange rate changes on the firm; international investment and global financing decisions. Prerequisite: FIN 304.	
<b>FIN 470</b>	<b>Financial Strategy and Policy</b>	3 Cr.
	An analysis of the financial strategy of the firm with regard to investment and financing decisions. Evaluation of the risk and return of various financial strategies is emphasized. Students will have the opportunity to develop and enhance their financial skills through reading articles drawn from the finance literature and through the analysis of case studies allowing students to integrate the skills and knowledge developed in earlier business courses. Prerequisites: FIN 410, and IDS 340 or STAT 340.	
<b>FIN 490</b>	<b>Topics in Finance</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of finance to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>FIN 495</b>	<b>Independent Study in Finance</b>	1-3 Cr.
	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.	

## *Information and Decision Sciences Courses*

<b>IDS 115</b>	<b>Business Applications for Decision-Making</b>	3 Cr.
	This course provides an introduction into business software applications used to integrate business processes and support decision-making. Topics introduced include data classification, data management, decision modeling, and analytics used in processing, organizing, analyzing, and communicating information to improve decision-making. The course uses current software applications and provides students the opportunity to gain software skills necessary to apply to business problems.	
<b>IDS 205</b>	<b>Business Statistics</b>	3 Cr.
	A course in the elements of statistical inference and the application of statistical methods to business problems. Content includes descriptive statistics, discrete distributions, continuous distributions, sampling distributions, hypotheses tests, and regression analysis. Emphasis will be placed on framing, interpretation, and application of the statistical tools to business problems. Prerequisite: MATH 124.	
<b>IDS 290</b>	<b>Topics in Information and Decision Sciences</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of information and decision sciences to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	

<b>IDS 306</b>	<b>Global Operations and Supply Chain Management</b>	3 Cr.
	This course examines issues and methods for effectively managing global operations and supply chain. Topics include the role of operations in global strategy, processes, quality, capacity planning, facility layout and location, sourcing decisions, managing inventories for independent & dependent demand, and lean production. Prerequisites: IDS 205.	
<b>IDS 310</b>	<b>Introduction to Business Analytics</b>	3 Cr.
	This course is intended to provide an overview of the field of business analytics and intelligence. The purpose and process of model building will be explained along with a variety of applications. Topics covered may include descriptive, predictive, and prescriptive analytics along with the role of big data and intelligence gathering. Prerequisites: IDS 115.	
<b>IDS 320</b>	<b>Management Science</b>	3 Cr.
	A study of fundamentals of management science techniques in decision-making process. The emphasis is on model building, problem formulation, and solution using linear programming, transportation, multi-criteria and network flow models, queuing theory, simulation, dynamic programming, and Markov processes. Prerequisites: one of IDS 205, STAT 140, STAT 240, MATH 264, or PSY 201.	
<b>IDS 340</b>	<b>Statistics for Decision Making</b>	3 Cr.
	A study of statistical concepts and methods to facilitate decision making. Content includes analysis of variance, simple and multiple regression, correlation, time-series analysis, and nonparametric methods. Prerequisite: one of IDS 205, STAT 140, STAT 240, PSY 201, or CE 202. Not open to students who have completed STAT 340.	
<b>IDS 390</b>	<b>Topics in Information and Decision Sciences</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of information and decision sciences to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>IDS 490</b>	<b>Topics in Information and Decision Sciences</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of information and decision sciences to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>IDS 495</b>	<b>Independent Study in Information and Decision Sciences</b>	1-3 Cr.
	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.	

## Management Courses

<b>MGT 190</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of business to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>MGT 290</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of business to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>MGT 304</b>	<b>Management and Organizational Behavior</b>	3 Cr.
	An overview of the traditional management functions: planning, organizing, leading, and controlling. Topics include competitive strategies, managing in a global environment, social responsibility, ethics, organizational design, qualitative decision making, and motivating employees. The course is designed to prepare students for more advanced courses in organizational management. Prerequisites: completion of at least 48 credit hours.	
<b>MGT 305</b>	<b>Business Ethics</b>	3 Cr.
	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.	
<b>MGT 310</b>	<b>Managing Human Resources</b>	3 Cr.
	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. Prerequisite: completion of or concurrent enrollment in MGT 304.	

<b>MGT 311</b>	<b>Selection, Training, and Development</b>	3 Cr.
	This course introduces students to effective approaches to recruiting, training, and developing employees. The processes for recruiting, onboarding, training, and development are examined. Topics include evaluating employee needs, recruiting and selecting, developing training and development programs, linking organizational strategy with training and development needs, and using these programs to create a competitive advantage. Prerequisites: MGT 310.	
<b>MGT 312</b>	<b>Performance Management and Compensation</b>	3 Cr.
	This course focuses on the principles of designing and administering compensation and reward systems. It covers the development and administration of employee performance management systems at the individual, group, and organizational levels. Additionally, this course covers topics useful for achieving organizational effectiveness through reward systems that help promote employee engagement. Prerequisites: MGT 310.	
<b>MGT 315</b>	<b>Leadership and Interpersonal Skills</b>	3 Cr.
	Describes the natures, 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. Prerequisite: MGT 304.	
<b>MGT 321</b>	<b>Fundamentals of Project Management</b>	3 Cr.
	This course introduces project management theories and concepts that will allow students to understand the basics of initiating and managing projects. The focus of this course is project management methodology, strategies, and behavioral skills necessary to manage projects in profit and non-profit organizations.	
<b>MGT 322</b>	<b>Project Management Tools and Techniques</b>	3 Cr.
	This course provides an in-depth understanding of commonly used project management tools. Students will gain a working knowledge of Microsoft Project, SAP Project Management, and other information technology project management tools and aids. Concepts from MGT 321 - Fundamentals of Project Management will be applied using the course project management software. Prerequisite: MGT 321.	
<b>MGT 335</b>	<b>Spanish Communication in Business Transactions</b>	3 Cr.
	Course taught in Spanish to explore potential business situations and to imitate interaction with customers, employees, and managers. Capstone course for the Certificate in Business Spanish. This course may not be used to fulfill the upper business elective in a student's declared business major. Prerequisites: junior standing, completion of SPAN 204 or SPAN 306, SPAN 230 or SPAN 231, and SPAN 307.	
<b>MGT 381</b>	<b>Cooperative Education in Business Administration I</b>	2 Cr.
	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 CoB Internship and Assessment Center coordinator and the director of the Career Center. S/U grade.	
<b>MGT 382</b>	<b>Cooperative Education in Business Administration II</b>	2 Cr.
	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 CoB Internship and Assessment Center coordinator and the director of the Career Center. S/U grade.	
<b>MGT 390</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of business to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>MGT 395</b>	<b>Internship Experience in Business Administration I</b>	1 Cr.
	Students apply their business knowledge, skills, and abilities in an actual organizational setting. Students keep a journal regarding their job experience while serving as an intern. Registration is in the semester of the actual work experience; students will secure an internship, and have the internship and related job description approved. Prerequisite: junior standing. S/U grade.	
<b>MGT 397</b>	<b>Internship in Business Administration II</b>	2 Cr.
	Second work experience in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires an approved job description, an evaluation from the employer and the internship coordinator, and submission of a final written report. Registration is in the semester of the actual work experience. Prerequisite: completion of MGT 395. S/U grade.	

<b>MGT 398</b>	<b>Internship in Business Administration III</b>	2 Cr.
	Third work experience in which students apply their business knowledge, skills, and abilities in an actual organizational setting. This course requires an approved job description, an evaluation from the employer and the internship coordinator, and a final written report. Registration is in the semester of the actual work experience. Prerequisite: completion of MGT 397. S/U grade.	
<b>MGT 410</b>	<b>Strategic Human Resource Management</b>	3 Cr.
	The purpose of this course is to engage students with the theory and practice of strategic human resource management. It covers topics such as the role of human resources in achieving competitive advantage, contemporary topics in human resources, and managing strategic change. This course requires students to integrate human resource concepts and strategies to analyze cases, simulations, and/or real-world human capital issues. Prerequisites: MGT 310.	
<b>MGT 421</b>	<b>Cases in Applied Project Management</b>	3 Cr.
	In this integrative project management capstone course, students will participate in a project utilizing project management software. They will perform case analysis and decision-making in order to offer solutions to issues that affect the scope, cost, and/or schedule of the projects or the strategic goals of the company. Prerequisite: MGT 322.	
<b>MGT 425</b>	<b>Managing Technology and Change</b>	3 Cr.
	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. Prerequisites: MGT 304 and senior standing.	
<b>MGT 440</b>	<b>Cross-Cultural Management</b>	3 Cr.
	This course focuses on the effect of national cultural value differences on the workplace. Leading empirical cross-cultural models are integrated and taught as analytical tools for understanding the effects of differing national cultural values on comparative management issues. Particular emphasis is on the development of skills in cross-cultural conflict avoidance, cross-cultural conflict resolution, and in managing international, multicultural teams and virtual/global networks. May be used to fulfill the Cultural Diversity course component of the General Education Requirements. Registration priority is given to CoB students. Prerequisite: junior standing.	
<b>MGT 470</b>	<b>High Performance Organizations</b>	3 Cr.
	This course focuses on learning to create high performance organizations. The high performing organization is one that provides customers with optimum value, satisfies all stakeholders, and creates an environment where members know more, do more, and contribute more. The goal is to understand what separates the merely ordinary organization from the extraordinary one. Cutting edge theory and practice will be integrated throughout the course. Prerequisites: MGT 304 and senior standing.	
<b>MGT 471</b>	<b>International Business Environment and Global Strategy</b>	3 Cr.
	Capstone integrative course for the international business field. The course focuses on the strategic management of multinational operations within cross-border business environments, including the legal, political, trade, and information technology environmental factors. Prerequisites: senior standing, MGT 304, and one of the following: FIN 430, MGT 440, and MKT 430.	
<b>MGT 475</b>	<b>Business Policy and Strategy</b>	3 Cr.
	Capstone business course. The development of the administrative perspective on management, including establishing and analyzing policy and strategy in various settings, as well as the relationships between administrative decision making and important social and ethical issues. Integrative approach uses case method to explore executive decision making in the global marketplace. Students must also register for a corresponding lab of the course for assessment. Prerequisites: final semester senior standing, FIN 304, IDS 306, MGT 304, and MKT 304.	
<b>MGT 475L</b>	<b>Business Policy and Strategy Lab</b>	0 Cr.
	This lab will involve approximately one-half day of assessment activities. Students will participate in a series of exercises, similar to those done during the freshman year in BUS 100L, designed to evaluate their skill level in a variety of behavioral dimensions (e.g. communication, teamwork, problem-solving skills). Students will then subsequently receive a personalized, detailed report. These results can then be used to assess the growth of the individual in their academic program. A \$60-70 fee is required of all students to be paid to Collegiate Assessment Partners, who administer the materials and results.	

<b>MGT 490</b>	<b>Topics in Business</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of business to be offered when sufficient interest and staffing are available. Prerequisites will vary, depending on topics being covered.	
<b>MGT 495</b>	<b>Independent Study in Business Administration</b>	1-3 Cr.
	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 Courses***

<b>MKT 290</b>	<b>Topics in Marketing</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of marketing to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>MKT 304</b>	<b>Marketing Management</b>	3 Cr.
	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: ACC 205, ECON 221, and completion of at least 48 credit hours.	
<b>MKT 310</b>	<b>Marketing Research</b>	3 Cr.
	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 IDS 340.	
<b>MKT 320</b>	<b>Sales Management</b>	3 Cr.
	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.	
<b>MKT 330</b>	<b>Buyer Behavior</b>	3 Cr.
	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.	
<b>MKT 361</b>	<b>Retailing</b>	3 Cr.
	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.	
<b>MKT 362</b>	<b>Advertising</b>	3 Cr.
	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.	
<b>MKT 390</b>	<b>Topics in Marketing</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of marketing to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	
<b>MKT 430</b>	<b>International Marketing</b>	3 Cr.
	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.	

<b>MKT 470</b>	<b>Marketing Strategy and Policy</b>	3 Cr.
	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: IDS 340, MKT 310, MKT 320, MKT 330, and MKT 430.	
<b>MKT 490</b>	<b>Topics in Marketing</b>	1-3 Cr.
	A detailed examination of selected topics pertinent to the field of marketing to be offered when sufficient interest and staffing are available. Prerequisites will vary depending on topics being covered.	

<b>MKT 495</b>	<b>Independent Study in Marketing</b>	1-3 Cr.
	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.	

## ***Supply Chain and Logistics Management Courses***

<b>SCM 310</b>	<b>Global Logistics Management</b>	3 Cr.
	The focus of this course is on strategic and tactical logistics decisions. This course will provide understanding of the concepts and techniques important for analyzing business logistics problems. A strategic and total systems approach is taken. Topics may include cross-docking, reverse logistics, multi-modal freight operations, high-tech automated warehousing, and order delivery and current topics in the logistics industry. Importance of logistics and its relationship to other functional areas of responsibility will be emphasized. Prerequisite: IDS 306.	
<b>SCM 330</b>	<b>Enterprise Resource Planning Systems</b>	3 Cr.
	Hands on "real world" usage of ERP software with a focus on supply chain management. Students will be trained to carry out supply chain management processes such as demand signal and planning, inventory control, capacity utilization, DRP, BOM, MRP, procurement, MPS, manufacturing (work centers, routings), and turning demand into marketable finished goods using ERP software. The course covers sale and delivery of goods and introduces all accounting aspects including invoicing and receiving payments. Prerequisite: IDS 306 and BUS 320.	
<b>SCM 402</b>	<b>Advanced Analytical Methods for SCM</b>	3 Cr.
	This course provides an in-depth understanding of analytical tools to model supply chain issues. Topics may include aggregate planning and forecasting, inventory management, managing uncertainty, network design, and supply chain coordination. Prerequisite: SCM 310.	
<b>SCM 405</b>	<b>Supply Chain Strategy- Capstone</b>	3 Cr.
	A capstone course with emphasis on analysis and problem solving related to inventory and risk pooling, network planning, supply contracts, value of information, procurement and outsourcing strategies, and product and supply chain design. Senior standing required. Prerequisites: IDS 340, SCM 330, and SCM 402.	

# College of Engineering

Visit the [College of Engineering](#) online.

**Interim Dean Paul Douglas Tougaw, P.E., Ph.D.  
Assistant Dean for Student Success, Laura Sanders, M.S.  
Assistant Dean for Strategic Initiatives, Erik Froelich, Ed.D.**

## Mission

The College of Engineering prepares and inspires talented students in a strong undergraduate environment to become servant leaders who apply scientific knowledge to benefit society. The College of Engineering accomplishes this mission by:

- offering rigorous curricula with a balance of theoretical and practical experience
- promoting professional growth through leadership, scholarship, and work experiences
- encouraging personal growth through service and outreach opportunities
- fostering a learning environment that is technologically rich and culturally diverse
- providing guidance from dedicated faculty mentors

## Vision

The College of Engineering will be the premier engineering college emphasizing undergraduate education, acknowledged for the impact its students, faculty, staff, and graduates have in leading and serving society.

## Core Values (E<sup>5</sup>)

### Exploration

We encourage creativity inside and outside the classroom. We provide opportunities for students, faculty, and staff to stretch the boundaries of their knowledge and explore uncommon solutions. We help students, faculty, and staff develop the skills necessary for discovery.

### Excellence

We strive for excellence in every activity. We cultivate an environment that fosters learning and critical thinking. We expect faculty, students, and staff to work each day to seek continuous improvement.

### Ethics

We are committed to a culture of honesty, respect, and fairness. We act in a professional and ethical manner in all that we do and say.

### Equality

We strive to create an environment that appreciates and values diversity, in all respects, without judgment.

### Enjoyment

We believe that potential cannot be achieved without enjoyment. We foster an environment where faculty, staff, and students enjoy their work and surroundings.

### Objectives

Engineering is the art of applying scientific and practical knowledge to the solution of problems for the benefit of society. The curriculum integrates scientific and engineering principles, practical laboratory and computer experiences, engineering design experiences culminating in a 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 Programs

Bachelor of Science degrees may be earned in Bioengineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, and Mechanical Engineering. The goals of these programs are to build a strong foundation in mathematics, the natural and engineering sciences, and to provide an introduction to engineering design during the early portion of these programs. 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.

## College of Engineering

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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. Entrepreneurial-minded learning is infused in the curriculum throughout all programs and is supported through participation in the KEEN network of schools.

### History

Civil engineering topics were taught at Valparaiso University beginning in 1859. 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 and have been accredited since 1958. 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 southeastern edge of campus, contains faculty offices, classrooms, and laboratories for the College of Engineering, the Department of Mathematics and Statistics, and the Department of Computer and Information Sciences.

The optional cooperative education program was initiated in 1983 and the first group of cooperative education students graduated in 1986. In 2003, the Computer Engineering program was accredited. The college added a fifth program, Bioengineering, in the fall of 2017 and a sixth, Environmental Engineering, in the fall of 2019. Accreditation for these programs will occur after the first graduating class of each.

With the beginning of the 2011-2012 academic year, the Donald V. Fites Engineering Innovation Center, a new state-of-the-art facility, was made available to College of Engineering students. It honors one of Valparaiso University's most prolific graduates for his contributions as CEO and Chairman of the Board for Caterpillar Incorporated. The Fites Center is an approximately 14,000 square foot high-performance building, which houses innovative laboratory, design, and meeting spaces that foster faculty-student interactions. In 2013, it was awarded LEED® Platinum established by the U.S. Green Building Council and verified by the Green Building Certification Institute. LEED (Leadership in Environmental and Energy Design) is the nation's preeminent program for the design, construction, and operation of high-performance green buildings.

The James S. Markiewicz Manufacturing and Projects Center forms a physical link between the Gellersen Engineering and Mathematics Center to the north, and the Fites Center to the south. The Markiewicz Manufacturing and Projects Center includes the Projects Laboratory and the James S. Markiewicz Manufacturing Suite.

The James S. Markiewicz Solar Energy Research Facility became operational during the 2013-14 academic year. This facility provides engineering students with extraordinary laboratory and research experiences involving concentrated solar energy to create commodities and fuels.

Both the Manufacturing Projects Center and the Solar Energy Research Facility are named after James S. Markiewicz, '72 ME, whose generosity made these spaces possible.

### College Organization

Administratively, the college is an instructional unit under the direction of the dean. The six programs, Bioengineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, and Mechanical Engineering, are directed by the faculty of the three engineering departments under the leadership of department chairs.

### Accreditation

Bachelor of Science degree programs in Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering are accredited by the Engineering Accreditation Commission of ABET, Inc. [www.abet.org](http://www.abet.org). Bioengineering and Environmental Engineering will apply for accreditation after the first graduating class of students.

### Admission Requirements

The requirements for admission of first-year students to the college are listed on page 372 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 54. Pre-engineers who pass PHYS 141 and MATH 131 and have a grade point average of at least 2.000 in the three categories described on page 294 may request admission to the College of Engineering.

## **Transfer Students**

Academic work taken at other institutions is evaluated for advanced standing by the Office of the Registrar. The College of Engineering Assistant Dean for Student Success, in consultation with the appropriate department chair, 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 plan of study.

## **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 a personal computer available for use in their residence. Computer specifications can be found on the College of Engineering website under the “Computing in Engineering” section.

In addition to their own computer, students have direct access to a wide variety of computing environments, email, and the internet on the campus computing network. Network-connected computers for general student use are located in the Fites and Gellersen Centers and in other buildings across campus. In addition, work stations and personal computers containing software for engineering design, analysis, and simulation are located in various engineering laboratories. Residence halls have network access from individual rooms.

## **The First-Year Program**

First-year engineering students begin their program of study with a schedule of courses that is consistent for all engineering majors. Coursework in a selected major begins in the second semester of the first year.

The Fundamentals of Engineering course (GE 100) is an integral part of the first-year program. The problem-based learning course focuses on the fundamental concepts of engineering, drawing on topics from each discipline and showing the interdisciplinary nature of the profession. This is accomplished through the design and development of two open-ended projects that the students work through in teams. Student mentors (i.e., our best students from previous classes) aid in the projects. The course also includes a once-a-week seminar, which features alumni and campus speakers to help them better understand the possible career paths available with an engineering degree.

## **Student Advisement**

First year engineering students are advised by the CoE Assistant Dean and the Engineering Academic Advisor for the first three semesters of their program. During the fourth semester, the student is assigned a faculty advisor from the department they are majoring in. This faculty advisor will help them prepare for their junior and senior years, as well as transition to graduate school or the workforce.

## **Herman and Helen Hesse Learning Resource Center**

Staffed by a team of engineering peer tutors, the Hesse Learning Resource Center provides academic support and resources for all students taking classes included in the engineering program. Located in GEM 121, the Hesse Center promotes student success through walk-in peer tutoring, course-specific help sessions, personalized tutoring schedules, and academic coaching for students in academic recovery.

## **Senior Project**

All students in their senior year are required to complete a major design project. Students are organized into multidisciplinary teams to plan, organize, execute, present, and document multidisciplinary design projects under the supervision of the faculty.

## **Professional Licensure**

Licensure of those who wish to practice professional engineering is required by law in each of the states and 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. Graduate engineers will be able to more fully practice engineering if they are licensed as a Professional Engineer. Licensing requires passing the Fundamentals of Engineering (FE) Examination typically followed by four years of engineering experience, after which the candidate can sit for the Practice of Engineering (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 FE Examination during their senior year. The FE exam is administered at an area testing center in an online environment.

## **Student Professional and Service Organizations**

To heighten student interest in the profession of engineering and in activities of the College of Engineering student body, 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 related professional society. The American Society of Civil Engineers (ASCE), the Institute of Electrical and Electronics Engineers (IEEE), and the American Society of Mechanical Engineers (ASME) all have active student chapters on campus.

The College of Engineering supports other organizations of interest to its students. These include the Society of Automotive Engineers (SAE), a vibrant section of the Society of Women Engineers (SWE), the National Society of Black Engineers (NSBE), the American Society of Biomechanics, and a newly formed Society of Hispanic Professional Engineers (SHPE) student chapter. In alignment with the University's and College of Engineering's mission statements to develop servant leaders, the Engineers Without

Borders™ (EWB) - Valparaiso Chapter was formed in the spring of 2002. In 2015, that organization has expanded to form the campus-wide service group, Working Across Vocations Everywhere Through Service (WAVES), which includes EWB and other service-related activities. The students have also formed a University organization called Valpo Robotics. The goal of this organization is to design and build robots for various competitions (Robotic Football, Vex Robotics, etc.).

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.

Sophomore, junior, and senior students majoring in Electrical Engineering or Computer Engineering who have distinguished themselves by high scholarship, character, and attitude may be elected to membership in Eta Kappa Nu, the national Electrical and Computer Engineering honor society.

### **Placement**

The Career Center arranges on-campus interviews with a variety of employers who are interested in hiring our 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 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.

## **Special Programs of the College of Engineering**

### **Cooperative Education**

The Cooperative Education Program provides an optional 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 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. The Cooperative Education Program enhances the graduating engineer's placement status, and some employers count the time served as a cooperative education student toward benefits provided to full-time employees. To participate in the program, students' cumulative GPA must be 2.400 or higher.

### **Internships**

The Engineering Internship Program is an optional program in which all engineering students in good standing, except those participating in the Cooperative Education Program, may participate during their summer breaks. Participation is typically limited to the summer between the freshman and sophomore years through the summer between the junior and senior years. Academic year internships may be accommodated on a case-by-case basis. Students interested in this program can earn up to three credit hours of academic credit for their participation in the program.

### **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 or chemical engineering can enrich their engineering programs by careful selection of electives. These programs involve replacing technical, professional, and free electives with courses from other disciplines. Each student plans a program of study in consultation with a faculty advisor.

### **Engineering and Masters of Business Administration (MBA) Program**

An engineering student interested in acquiring business, values-based leadership, and entrepreneurial acumen to augment their engineering skillset should consider pursuing the Master of Business Administration (MBA) degree with an Engineering Management concentration. Through careful academic advising and proper selection of either a Business Administration minor or a Fundamentals of Business minor, an engineering student can complete an engineering degree and the MBA in five years. Interested students should speak with their academic advisor as early as possible when formulating their plan of study.

### **Integrated Business and Engineering (IBE) Program**

While housed in the College of Business, the Integrated Business and Engineering program is offered jointly through the College of Engineering and College of Business. Students complete coursework in engineering, business, and general studies that leads to a business degree. Along with the degree, students can earn an engineering minor and a business minor of their choice. For more information about the IBE, please refer to the College of Business section of the catalog.

### **Engineering Plus (ENG+) Program**

The Engineering Plus program provides an intentional pathway for College of Engineering students to earn an engineering degree plus a major or minor in another area and still graduate in four years. If a student does not have any AP credit, the pathway includes nine credit hours of coursework in the summer after the student's first year to ensure completion on time. For information on what majors and minors are available in the ENG+ program, please contact your department chair.

## **KEEN Network**

The College of Engineering is a member of the KEEN Network of engineering schools whose focus is to develop the entrepreneurial mindset in all undergraduate engineering students. The college is committed to embedding core components of KEEN's entrepreneurial mindset (curiosity, connections and creating value) throughout the curricula of all programs.

## **Majors and Minors**

An engineering student may earn multiple majors or minors by satisfying catalog course and credit requirements for each major or minor. Each major will require at least one course (of at least three credits) in addition to all coursework presented for the engineering degree. Each minor will require at least one course (of at least three credits) above any and all coursework presented for the engineering degree or for another minor. The extra course must be numbered 200 or higher. The use of engineering courses that are cross-listed or that 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.

## **Departmental Minors**

Any student seeking further breadth in their plan of study may earn one or more minors within the College of Engineering. The following minors are available: bioengineering, civil engineering, electrical and computer engineering, and mechanical engineering. See the requirements for each in their respective departmental listing.

## **Engineering Minor**

The Engineering Minor offers non-engineering students an introduction to areas of engineering. This minor is especially appropriate for students with an interest in pursuing a career in an engineering related field. This minor would be of interest to science students who need an approved minor to graduate (see page 48). The College of Engineering assistant dean for student success will serve as the advisor.

A minimum of 18 credit hours of engineering courses is required for this minor. Of these, at least 9 credits must be from 200-level or higher courses. GE 100 may not be included, and credit will not be given for both CE 334 and ME 373, for both ECE 261 and ECE 281, and for both CE 212 and ME 252. Students must satisfy course prerequisites. The program of study must be approved by the student's academic advisor.

## **Humanitarian Engineering Minor (Minimum 18 Cr.)**

The Humanitarian Engineering Minor gives students the understanding and the opportunity to apply engineering concepts to improve the welfare of the less advantaged. Coursework enhances cultural awareness and helps students identify problems that engineers could solve. Professor Peter Johnson is the current advisor.

<b>GS 180</b>	Civic Engagement (3 credits)	1-2 Cr.
<b>One course from the following options:</b>		
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>WLC 150</b>	Global Perspectives	3 Cr.
<b>Twelve credits from the following options:</b>		
<b>Foundational Humanitarian Courses</b>		
<b>GEO 102</b>	Globalization and Development	3 Cr.
<b>WLC 150</b>	Global Perspectives	3 Cr.
<b>Civic Society &amp; Development</b>		
<b>ECON 136</b>	Economics of Health, Education, and Welfare	3 Cr.
<b>ENGL 296</b>	Traditions of Giving and Serving in American Life	3 Cr.
<b>GEO 320</b>	Urban Geography	3 Cr.
<b>GS 220</b>	Contemporary Issues of Philanthropy and Service	3 Cr.
<b>PHIL 125</b>	The Good Life	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.
<b>POLS 353</b>	Principles of Peace and Social Justice	3 Cr.
<b>PSJ 201</b>	Principles of Peace and Social Justice	3 Cr.
<b>SOC 210</b>	Contemporary Social Problems	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights and Justice	3 Cr.
<b>Cultural Perspectives</b>		
<b>EAST 140</b>	Introduction to East Asian Culture	3 Cr.
<b>GEO 200</b>	American Ethnic Geography	3 Cr.
<b>HIST 232</b>	Latin American History and Society	3 Cr.
<b>HIST 140</b>	Introduction to East Asian Culture	3 Cr.
<b>HIST 250</b>	African History and Society	3 Cr.
<b>HIST 329</b>	Revolution! Insurgence in Latin America	3 Cr.

<b>HIST 333</b>	Latin American in the Cold War Era	3 Cr.
<b>HIST 341</b>	Revolution and Its Roots: The Making of Modern China	3 Cr.
<b>HIST 350</b>	Colonialism and Independence: Understanding Modern Africa	3 Cr.
<b>HIST 355</b>	Modern Middle Eastern History	3 Cr.
<b>WLC 337</b>	Ethnology and History of Costa Rica	3 Cr.
<b>THEO 360</b>	Themes in the History of Religions	3 Cr.
<b>THEO 361</b>	Indian Religions and Culture	3 Cr.
<b>THEO 362</b>	Islamic Religion and Culture	3 Cr.
<b>THEO 363</b>	Religions of China and Japan	3 Cr.
<b>THEO 364</b>	Native American Religions	3 Cr.
<b>THEO 367</b>	Topics in South Asian Religions	3 Cr.
<b>THEO 368</b>	Topics in Abrahamic Religions	3 Cr.
<b>World Language (4 credits maximum)</b>		
<b>Global Awareness</b>		
<b>EAST 340</b>	East Asian Humanities Topics	3 Cr.
<b>ECON 326</b>	International Economics	3 Cr.
<b>GEO 101</b>	World Human Geography	3 Cr.
<b>GEO 201</b>	Economic Geography	3 Cr.
<b>GEO 301</b>	Regional Geographies of the World	3 Cr.
<b>GEO 470</b>	Political Geography	3 Cr.
<b>WLC 320</b>	Global Humanitarianism Examined	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>POLS 332</b>	Politics of China and East Asia	3 Cr.
<b>POLS 333</b>	Politics of Africa	3 Cr.
<b>POLS 334</b>	Politics of the Middle East	3 Cr.
<b>POLS 335</b>	Politics of Developing States	3 Cr.
<b>POLS 336</b>	Politics of Latin America	3 Cr.
<b>Global Health &amp; Development</b>		
<b>HCL 418</b>	Global Health Issues	3 Cr.
<b>HS 418</b>	Global Health Issues	3 Cr.
<b>WLC 335</b>	Perspectives on Health Care in Costa Rica	3 Cr.
<b>MATH 321</b>	Mathematical Models of Infectious Diseases	3 Cr.
<b>NURS 360</b>	Interprofessional Service Learning in Health in Central America	3 Cr.
<b>NUR 418</b>	Global Health Issues	3 Cr.
<b>PHS 101</b>	Introduction to Public Health	3 Cr.
<b>PHS 121</b>	Environment and Health	3 Cr.
<b>PHS 207</b>	Public Health Education and Promotion	3 Cr.
<b>PHS 418</b>	Global Health Issues	3 Cr.
<b>PHS 421</b>	Environmental Health for a Sustainable Future	3 Cr.
<b>SPED 441</b>	Assistive Technology	3 Cr.
<b>Sustainable Development</b>		
<b>ECON 210</b>	Environmental Economics and Policy	3 Cr.
<b>ECON 336</b>	Economics of Developing Nations	3 Cr.
<b>ENVS 340</b>	Water Resources Science and Management	3 Cr.
<b>GEO 260</b>	Environmental Conservation	3 Cr.
<b>GEO 475</b>	Culture, Nature, Landscape	3 Cr.
<b>ME 377</b>	Introduction to Renewable Energy	3 Cr.

**Note:** At least one credit of GS 180 must be for activities in Engineers Without Borders or a similar approved engineering project.

**Note:** Non-engineering students may earn this minor by completing the Engineering Minor and the above requirements.

**Note:** For possible exceptions to this list, please contact Professor Peter Johnson.

**Mechatronics Minor (Minimum 31 Cr.)**

ECE 221	Digital Logic Design	3 Cr.
ECE 251	Fundamentals of Programming I	3 Cr.
ECE 322	Embedded Microcontrollers	3 Cr.
GE 109	Mechanics - Statics	3 Cr.
ME 209	Mechanics - Dynamics	3 Cr.
ME 215	Mechanics of Materials	3 Cr.
ME 361	Mechatronics Laboratory	0.5 Cr.
ME 368	Actuators	1 Cr.
ME 369	Robotics	1.5 Cr.

**One of the following options:**

ECE 263	Linear Circuit Theory I	3+3, 4 Cr.
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**Both of the following:**

ECE 281	Fundamentals of Electrical Engineering	2.5 Cr.
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ME 261	Analog Circuits Laboratory	0+1.5, 0.5 Cr.
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**One course from the following options:**

ECE 323	Industrial Automation	2 Cr.
ME 367	PLCs and Sensors	1 Cr.

**Choose one of the following groups (depending on current major)****Mechanical/Bioengineering Majors****Choose six credits from the following options:**

ECE 222	Advanced Logic Design	2.5+1.5, 3 Cr.
ECE 252	Engineering Programming II	2.5+1.5, 3 Cr.
ECE 264	Linear Circuit Theory II	3+3, 4 Cr.
ECE 340	Electronics I	2.5+1.5, 3 Cr.
ECE 341	Electronics II	2.5+1.5, 3 Cr.
ECE 360	Signals and Systems	3 Cr.
ECE 422	Embedded Microcontrollers II	2.5+1.5, 3 Cr.
ECE 464	Mobile Robotics	2 Cr.
ECE 470	Power Electronics	3 Cr.
BE 468	Human Machine Interfaces	3 Cr.

**Electrical/Computer Engineering Majors****Choose six credits from the following options:**

ECE 464	Mobile Robotics	2 Cr.
ECE 473	Electric Motors	3 Cr.
ME 102	Computer-Aided Design	1 Cr.
ME 252	Materials Science	2.5 Cr.
ME 333	Mechanical Measurements Laboratory	3+3, 4 Cr.
ME 352	Materials Science and Mechanics Laboratory	0+1.5, 0.5 Cr.
ME 354	Mechanical Systems Laboratory I	0.5 Cr.
ME 355	Systems Modeling and Numerical Methods	3 Cr.
ME 363	Machine Design	3 Cr.
ME 364	Vibrations	2 Cr.
ME 454	Mechanical Systems Laboratory II	0.5 Cr.
BE 468	Human Machine Interfaces	3 Cr.

**One course from the following can apply to the six credit requirement:**

ECE 460	Control System Design	3 Cr.
ME 442	Automatic Control	3 Cr.

**Double Degree Program**

Some students wish to obtain a second engineering degree, a Bachelor of Arts or Bachelor of Science degree in the College of Arts and Sciences or the College of Business, in addition to their first degree in engineering. In general, this will require an additional year or more of study. To earn two degrees, students must earn at least 157 credit hours and attain a grade point average of at least 2.000, as well as complete all other graduation requirements for each degree independently. Please refer to the University policy regarding second degrees under the Academic Policies section on page 383.

## 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 courses provide an enriched program in the humanities and satisfy General Education Requirements for the engineering program. Academic advisors 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.

## 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 beginning on pages 12 and 18 of this catalog, engineering students are permitted to arrange an international cooperative education assignment. A semester abroad opportunity in Reutlingen, Germany for mechanical, electrical, and computer engineering students is available during the first semester of a student's junior year. A four-week summer study abroad experience is also available for engineers in Reutlingen, Germany and will be offered on an annual or bi-annual basis.

### Valparaiso University International Engineering Programs (VIEP)

VIEP is a five-year program that combines a major in one of the four engineering fields with a major or minor in German (VIEP - German), French (VIEP - French), Spanish (VIEP - Spanish) or a minor in Chinese (VIEP in China). The program allows students to gain multicultural experience and language proficiency along with technical engineering skills and prepares them for careers with one of many international firms located in the United States and around the world.

**VIEP-German:** Students are required to fulfill all requirements for one of the six engineering majors; take at least one 3- or 4-credit German language course per semester beginning, at the latest, in the third semester; participate in the University's Study Abroad Program in Reutlingen, Germany, in the seventh semester; work in a cooperative education placement in Germany during the eighth semester and the ensuing summer; and reside in the Kade-Duesenberg German House and Cultural Center for at least two semesters.

**VIEP-French:** Students are required to fulfill all requirements for one of the six engineering majors; take at least one 3- or 4-credit French language course per semester beginning, at the latest, in the third semester; participate in the University's Study Abroad Program in Compiègne, France, in the seventh semester and work in a cooperative education placement in France during the eighth semester and the ensuing summer.

**VIEP-Spanish:** Students are required to fulfill all requirements for one of the six engineering majors; take at least one Spanish language course per semester beginning, at the latest, in the third semester; participate in the University's Study Abroad Program in Zaragoza, Spain, in the seventh semester; and work in a cooperative education placement in Spain during the eighth semester and ensuing summer.

**VIEP in China:** Students are required to fulfill all requirements for one of the six engineering majors; take at least one Chinese language course per semester beginning, at the latest, in the third semester; participate in the University's Study Abroad Program in Hangzhou, China, in the seventh semester; and work in a cooperative education placement in China during the eighth semester and the ensuing summer.

VIEP-German, VIEP-French, VIEP-Spanish, and VIEP in China are coordinated jointly by the College of Engineering and the Department of World Languages and Cultures. Students who wish to enroll in one of the programs should see their engineering advisor and a German, French, Spanish, or Chinese instructor as early in the freshman year as possible.

## Academic Policies

### Graduation Requirements

Students must complete one of the prescribed engineering curricula as described in the departmental listings. These prescribed courses satisfy the general criteria for baccalaureate-level programs as defined by ABET. The evaluation of advanced standing of transfer students in the Statement of Equivalence is based on meeting these criteria. With the approval of the department chair, the requirement for GE 100 may be replaced by another approved course.

In addition to other requirements set forth beginning on page 388 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 2.000 in all work.
2. A cumulative GPA of 2.000 in mathematics and science courses that satisfy the major and minor requirements.
3. A cumulative GPA of 2.000 in the engineering major. This includes courses identified with the student's departmental prefix (i.e., CE, ECE, and ME, respectively), all general engineering courses (GE), and ECE 281 for ME majors. Computer Science courses are included in this category for Computer Engineering majors.

### Academic Deficiency

Students whose cumulative resident grade point average in any of the three categories listed above under Graduation Requirements falls below 2.000 are considered academically deficient. Such students may be denied the privilege of continuing their studies by being suspended from the 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. If you are reinstated in the College of Engineering and your cumulative resident grade point average in any of the three categories falls below 2.000 after subsequent semesters, you may be suspended from the college immediately.

### Guest Policy

A student not pursuing an engineering major or minor may take one engineering course per semester or summer session. Written recommendation from the department chair and approval of the dean is needed to take two or more courses. 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 (lower than C-) or have approval of the department chair. 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, unless approved by the dean of Engineering.

# General Engineering

**Assistant Dean for Student Success & Director, Hesse Center Laura L. Sanders; Assistant Professor Wertz.**

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

## General Engineering Courses

<b>GE 100</b>	<b>Fundamentals of Engineering</b>	1+3, 2 Cr.
	This is an introductory course that focuses on the fundamental concepts of engineering. Topics are drawn from principles of bio-, civil, computer, electrical, environmental, and mechanical engineering and show the interdisciplinary nature of the profession. Foundational skills such as problem solving, engineering communication, and teamwork are included. Students will participate in hands-on activities and design projects related to topics covered. Corequisite: MATH 131 or enrollment in the College of Engineering.	
<b>GE 109</b>	<b>Mechanics-Statics</b>	3 Cr.
	(Also offered as PHYS 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, and friction. Prerequisites: MATH 131 and PHYS 141.	
<b>GE 190</b>	<b>Topics in Engineering</b>	0.5-3 Cr.
	The investigation of engineering topics of special interest.	
<b>GE 290</b>	<b>Issues in Technology</b>	3 Cr.
	Introduction to problem solving, decision making, and risk assessment as they relate to the technical decision-making process. Engineering measurements will be explored in the laboratory using conventional and computer-based data acquisition systems. Utilizing case studies, the relevant technical and nontechnical decisions associated with issues and projects will be explored. Not open to engineering majors.	
<b>GE 299</b>	<b>Humanitarian Engineering Colloquium</b>	0 Cr.
	Students will present their work in humanitarian engineering. Guest speakers will be invited to present topics relating to humanitarian issues. Students pursuing the Humanitarian Engineering Minor are expected to register for the colloquium every spring semester. S/U grade only.	
<b>GE 311</b>	<b>Financial Decisions in Engineering</b>	1.5 Cr.
	A discussion of essential financial issues that impact engineering decision-making. Topics include calculating measures of financial merit for engineering decisions and selecting the most economically desirable solution from among several alternatives. Prerequisite: MATH 132, sophomore standing, or chair approval.	
<b>GE 312</b>	<b>Ethical Decisions in Engineering</b>	1.5 Cr.
	A discussion of essential ethical issues that impact engineering decision-making. Topics include recognizing situations that require ethical judgment, and applying engineering codes of ethics to make ethical decisions. Concepts of sustainability and socio-political influence are also discussed. Prerequisite: junior standing or chair approval.	
<b>GE 386</b>	<b>Internship in Engineering</b>	0.5-1 Cr.
	An engineering work experience with a pre-selected and approved employer. Requires satisfactory work performance and submission of a final report in approved format. Students may repeat for a maximum of three work sessions. Grading will be on an S/U basis. Prerequisites: student must be in good standing in the College of Engineering and have approval of the student's department chair.	
<b>GE 390</b>	<b>Topics in Engineering</b>	0.5-3 Cr.
	The investigation of engineering topics of special interest.	
<b>GE 481</b>	<b>Cooperative Education I</b>	0.5-3 Cr.
	Application of the concepts of engineering in a business, consulting, industrial, or government setting. Emphasis is placed on involvement in real-world engineering projects requiring analysis, design, and investigative skills. Requires satisfactory work performance at a pre-selected employer and the submission of reports in a format approved by each department. This course is graded S/U only for civil and mechanical engineering majors. Prerequisite: approval of the student's department chair.	
<b>GE 482</b>	<b>Cooperative Education II</b>	0.5-2 Cr.
	A continuation of GE 481. This course requires a satisfactory employer evaluation and reports in a format approved by each department. This course is graded S/U only for civil and mechanical engineering majors. Prerequisite: GE 481 and approval of the student's department chair.	

<b>GE 483</b>	<b>Cooperative Education III</b>	0.5-1 Cr.
	Application of the concepts of engineering in a business, consulting, industrial, or government setting. Requires the submission of reports in a format approved by each department. This course is graded S/U only for civil and mechanical engineering majors. May be repeated for up to three credit hours. Prerequisite: approval of the student's department chair.	
<b>GE 493</b>	<b>Professional Communications and Interpersonal Relations</b>	3 Cr.
	The development of professional skills needed to be successful in the engineering profession. Topics include building self-confidence, strengthening people skills, enhancing communication skills, developing leadership skills, and reducing stress/improving attitude. Junior standing and dean's approval required.	
<b>GE 495</b>	<b>Special Problem</b>	1-3 Cr.
	Selected students are permitted to work on a special problem under the supervision of a member of the faculty. Each student is required to keep a progress notebook and to turn in a final report in an approved format. Open only to students with permission of the faculty and approval of the dean.	
<b>GE 497</b>	<b>Senior Design Project I</b>	3 Cr.
	The application of theoretical and experimental engineering concepts in the analysis and design of an engineering system. Students form teams to plan and organize a multidisciplinary project. Pre/corequisite: GE 311 and 312 and [(Prerequisite: ECE 340 or ECE322) or (Pre/corequisite: ME 363) or (Pre/corequisite: BE 415)].	
<b>GE 498</b>	<b>Senior Design Project II</b>	3 Cr.
	A continuation of GE 497. Projects are built, tested, documented, and reported. Prerequisite: GE 497.	

# Civil and Environmental Engineering

**Professors Polito (chair, spring), P. Weiss (chair, fall); Associate Professors Aljobeh, Raich; Assistant Professors Grossman, Heffron.**

## Mission

The mission of the Department of Civil and Environmental Engineering is to provide the highest quality of technical education, which is grounded in the arts and sciences by faculty dedicated to exceptional teaching and extraordinary care for individual students. The department will strive to develop graduates who will be effective members of engineering teams, managers of engineering projects, and serve as leaders in the civil engineering discipline and within the broader community of church and society.

# Civil Engineering

## Program Educational Objectives

The Program Educational Objectives help to direct and measure the success of the civil engineering program in accomplishing its mission. They are broad statements that describe what graduates are expected to attain within a few years of graduation and are based on the needs of the program's constituencies. The Civil Engineering Program Education Objectives state that within five to ten years of graduation, civil engineering alumni will have:

1. Attained a position within the civil engineering community through which they are able to make a positive contribution to the engineering profession and society as a whole.
2. Participated in continuing education activities, such as courses taken for advanced degrees, seminars, workshops, and conferences, demonstrating their commitment to lifelong learning; and
3. Advanced in their profession. Advancement may be demonstrated through achievements such as promotions and licensure.

## Program Overview

“Civil engineering is the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the progressive wellbeing of mankind in creating, improving, and protecting the environment, in providing facilities for community living, industry, transportation, and in providing structures for the use of mankind.”

*--American Society of Civil Engineers*

The Civil Engineering Program is designed to prepare the graduate to enter the practice of engineering or to pursue graduate study. The program is broad in scope requiring students to complete course work in five major branches of civil engineering (i.e., environmental, geotechnical, structural, transportation, and water resources engineering). Additional depth in one or several branches can be obtained through appropriate electives. The program emphasizes the importance of effective communication (e.g., written and oral); the ability to work in teams; the importance of ethical and professional responsibility; the need to be lifelong 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 between analysis and design, exposing students to various design methodologies, and requiring students to develop and evaluate (i.e., using economic, social, safety, and engineering criteria) alternative solutions to realistic engineering problems. The design experience (i.e., 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 the mechanics of materials and their introductory courses in structural and transportation engineering. In the junior year, additional aspects of the design process and the use of standards, specifications, and building codes are discussed in courses in environmental engineering, water resources engineering, soil and foundation engineering, structural engineering, and transportation engineering. In the senior year, students apply their design skills in their civil engineering electives and capstone design experience. The capstone courses include a major, comprehensive design project in which students work in teams to bring together their accumulated knowledge of civil engineering to solve engineering problems with realistic constraints.

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. The civil engineering program has modern, well-equipped laboratories in materials engineering, fluid mechanics, soil mechanics, and environmental engineering.

**Bachelor of Science in Civil Engineering – Civil Engineering Major (128 Cr.)**

<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>CHEM 115</b>	Essentials of Chemistry for Engineers	3+2, 4 Cr.
<b>CHEM 116</b>	Applications of Chemistry in Engineering	3+3, 4 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.
<b>One of the following options:</b>		
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		
<b>Science Elective</b>		
<b>Technical Elective</b>		
<b>Professional Elective</b>		
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 109</b>	Mechanics-Statics	3 Cr.
<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>CE 151</b>	Introduction to Computer-Aided Drafting	0+3, 1 Cr.
<b>CE 212</b>	Materials Engineering	2+3, 3 Cr.
<b>CE 213</b>	Technical and Professional Writing in Civil and Environmental Engineering <sup>w</sup>	1 Cr.
<b>CE 215</b>	Mechanics of Materials	3 Cr.
<b>CE 216</b>	Introduction to Structural Engineering	3 Cr.
<b>CE 252</b>	Introduction to Transportation Engineering	3 Cr.
<b>CE 317</b>	Design of Reinforced Concrete Structures	3 Cr.
<b>CE 318</b>	Design of Steel Structures	3 Cr.
<b>CE 320</b>	Soil Mechanics	3+3, 4 Cr.
<b>CE 322</b>	Soil and Foundation Engineering	3 Cr.
<b>CE 334</b>	Fluid Mechanics	3+3, 4 Cr.
<b>CE 335</b>	Hydrology	3 Cr.
<b>CE 354</b>	Design of Transportation Facilities	3 Cr.
<b>CE 364</b>	Environmental Engineering I	3+3, 4 Cr.
<b>CE 365</b>	Environmental Engineering II	3 Cr.
<b>CE 493</b>	Senior Design I: Project Planning and Management	2.5+1.5, 3 Cr.
<b>CE 494</b>	Senior Design II: Project Development and Design	1+6, 3 Cr.
<b>Civil Engineering Electives</b>		
<b>Total Required for Graduation</b>		
<b>128 Cr.</b>		

**Writing Intensive Course (as indicated by a superscript "w")**

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or CE 213 must be a Writing Intensive Course. A list of courses approved as a writing intensive course is provided on page 443.

**Professional Elective**

The professional elective requirement may be met by taking a course from an approved list of courses found on page 323. Other choices may be made available by petition to the Civil and Environmental Engineering Department.

## **Civil Engineering Electives**

These nine credits are to be selected from the array of civil engineering electives provided. Courses which fulfill civil engineering elective requirements are indicated with a superscript "c": (...)<sup>c</sup>.

## **Cooperative Education**

Students may request to substitute up to six credits of GE 481 through GE 483 for the Professional Elective and Technical Elective. Courses GE 481-483 are graded S/U only.

## **Technical Elective**

The Technical Elective requirement may be met by taking a course from an approved list of courses found on page 323. Other choices may be made available by petition to the Civil and Environmental Engineering Department.

## **Science Elective**

The Science Elective requirement is met by taking a course from an approved list of courses found on page 323.

## **World Language/Diversity Elective**

Students will take three credits from either world languages at the 102 level or above or from the diversity list beginning on page 438.

## **Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

## **Civil Engineering Minor (Minimum 18 Cr.)**

A minor in civil engineering is available to students majoring in computer, electrical, or mechanical engineering. A minimum of 18 credit hours in civil engineering, excluding CE 202, is required. GE 109 may be counted as part of the 18 credits. A concentration of at least two CE courses in water resources, structural, geotechnical, construction, environmental, or transportation engineering is required. At least nine credits must be at the 300 level or above. Mechanical engineering majors may not use CE 334 as part of the minor. The civil and environmental engineering department chair must approve the plan of study.

# Environmental Engineering

## Program Educational Objectives

The Program Educational Objectives help to direct and measure the success of the civil engineering program in accomplishing its mission. They are broad statements that describe what graduates are expected to attain within a few years of graduation and are based on the needs of the program's constituencies. The Environmental Engineering Program Education Objectives state that within five to ten years of graduation, environmental engineering alumni will have:

- A. Attained a position within the civil and environmental engineering community through which they are able to make a positive contribution to the engineering profession and society as a whole.
- B. Participated in continuing education activities, such as courses taken for advanced degrees, seminars, workshops, and conferences, demonstrating their commitment to lifelong learning; and
- C. Advanced in their profession. Advancement may be demonstrated through achievements such as promotions and licensure.

## Program Overview

Environmental engineers protect and improve the quality of life of people and society by applying their technical expertise to find sustainable solutions to global problems. In this role, environmental engineers are stewards of our natural resources and designers of our built environment. Population growth and the rising standard of living for societies worldwide result in additional environmental challenges. The global population has grown from 1 billion in 1800 to 7 billion in 2011 with an expected population reaching almost 10 billion by 2050. With this growth comes the increasing challenge of providing clean air and water to people worldwide. In addition, the rising standard of living results in increased consumption and higher energy and water needs. Environmental engineers working alongside other environmental professionals will be at the forefront of efforts to ensure adequate living conditions for everyone. While environmental engineers in the previous century focused mainly on waste water treatment, today their focus has expanded to develop solutions to all types of environmental problems surrounding the air, water and soil. They also investigate such diverse topics as the effects of climate change and the development of green infrastructure.

The environmental engineering program is interdisciplinary in nature with a strong link between the natural sciences and engineering. Courses are sequenced to build upon a firm foundation in mathematics, basic sciences, and engineering sciences. Courses progressively involve students in engineering design activities, and the courses culminate in a major interdisciplinary, capstone design experience during the final year of study. The program will be housed in the Department of Civil and Environmental Engineering (CEE). The Environmental Engineering (ENE) program shares a common first year with other CoE programs and a common second year with the civil engineering program. The ENE program offers a core that provides a broad foundation in environmental engineering while also providing elective concentrations in air, water or soil. Graduates of the Environmental Engineering Program at Valparaiso University are qualified to enter industry as practicing engineers or to pursue advanced degrees.

## Bachelor of Science in Environmental Engineering – Environmental Engineering Major (128 Cr.)

<b>BIO 215</b>	Fundamental Microbiology for Engineers	3 Cr.
<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>CHEM 115</b>	Essentials of Chemistry for Engineers	3+2, 4 Cr.
<b>CHEM 116</b>	Applications of Chemistry in Engineering	3+3, 4 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.

### One of the following options:

<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		3 Cr.
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		6 Cr.
<b>Professional Elective</b>		3 Cr.
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 109</b>	Mechanics-Statics	3 Cr.

<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>CE 151</b>	Introduction to Computer-Aided Drafting	0+3, 1 Cr.
<b>CE 213</b>	Technical and Professional Writing in Civil and Environmental Engineering <sup>w</sup>	1 Cr.
<b>CE 215</b>	Mechanics of Materials	3 Cr.
<b>CE 281</b>	Geology for Civil and Environmental Engineers	3 Cr.
<b>CE 334</b>	Fluid Mechanics	3+3, 4 Cr.
<b>CE 335</b>	Hydrology	3 Cr.
<b>CE 351</b>	Programming and Numerical Methods	2 Cr.
<b>CE 364</b>	Environmental Engineering I	3+3, 4 Cr.
<b>CE 365</b>	Environmental Engineering II	3 Cr.
<b>CE 493</b>	Senior Design I: Project Planning and Management	2.5+1.5, 3 Cr.
<b>CE 494</b>	Senior Design II: Project Development and Design	1+6, 3 Cr.
<b>ENE 210</b>	Environmental Toxicity and Risk Assessment	3 Cr.
<b>ENE 260</b>	Environmental Sustainability	2 Cr.
<b>ENE 310</b>	Chemical Fate and Transport	3 Cr.
<b>ENE 330</b>	Environmental Soils	2+3, 3 Cr.
<b>ENE 360</b>	Environmental Policy and Law	2 Cr.
<b>ENE 440</b>	Introduction to Air Pollution	3 Cr.
<b>ENE 450</b>	Hazardous Waste Management	3 Cr.
<b>ME 270</b>	Thermodynamics I	3 Cr.
<b>Environmental Engineering Electives</b>		6 Cr.
<b>Total Required for Graduation</b>		<b>128 Cr.</b>

## Environmental Engineering Minor (18 Cr.)

A minor in environmental engineering is available to students majoring in civil, computer, electrical, or mechanical engineering, biology, chemistry, or environmental science. A minimum of 18 credit hours in chemistry, civil, and environmental engineering is required. The civil and environmental engineering department chair must approve the plan of study.

### One course from the following:

<b>CHEM 116</b>	Applications of Chemistry in Engineering	3+3, 4 Cr.
<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>ENE 210</b>	Environmental Toxicology and Risk Assessment	3 Cr.
<b>ENE 260</b>	Environmental Sustainability	2 Cr.
<b>CE 364</b>	Environmental Engineering I	3+3, 4 Cr.

### Two courses from the following options:

<b>ENE 310</b>	Chemical Fate and Transport	3 Cr.
<b>ENE 330</b>	Environmental Soils	2+3, 3 Cr.
<b>ENE 360</b>	Environmental Policy and Law	2 Cr.
<b>ENE 440</b>	Introduction to Air Pollution	3 Cr.
<b>ENE 450</b>	Hazardous Waste Management	3 Cr.

### Writing Intensive Course (as indicated by a superscript "w")

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or CE 213 must be a Writing Intensive Course. A list of courses approved as a Writing Intensive Course is provided on page 443.

### Professional Elective

The professional elective requirement may be met by taking a course from an approved list of courses found on page 323. Other choices may be made available by petition to the Civil and Environmental Engineering Department.

### Environmental Engineering Electives

These six credits are to be selected from the array of environmental engineering electives provided. Courses which fulfill environmental engineering elective requirements are indicated with a superscript "e": (...)<sup>e</sup>.

### Cooperative Education

Students may request to substitute up to six credits of GE 481 through GE 483 for the Professional Elective and Technical Elective. Courses GE 481-483 are graded S/U only.

**World Language/Diversity Elective**

Students will take three credits from either world languages at the 102 level or above or from the diversity list beginning on page 438.

**Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

**Civil Engineering Courses**

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

<b>CE 151</b>	<b>Introduction to Computer-Aided Drafting</b>	0+3, 1 Cr.
	This introductory course will provide students with a basic understanding of the features and consideration associated with the operation of a computer-aided drafting (CAD) system. Students will be introduced to drafting standards and practices in the context of a range of civil engineering disciplines.	
<b>CE 202</b>	<b>Statistical Applications in Civil Engineering</b>	3 Cr.
	An introduction to the primary statistical and probabilistic models used in the collection and interpretation of civil engineering data. The focus is on summary techniques, regression models, application of the Central Limit Theorem, confidence intervals, and recurrence intervals. Monte Carlo simulation techniques are used to estimate the failure likelihood of a civil engineering system. Prerequisite: MATH 132.	
<b>CE 212</b>	<b>Materials Engineering</b>	2+3, 3 Cr.
	Study of the composition, production, properties, and behavior of structural materials such as aggregate, concrete, steel, and timber. Introduction to the use of standardized test methods and data analysis. Laboratory exercises include determination of aggregate properties, concrete mixture design, properties of hardened concrete, properties of ductile metals, and properties of clear wood. Written reports for laboratory exercises are required. Field trips may be required. Prerequisite or Corequisite: CE 215; Corequisite: CE 213.	
<b>CE 213</b>	<b>Technical and Professional Writing in Civil and Environmental Engineering</b>	1 Cr.
	Students will be introduced to technical writing in civil and environmental engineering, with a focus on laboratory reports, and to professional writing such as memoranda and business letters. This course fulfills the Writing Intensive Course General Education requirement. Corequisite: sophomore standing in the Civil Engineering Department or consent of the chair of the department.	
<b>CE 215</b>	<b>Mechanics of Materials</b>	3 Cr.
	(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. Prerequisite: GE 109.	
<b>CE 216</b>	<b>Introduction to Structural Engineering</b>	3 Cr.
	An introduction to the behavior, analysis, and design of structures. Topics will include design criteria, loads, analysis of structural members and systems using classical hand methods and computer software, and design with various material types (e.g., steel, concrete, timber, masonry). Prerequisite: CE 215.	
<b>CE 252</b>	<b>Introduction to Transportation Engineering</b>	3 Cr.
	Topics include transportation system characteristics, transportation demand, transportation planning, transportation engineering studies, human and vehicle design factors, traffic flow and operations, signing and marking, and safety. While highway modes occupy a majority of the time due to their relative importance, other modes such as rail, air, and water will also be discussed. Prerequisite: STAT 240 or CE 202.	
<b>CE 281</b>	<b>Geology for Civil and Environmental Engineers</b>	3 Cr.
	A study of the structure of the Earth, including minerals, igneous, sedimentary, and metamorphic rocks. Also discussed are plate tectonics and its relationship to volcanoes, earthquakes, and mountain building. Upon completion of this course, students should be able to apply their knowledge of geology to civil engineering projects. Prerequisite: sophomore standing in the Civil Engineering Department or consent of the chair of the department.	
<b>CE 290</b>	<b>Topics in Civil Engineering</b>	2-4 Cr.
	Seven weeks or semester. The investigation of civil engineering topics of special interest. Prerequisites depend on topics offered. Offered upon sufficient demand.	

<b>CE 299</b>	<b>Sophomore Honor Studies in Civil Engineering</b>	1-3 Cr.
	Independent study of an advanced topic in civil engineering. Available by invitation only. Prerequisite: approval by the Civil Engineering Department.	
<b>CE 317</b>	<b>Design of Reinforced Concrete Structures</b>	3 Cr.
	Design of reinforced concrete members and structures. Topics will include the design of members for compression, flexure and shear, deflections, bond and anchorage, and footings. Additional topics may include the design of one-way slabs and the design of reinforced concrete frames. ACI strength design methods are used. Prerequisite: CE 216.	
<b>CE 318</b>	<b>Design of Steel Structures</b>	3 Cr.
	Design of steel members and structures. Topics will include the design of members for tension, compression, flexure and shear, and the design of simple connections. Additional topics may include the design of composite members and the design of steel frames. LRFD methods are used. Prerequisite: CE 216.	
<b>CE 320</b>	<b>Soil Mechanics</b>	3+3, 4 Cr.
	The study of index, mechanical, and hydraulic properties of soils. Soil identification, compaction, shear strength, consolidation, vertical stress distribution, and flow through porous media. Principles of laboratory identification and testing of soils. Site investigation and in situ testing. Prerequisite: CE 215.	
<b>CE 322</b>	<b>Soil and Foundation Engineering</b>	3 Cr.
	A continuation of CE 320. Lateral earth pressures, retaining wall design, elastic stress distribution, settlement, and bearing capacity of foundation systems. Sizing of shallow and deep foundation systems. Prerequisite: CE 320.	
<b>CE 334</b>	<b>Fluid Mechanics</b>	3+3, 4 Cr.
	An examination of fluid properties, fluids at rest, and fluids in motion. Conservation of mass, and the energy and momentum principles are utilized along with dimensional analysis and similitude. Applications include pumps, flow in conduits, lift and drag, pipe networks, and hydraulic model studies. Integrated with the fluid mechanics per se are principles of mechanics/dynamics. A Writing in the Discipline course. Prerequisites: MATH 132, CE 213 and CE 215.	
<b>CE 335</b>	<b>Hydrology</b>	3 Cr.
	Introduction to surface water hydrology: hydrologic cycle, precipitation, evaporation, infiltration, runoff, rainfall-runoff relationships, uniform flow in open channels, stream flow measurements, hydrologic routing, hydrologic modeling, hydrologic probability, storm water management, storm sewer design, and applications. Prerequisite: CE 334.	
<b>CE 351</b>	<b>Programming and Numerical Methods</b>	1+3, 2 Cr.
	Course will cover programming/numerical methods/computer modeling and students will apply methods to help solve engineering applications. Students will learn how to program in MATLAB and use their evolving programming skills to implement numerical solutions for problems of interest to civil and environmental engineers. Topics will include root finding, numerical integration, GUI development, arrays and matrices, systems of linear equations, nonlinear ODE boundary value problems, numerical differentiation with finite difference method, detention basin routing, initial value problems, and Runge-Kutta routing problems. Prerequisites: MATH 260/270.	
<b>CE 354</b>	<b>Design of Transportation Facilities</b>	3 Cr.
	Infrastructure and associated needs for transportation facilities. Highway geometric design and the necessary design aids will be a major focus of the class, but other facilities will also be addressed, particularly rail and airport design. Other topics will include pavement design and the explicit incorporation of safety into the design process. Prerequisites: CE 151 and CE 252.	
<b>CE 364</b>	<b>Environmental Engineering I</b>	3+3, 4 Cr.
	Introductory study of water treatment practices common to urban 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. Corequisite: CE 334; prerequisite: CHEM 116.	
<b>CE 365</b>	<b>Environmental Engineering II</b>	3 Cr.
	Introductory study of physical, chemical, and biological processes for the treatment of domestic wastewater and the design of wastewater treatment unit operations. Prerequisite: CE 364	
<b>CE 399</b>	<b>Junior Honor Studies in Civil Engineering</b>	1-3 Cr.
	Independent study of an advanced topic in civil engineering. Available by invitation only. Prerequisite: approval by the Civil Engineering Department.	

<b>CE 415</b>	<b>Advanced Structural Analysis <sup>c</sup></b>	3 Cr.
	Analysis of statically indeterminate structures using energy and/or matrix methods. Direct stiffness and flexibility methods are discussed as are a variety of applications in structural analysis software including response to time-dependent loading such as blasts, earthquakes, etc. Prerequisite: CE 216.	
<b>CE 418</b>	<b>Design of Masonry Structures <sup>c</sup></b>	3 Cr.
	Analysis and design of masonry structural system components. The use of appropriate specifications in design. Design projects may be required. Prerequisite: CE 216.	
<b>CE 419</b>	<b>Prestressed Concrete <sup>c</sup></b>	3 Cr.
	Analysis and design of prestressed concrete members and structures. Topics will include flexural stresses, flexural strength, shear strength, loss of prestress, and deflections. Field trips may be required. Prerequisite: CE 317.	
<b>CE 421</b>	<b>Geotechnical Aspects of Earthquake Engineering <sup>c</sup></b>	3 Cr.
	Causative mechanisms of earthquake, earthquake magnitudes, ground motion, effect of local soil conditions on motions. Response of soils to seismic loading, liquefaction phenomena and analysis of pore pressure development, laboratory and in-situ testing for seismic loading. Prerequisites: STAT 240 or CE 202, and CE 320.	
<b>CE 422</b>	<b>Advanced Soil Mechanics <sup>c</sup></b>	3 Cr.
	The behavior of soil examined from a fundamental soil perspective. Review of methods of testing to define soil strength and response for clays, sands, and silts; rationale for choosing shear strength and deformation parameters for soils for design application. Prerequisite: CE 320.	
<b>CE 436</b>	<b>Water Resources Engineering <sup>c</sup></b>	3 Cr.
	Application of the principles of fluid mechanics to analysis and design of water resources projects. Potential topics include branching pipes, water towers in pipe networks, manifolds, open-channel hydraulics, culvert design, water hammer, reservoirs, and water law, and wells. Prerequisite: CE 334 or ME 373.	
<b>CE 437</b>	<b>Urban Stormwater Management <sup>c</sup></b>	3 Cr.
	Urbanization typically increases the volume of stormwater runoff and degrades water quality. This effect of urbanization on the quantity and quality of stormwater water runoff will be investigated as will methods used to measure and reduce this impact. This course will address the special case of urban hydrology for small watersheds and the management of stormwater quality and quantity. Pre/corequisite: CE 335.	
<b>CE 442</b>	<b>Construction Engineering <sup>c</sup></b>	3 Cr.
	An introduction to construction management issues such as project delivery systems, construction scheduling, construction estimating, project documents, and legal issues. Prerequisite: junior or senior standing.	
<b>CE 456</b>	<b>Railroad Design and Operations <sup>c</sup></b>	3 Cr.
	Essential elements of railroad facility design and operations, with the objective of providing students with a more detailed understanding of railroad functions, design, construction, and operations. The design aspect of the course will include route location, track structure, design and construction of main lines and terminal facilities, maintenance-of-way operations such as track inspection and right-of-way maintenance, railroad bridges and bridge loadings, and drainage requirements. The operations aspect of the course will include basic train handling, train operating characteristics, train makeup and types of trains, train dispatching, yard and terminal operations, and signaling. Prerequisite: CE 354.	
<b>CE 457</b>	<b>Traffic Engineering <sup>c</sup></b>	3 Cr.
	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 252.	
<b>CE 458</b>	<b>Urban Transportation Planning <sup>c</sup></b>	3 Cr.
	Fundamentals of urban transportation planning. Topics include the traditional 4-step planning process, which includes trip generation, trip distribution, mode choice, and trip assignment, data collection and statistical techniques, aggregate and disaggregate modeling, transportation demand forecasting, interaction with land use and urban planning, short-term and long-term plans, traffic impact studies, and environmental studies. Prerequisite: CE 354.	
<b>CE 459</b>	<b>Transportation Economics <sup>c</sup></b>	3 Cr.
	Introduces the basics of transportation economics. Topics include fixed costs, incremental costs, elasticities, direct and indirect costs, the application and impact of subsidies, economics of scale, economies of highway-, transit-, rail, air-, and water-based transportation modes. Prerequisites: CE 354 and GE 311.	

<b>CE 466</b>	<b>Hazardous Waste Management <sup>c</sup></b>	3 Cr.
	A basic overview of remediation of contaminated soil and ground water at hazardous waste sites including development of site investigation plans, management of field investigations, environmental risk assessments, feasibility studies, innovative remedial design techniques, and case studies. Oral and written reports and field trips are required.	
<b>CE 467</b>	<b>Biological Wastewater Treatment <sup>c</sup></b>	3 Cr.
	This course covers biological treatment of domestic and industrial wastewaters for the removal of organics and nutrients. Kinetic expressions of biological growth and fluid transport through treatment reactors will be introduced. These concepts will be used to estimate reductions in organic and nutrient concentrations and design appropriate biological treatment processes. Corequisite: CE 364.	
<b>CE 490</b>	<b>Topics in Civil Engineering <sup>c</sup></b>	2-4 Cr.
	Seven weeks or semester. The investigation of civil engineering topics of special interest. Prerequisites depend on topics offered. Offered upon sufficient demand. Prerequisite: junior standing or approval of the instructor.	
<b>CE 493</b>	<b>Senior Design I: Project Planning and Management</b>	2.5+1.5, 3 Cr.
	An introduction to professional practice issues such as contracts, project proposals, and project management including scheduling, estimating, and project control. Student teams participate in the planning of an integrated and realistic civil engineering project. Knowledge gained in previous courses including ethical, legal, societal, multicultural, economic, financial, aesthetic, and environmental aspects will be integrated into the projects. The course may include field trips and/or lectures by practicing professionals. Oral and written reports are required. Prerequisites: CE 151 and at least three of the following: CE 317 or CE 318, CE 322, CE 335, CE 351, CE 354, CE 365, ENE 310, or ENE 360; or permission of the department chair.	
<b>CE 494</b>	<b>Senior Design II: Project Development and Design</b>	1+6, 3 Cr.
	Student teams participate in the design of integrated and realistic civil engineering projects. Knowledge gained in previous courses is used to incorporate the ethical, legal, societal, multicultural, economic, financial, aesthetic, and environmental aspects in the design. In addition, elements of management and communication are integrated. The course may include field trips and/or lectures by practicing professionals. Oral and written reports are required. Prerequisite: senior standing, CE 334, and CE 493, or permission of the department chair.	
<b>CE 499</b>	<b>Senior Honor Studies in Civil Engineering</b>	1-3 Cr.
	Independent study of an advanced topic in civil engineering. Available by invitation only. Prerequisite: approval by the Civil Engineering Department.	

## ***Environmental Engineering Courses***

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

<b>ENE 210</b>	<b>Environmental Toxicology and Risk Assessment</b>	3 Cr.
	Solve problems in environmental engineering that involve fundamental physical, chemical and biological processes, engineering technology, and current environmental issues and policies. Introduction to topics related to environmental quality, public health, environmental and occupational health regulations, health risk assessment, public and private institutions, and environmental systems. Topics discussed include risk analysis, brownfields, solid waste and energy fundamentals. Prerequisites: CHEM 115 and MATH 131.	
<b>ENE 260</b>	<b>Environmental Sustainability</b>	2 Cr.
	An introduction to the fundamental aspects of sustainability and green design concepts. Topics include renewable and non-renewable resources, energy cycles, pollution generation, carbon cycle, emissions and sequestering, and life cycle analysis. Prerequisite: Sophomore standing.	
<b>ENE 299</b>	<b>Sophomore Honor Studies in Environmental Engineering</b>	0.5-3 Cr.
	Independent study of an advanced topic in environmental engineering. Prerequisite: approval by the Civil Engineering Department.	
<b>ENE 310</b>	<b>Chemical Fate and Transport<sup>c</sup></b>	3 Cr.
	An introduction to solving problems using concepts of heat and mass transfer and evaluating design options related to the production, clean-up and control of bioenvironmental systems. Focus is placed on understanding conduction, convection, radiation, and diffusion heat and mass transfer processes. Prerequisites: CE 334 and ME 270.	
<b>ENE 330</b>	<b>Environmental Soils</b>	2+3, 3 Cr.
	An introduction to the chemical, physical, and biological properties of soils; the origin, classification, properties, and distribution of soils and their influence on hydrological and environmental processes; the management and conservation of soils; and the environmental impact of soil disturbance. Prerequisite: CE 213 and 215.	

<b>ENE 360</b>	<b>Environmental Policy and Law</b>	3 Cr.
	Introduction to environmental law and major federal statutes covering the Clean Air Act, Clean Water Act, the National Environmental Policy Act, the Endangered Species Act, and hazardous waste and toxic substance laws. Students will discuss historical and contemporary issues of statutory and regulatory analysis, ethics, politics, and economics in these various legal contexts. Emphasis will be placed on contextualizing environmental problems, including uncertainty, risk assessment, risk perception and risk mitigation. Prerequisite: ENE 260.	
<b>ENE 399</b>	<b>Junior Honor Studies in Environmental Engineering</b>	0.5-3 Cr.
	Independent study of an advanced topic in environmental engineering. Prerequisite: approval by the Civil Engineering Department.	
<b>ENE 440</b>	<b>Introduction to Air Pollution<sup>c</sup></b>	3 Cr.
	Introduction to particulate- and gas-control technologies, dispersion modeling, and pollutant transport. Students will solve problems in the area of air quality and air pollution control using fundamental physical, electrical and chemical processes. Course topics will investigate the effects of regulation and legislation. Prerequisites: CE 334, ENE 210 and ME 270.	
<b>ENE 450</b>	<b>Hazardous Waste Management<sup>c</sup></b>	3 Cr.
	An overview of remediation of contaminated soil and ground water at hazardous waste sites including development of site investigation plans, management of field investigations, environmental risk assessments, feasibility studies, innovative remedial design techniques, and case studies. Energy and greenhouse gas emission will be evaluated as will municipal landfill leachate and gas generation. Prerequisites: ENE 310.	
<b>ENE 490</b>	<b>Topics in Environmental Engineering<sup>c, e</sup></b>	0.5-4 Cr.
	Seven weeks or semester. The investigation of environmental engineering topics of special interest. Prerequisites depend on topics offered. Offered upon sufficient demand. Prerequisite: junior standing or approval of the instructor.	
<b>ENE 499</b>	<b>Undergraduate Research in Environmental Engineering</b>	0.5-3 Cr.
	Independent study of an advanced topic in environmental engineering. This course may be repeated for additional credit. Prerequisite: approval by the Civil Engineering Department.	

## Electrical and Computer Engineering

**Professors E. Johnson, Khorbotly (chair), Tougaw, Will; Associate Professors El-Howayek, White; Assistant Professors Dhaliwal, Maguire, Marley; Visiting Assistant Professor Zang.**

The Department of Electrical and Computer Engineering offers two degree programs: Electrical Engineering and Computer Engineering. These two degrees share a fundamental theoretical background that is reflected by many common courses and shared laboratory facilities.

In the sophomore year students take foundation courses in analog circuits, digital circuits, and programming. Computer-aided design tools and laboratories supplement the material taught in the classroom. During their junior year, students build on their foundation by studying electronics, linear systems, and embedded microcontrollers. Students also participate in group design projects and are introduced to a variety of realistic design constraints including engineering ethics, safety, and economics. The senior year is anchored by an interdisciplinary capstone project where students begin a systematic study of the design process and apply the knowledge acquired in earlier courses. Projects require the consideration of realistic constraints and standards, formal project management, the building and testing of a prototype, and thorough documentation.

The department supports a diverse set of laboratory facilities. The electronics laboratory supports work in digital and analog systems including power electronics. The digital systems laboratory is used for logic design, embedded microcontrollers and digital filtering systems. The scientific visualization laboratory serves as a research center for all engineering departments to develop applications for virtual reality to augment undergraduate education.

# Electrical Engineering

## Electrical Engineering Mission

We prepare students with the engineering expertise and well-rounded education necessary to lead and serve society.

## Electrical Engineering Program Educational Objectives

The educational objectives of the electrical engineering program are the following:

1. Our graduates will be highly sought for their world-class electrical engineering expertise and well-rounded education.
2. Our graduates will respond to a rapidly changing global environment with an entrepreneurial mindset, demonstrating persistence, creativity, innovation, and adaptability.
3. Our graduates will communicate effectively and persuasively and function as integral members of diverse teams.
4. Our graduates will demonstrate character, leadership, and values by making ethical decisions throughout their lives.
5. Our graduates will strive to serve society in pursuit of their chosen vocation.

## Bachelor of Science in Electrical Engineering – Electrical Engineering Major (125 Cr.)

<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.
<b>One course from the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>One course from the following options:</b>		
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 151</b>	Newtonian Mechanics - Honors	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>One course from the following options:</b>		
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 152</b>	Physics: Electricity, Magnetism and Waves - Honors	3+0, 3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		3 Cr.
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		6 Cr.
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>GE 497</b>	Senior Design Project I	3 Cr.
<b>GE 498</b>	Senior Design Project II	3 Cr.
<b>ECE 100</b>	Fundamentals of Electrical and Computer Engineering	2.5+1.5, 3 Cr.
<b>ECE 211</b>	Technical Writing for Electrical and Computer Engineers <sup>w</sup>	1 Cr.
<b>ECE 212</b>	The Design Process for Electrical and Computer Engineers	1 Cr.
<b>ECE 221</b>	Digital Logic Design	2.5+1.5, 3 Cr.
<b>ECE 251</b>	Engineering Programming I	2.33+2, 3 Cr.
<b>ECE 263</b>	Linear Circuit Theory I	3+3, 4 Cr.
<b>ECE 264</b>	Linear Circuit Theory II	3+3, 4 Cr.
<b>ECE 322</b>	Embedded Microcontrollers	2.5+1.5, 3 Cr.
<b>ECE 340</b>	Electronics I	2.5+1.5, 3 Cr.
<b>ECE 341</b>	Electronics II	2.5+1.5, 3 Cr.
<b>ECE 360</b>	Signals and Systems	3 Cr.
<b>ECE 430</b>	Electromagnetic Field Theory	3 Cr.
<b>Mathematics/Science Electives</b>		9 Cr.
<b>Professional Electives</b>		6 Cr.
<b>Electrical Engineering Electives</b>		18 Cr.
<b>Total Required for Graduation</b>		<b>125 Cr.</b>

**Writing Intensive Course (as indicated by a superscript "w")**

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or ECE 211 must be a Writing Intensive Course. A list of courses approved as a Writing Intensive Course is provided on page 443.

**Cooperative Education**

Six credits of GE 481 through GE 483 may be used to satisfy the Professional Electives requirement if a minimum of six credits of cooperative education have been completed. All courses are graded S/U only.

**Electrical Engineering Electives**

Eighteen credits must be taken from among the following courses: ECE 222, 252, 323, 324, 422, 424, 429, 450, 452, 453, 455, 456, 460, 464, 471, 472, 473, 490, and 499. Other courses may be used to satisfy this elective with the approval of the department faculty. A maximum of 3 credits of ECE 499 may be applied to this requirement unless approved by the department faculty. Multiple sections of ECE 490 can be counted toward this requirement provided topics are different.

**World Language/Diversity Elective**

Students will take three credits from either world language courses at the 102 level or above or from the diversity list beginning on page 438.

**Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

**Mathematics/Science Electives**

The Mathematics/Science Elective requirement may be met by taking nine credits from the approved list of courses found on page 323. Other choices may be made available by petition to the ECE Department.

**Professional Electives**

These courses are selected, in consultation with the academic advisor, to support the student's specific career goals. A current listing of approved professional electives is available on page 323. Other choices may be made available by petition to the ECE Department.

**Electrical and Computer Engineering Minor (Minimum 18 Cr.)**

A minor in electrical and computer engineering is available for students majoring in civil or mechanical engineering, computer science, mathematics, physics, or chemistry.

ECE 221	Digital Logic Design	2.5+1.5, 3 Cr.
ECE 251	Engineering Programming I	2.33+2, 3 Cr.
ECE 263	Linear Circuit Theory I	3+3, 4 Cr.
<b>At least eight additional credits from ECE courses</b>		<b>8 Cr.</b>
<b>Neither ECE 211 nor ECE 212 may be used to satisfy this requirement.</b>		

Note: ME 442 may be taken in place of ECE 460; ECE 203, ECE 281, ME 125, and ME 261 may be combined to satisfy the ECE 263 requirement.

# Computer Engineering

**Computer Engineering Mission**

We prepare students with the engineering expertise and well-rounded education necessary to lead and serve society.

**Computer Engineering Program Educational Objectives**

The educational objectives of the computer engineering program are the following:

1. Our graduates will be highly sought for their world-class computer engineering expertise and well-rounded education.
2. Our graduates will respond to a rapidly changing global environment with an entrepreneurial mindset, demonstrating persistence, creativity, innovation, and adaptability.
3. Our graduates will communicate effectively and persuasively and function as integral members of diverse teams.
4. Our graduates will demonstrate character, leadership, and values by making ethical decisions throughout their lives.
5. Our graduates will strive to serve society in pursuit of their chosen vocation.

## Bachelor of Science in Computer Engineering – Computer Engineering Major (125 Cr.)

<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 220</b>	Discrete Mathematics	3 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.
<b>One course from the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>One course from the following options:</b>		
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 151</b>	Newtonian Mechanics - Honors	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>One course from the following options:</b>		
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>PHYS 152</b>	Physics: Electricity, Magnetism and Waves - Honors	3+0, 3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		3 Cr.
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		6 Cr.
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>GE 497</b>	Senior Design Project I	3 Cr.
<b>GE 498</b>	Senior Design Project II	3 Cr.
<b>ECE 100</b>	Fundamentals of Electrical and Computer Engineering	2.5+1.5, 3 Cr.
<b>ECE 211</b>	Technical Writing for Electrical and Computer Engineers <sup>w</sup>	1 Cr.
<b>ECE 212</b>	The Design Process for Electrical and Computer Engineers	1 Cr.
<b>ECE 221</b>	Digital Logic Design	2.5+1.5, 3 Cr.
<b>ECE 222</b>	Advanced Logic Design	2.5+1.5, 3 Cr.
<b>ECE 251</b>	Engineering Programming I	2.33+2, 3 Cr.
<b>ECE 252</b>	Engineering Programming II	2.5+1.5, 3 Cr.
<b>ECE 263</b>	Linear Circuit Theory I	3+3, 4 Cr.
<b>ECE 322</b>	Embedded Microcontrollers	2.5+1.5, 3 Cr.
<b>ECE 340</b>	Electronics I	2.5+1.5, 3 Cr.
<b>ECE 360</b>	Signals and Systems	3 Cr.
<b>ECE 422</b>	Embedded Microcontrollers II	2.5+1.5, 3 Cr.
<b>ECE 424</b>	Computer Architecture	3 Cr.
<b>ECE 450</b>	Networking and Data Communications	3 Cr.
<b>ECE 452</b>	Digital Signal Processing	2.5+1.5, 3 Cr.
<b>Mathematics/Science Electives</b>		6 Cr.
<b>Professional Electives</b>		3 Cr.
<b>Computer Engineering Electives</b>		13 Cr.
<b>Total Required for Graduation</b>		<b>125 Cr.</b>

### Writing Intensive Course (as indicated by a superscript "w")

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or ECE 211 must be a Writing Intensive Course. A list of courses approved as a Writing Intensive Course is provided on page 443.

### Computer Engineering Electives

Thirteen credits must be taken by choosing from the following courses: CS 225, 230, 240, 250, 260, 325, 330, 335, 345, 358, 365, 372, ECE 264, 323, 324, 341, 429, 430, 455, 456, 460, 464, 490, and 499. Other courses may be used to satisfy this requirement with the approval of the department faculty. A maximum of 3 credits of ECE 499 may be applied to this requirement unless approved by the department faculty. Multiple sections of ECE 490 can be counted toward this requirement provided topics are different.

**Cooperative Education**

Six credits of GE 481 through GE 483 may be used to satisfy the Professional Electives requirement if a minimum of six credits of cooperative education have been completed. All courses are graded S/U only.

**World Language/Diversity Elective**

Students will take three credits from either world language at the 102 level or above or from the diversity list beginning on page 438.

**Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

**Mathematics/Science Elective**

The Mathematics/Science Elective requirement may be met by taking one of the approved courses found on page 323. Other choices may be made available by petition to the ECE Department.

**Professional Electives**

These courses are selected, in consultation with the advisor, to support the student's specific career goals. A current listing of approved professional electives is available on page 323. Other choices may be made available by petition to the ECE Department.

## Power and Control Systems

**Objective**

This certificate program is designed to provide electrical and computer engineering students with the knowledge and skills necessary to work as a power systems engineer or a control systems engineer.

### Certificate in Power and Control Systems (12 Cr.)

Admission to either Electrical Engineering or Computer Engineering is required prior to declaring this certificate. A minimum of 12 credit hours is required to complete this certificate. Any or all of these 12 credits may also be used to satisfy other Electrical Engineering or Computer Engineering degree requirements.

<b>ECE 460</b>	Control System Design	3 Cr.
<b>ECE 471</b>	Power Electronics	3 Cr.
<b>ECE 472</b>	Power System Analysis	3 Cr.
<b>ECE 473</b>	Electric Machinery	3 Cr.

### Electrical and Computer Engineering Courses

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

<b>ECE 100</b>	<b>Fundamentals of Electrical and Computer Engineering</b>	2.5+1.5, 3 Cr.
	An introduction to the principles of Electrical and Computer Engineering. Topics include computer tools, DC circuit analysis, and digital circuit analysis and design. Prerequisite: MATH 131. Students may not take this course if they have previously completed ECE 221, 251, 263, or 281.	
<b>ECE 203</b>	<b>Simulation and Modeling Tools</b>	0+1.5, 0.5
	A study of the software tools that are used by electrical and computer engineers to simulate circuits and to study electrical signals and systems. Students cannot receive credit for both ECE 203 and ECE 263. Pre-requisite: ECE 281.	
<b>ECE 211</b>	<b>Technical Writing for Electrical and Computer Engineers<sup>w</sup></b>	1 Cr.
	An introduction to technical writing in electrical and computer engineering. Topics include writing impactful sentences and paragraphs, designing figures, charts, graphs, and tables to effectively convey technical information, and writing for a particular audience. This course fulfills the Writing Intensive Course General Education requirement. Pre/Corequisite: ECE 263.	
<b>ECE 212</b>	<b>The Design Process for Electrical and Computer Engineers</b>	1 Cr.
	A study of the design process as it relates to electrical and computer engineering. All steps of the design process will be considered in depth, and students will complete both incremental projects and a comprehensive design project that integrates their knowledge of the course material with technical design constraints. Prerequisites: ECE 221, ECE 251, and ECE 263.	

<b>ECE 221</b>	<b>Digital Logic Design</b>	2.5+1.5, 3 Cr.
	An introduction to digital logic concepts, including the analysis and design of combinational and sequential digital circuits.	
<b>ECE 222</b>	<b>Advanced Logic Design</b>	2.5+1.5, 3 Cr.
	A continuation of ECE 221 that includes the design of MSI and LSI digital circuits using a hardware description language (VHDL). Designs are also implemented in programmable logic devices (PALs, CPLDs). Prerequisite: ECE 221 with a minimum grade of C.	
<b>ECE 251</b>	<b>Engineering Programming I</b>	3 Cr.
	A study of the fundamental programming constructs, algorithms, and data structures using industry-standard software. An emphasis is placed on programming strategies and the application of computer algorithms to solve problems in engineering and mathematics. Students cannot receive credit for both ECE 251 and CS 157.	
<b>ECE 252</b>	<b>Engineering Programming II</b>	2.5+1.5, 3 Cr.
	A continuation of ECE 251 with emphasis on implementing abstract data types and standard algorithms using industry-standard programming languages, with applications to contemporary engineering problems. Topics include the implementation of linked lists, queues, trees, stacks, sets, and sorting algorithms, such as quick sort, merge sort, and bucket sort. Students are also introduced to object orientation. Prerequisite: ECE 251 or instructor's approval. Students cannot receive credit for both ECE 252 and CS 158.	
<b>ECE 263</b>	<b>Linear Circuit Theory I</b>	3+3, 4 Cr.
	A study of the fundamental methods and theorems of electric circuit analysis. Topics include steady state and transient analysis of DC and transient circuits containing resistors, capacitors, inductors, and operational amplifiers. Pre/corequisite: MATH 132.	
<b>ECE 264</b>	<b>Linear Circuit Theory II</b>	3+3, 4 Cr.
	A continuation of ECE 263. Topics include AC circuits, power computations, transformers, frequency response, filters, Laplace transforms, and Fourier series. Prerequisite: ECE 263 with a minimum grade of C and pre/corequisite MATH 270.	
<b>ECE 281</b>	<b>Fundamentals of Electrical Engineering</b>	2.5 Cr.
	(Also offered as PHYS 281.) A study of the fundamental methods and theorems of electrical circuit analysis. Topics include steady-state and transient analysis of DC and AC circuits containing resistors, capacitors, inductors, and operational amplifiers. Students cannot receive credit for both ECE 263 and ECE 281. Prerequisite: MATH 131.	
<b>ECE 290</b>	<b>Sophomore Project</b>	0-3 Cr.
	An independent research, development, or design project done under the supervision of a faculty member. Prerequisite: sophomore standing. May be offered for S/U grades.	
<b>ECE 299</b>	<b>Sophomore Honor Studies in Electrical and Computer Engineering</b>	0-3 Cr.
	Independent study of an advanced topic in electrical engineering. Available by invitation only. Prerequisite: approval by the Electrical and Computer Engineering Department. May be offered for S/U grades.	
<b>ECE 322</b>	<b>Embedded Microcontrollers</b>	2.5+1.5, 3 Cr.
	(Also offered as PHYS 322.) The application of microcontrollers in embedded system design, emphasizing the interaction of hardware and software design. Topics include integrated development environments, CPUs, program and data memories, interrupts, digital inputs and outputs, timer peripherals, serial communication interfaces, and analog-to-digital converter peripherals. Prerequisite: ECE 221 with a minimum grade of C and ECE 251 with a minimum grade of C.	
<b>ECE 323</b>	<b>Industrial Automation Controls</b>	1+3, 2 Cr.
	An introduction to the design of industrial automation control systems and their applications. Topics include programmable logic controllers (PLCs), industrial computers, and embedded systems, their applicable standards, and best practices. Prerequisite: (ECE 263 or ECE 281) and (ECE 100 or ECE 251).	
<b>ECE 324</b>	<b>Industrial Automation Field Experience</b>	0.5+1.5, 1 Cr.
	One or more field experiences to accompany ECE 323. Corequisite: ECE323.	
<b>ECE 340</b>	<b>Electronics I</b>	2.5+1.5, 3 Cr.
	An introduction to semiconductor theory and the design and analysis of electronic circuits. Topics include diodes, field-effect and bipolar transistors, CMOS logic circuits, single state discrete transistor amplifiers, and multistage integrated-circuit amplifiers. A Writing in the Discipline Course. Prerequisite: (ECE 263 or ECE 281) with a minimum grade of C and a Writing Intensive Course.	

<b>ECE 341</b>	<b>Electronics II</b>	2.5+1.5, 3 Cr.
	Topics include power amplifiers, DC power supplies, data converters, feedback, oscillators, switched-capacitor circuits, and transistor memory units. Prerequisite: ECE 340.	
<b>ECE 360</b>	<b>Signals and Systems</b>	3 Cr.
	Continuous and discrete systems and signals are considered in both time and frequency domains. Continuous-time linear systems topics include Fourier series, Fourier transforms, and Laplace transforms. Discrete-time topics include the discrete Fourier transform, the Z-transform, sampling, quantization, and discrete-time processing. Discrete and continuous filtering techniques are introduced. Prerequisite: (ECE 263 or ECE 281) with a minimum grade of C.	
<b>ECE 422</b>	<b>Embedded Microcontrollers II</b>	2.5+1.5, 3 Cr.
	Topics include assembly language, low power modes, clock systems, real-time operating systems, and hardware/software co-design. Prerequisite: ECE 322.	
<b>ECE 424</b>	<b>Computer Architecture</b>	3 Cr.
	The description, organization, and design of computer elements to perform effectively. Instruction set design, caches, pipelining, and microprogramming. Prerequisite: ECE 222 with a minimum grade of C.	
<b>ECE 429</b>	<b>Integrated Circuit Fabrication and Design</b>	3 Cr.
	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 tradeoff are studied. Prerequisite: ECE 221 and ECE 340.	
<b>ECE 430</b>	<b>Electromagnetic Field Theory</b>	3 Cr.
	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 and PHYS 142.	
<b>ECE 450</b>	<b>Networking and Data Communications</b>	3 Cr.
	Theory of interconnected digital systems including information flow control by packet and circuit-switching techniques and standards for communication between network nodes. Prerequisites: ECE 221 and ECE 251.	
<b>ECE 452</b>	<b>Digital Signal Processing</b>	2.5+1.5, 3 Cr.
	This course is an overview of the theory and techniques of the basic concepts of digital signal processing. Topics covered include design of FIR and IIR filters, construction of algorithms for real-time and off-line signal processing, relationships between analog and digital realizations, and real-time hardware considerations. Prerequisite: ECE 360.	
<b>ECE 453</b>	<b>Communication Systems</b>	2.5+0.5, 3 Cr.
	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, and PCM are investigated and related to their channel requirements. Prerequisite: ECE 360 and pre/corequisite: STAT 240.	
<b>ECE 455</b>	<b>Image Processing and Computer Vision</b>	3 Cr.
	An introduction to image processing concepts such as image filtering, enhancement, and manipulation. Computer vision processes, including image segmentation, feature extraction, and pattern recognition. Prerequisites: ECE 251 and MATH 260.	
<b>ECE 456</b>	<b>Fiber-Optic Communication</b>	2.5+0.5, 3 Cr.
	A study of optical fiber communication systems and networks with hands-on experience. Theory of light wave propagation and single/multimode optical fibers. Introduction to light emitting diodes and laser diodes as optical sources and the modulation of those sources. Introduction to PIN and avalanche photodetectors, filters, and multiplexers. Prerequisite: ECE 340.	
<b>ECE 460</b>	<b>Control System Design</b>	3 Cr.
	A study of the application of feedback analysis and design in the frequency and time domains. Classical design is considered using root-locus and frequency response methods. Models derived from frequency response data are introduced. Introduction to modern control (state-space representation and pole placement) and Luenberger observers. Prerequisite: ECE 360.	
<b>ECE 464</b>	<b>Mobile Robotics</b>	1+3, 2 Cr.
	A study of the basic principles of autonomous mobile robots. Topics include locomotion dynamics, sensors and perception, localization, planning and navigation, feedback control, programming techniques, and hardware integration. Prerequisites: (ECE 263 or ECE 281) and ECE 322 or concurrent enrollment.	
<b>ECE 471</b>	<b>Power Electronics</b>	2.7+1, 3 Cr.
	A course in the application and design of power semiconductor circuits. Topics include rectifiers, AC controllers, inverters, and switched mode power supplies. Prerequisite: ECE 340.	

<b>ECE 472</b>	<b>Power Systems Analysis</b>	3 Cr.
	The principles of power system analysis are studied through the development of models of all major components of a modern electric power grid. The course includes the development and application of power system analysis tools for power flow and fault analysis. Prerequisite: ECE 264.	
<b>ECE 473</b>	<b>Electric Machinery</b>	2.5+1.5, 3 Cr.
	A study of different types of electric machines, including DC, induction, and synchronous motors and generators and the power electronic circuits that control them. Prerequisite: ECE 264.	
<b>ECE 490</b>	<b>Topics in Electrical and Computer Engineering</b>	0-3 Cr.
	The investigation of electrical engineering or computer engineering topics of special interest. Prerequisite: consent of the chair of the department. May be offered for S/U grades.	
<b>ECE 499</b>	<b>Senior Honor Studies in Electrical and Computer Engineering</b>	0-3 Cr.
	Independent study of an advanced topic in electrical engineering. Available by invitation only. Prerequisite: approval by the Electrical and Computer Engineering Department. May be offered for S/U grades.	

# Mechanical Engineering and Bioengineering

**Professor Duncan (chair); Associate Professors P. Johnson, Nudehi, Venstrom; Assistant Professors R. Johnson, Krenzke, Luke; Visiting Assistant Professors Saeidi, Sestito.**

## Mission

The Department of Mechanical Engineering and Bioengineering provides a program of professional studies grounded in engineering fundamentals and arts and sciences and augmented by the development of interpersonal skills, experiential learning, and an appreciation of lifelong learning. Graduates are prepared to apply their knowledge to society's needs and help shape the future.

# Mechanical Engineering

## Program Educational Objectives

The educational objectives of the Mechanical Engineering Program are the following:

1. Our graduates will have a vocation.
2. Our graduates will demonstrate growth or advancement in their chosen vocation.
3. Our graduates will contribute to society through their endeavors in their chosen vocation.

## Program Overview

The practice of mechanical engineering includes a wide variety 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 address both technical and nontechnical issues. A curriculum solidly comprised of fundamental engineering course work and the humanities and social sciences is an essential element in the preparation process.

Courses are sequenced to build upon a firm foundation in mathematics, basic sciences, and engineering sciences. Courses progressively involve students in engineering design activities and culminate in a major interdisciplinary design experience during the final year of study. Alongside technical issues, design activities address economic, safety, environmental, sustainability, product development, and social factors.

Graduates of the Mechanical Engineering Program at Valparaiso University are qualified to enter industry as practicing engineers or to pursue advanced degrees.

## Mechanical Engineering Laboratories

The Mechanical Engineering Program contains a significant laboratory component which is closely correlated with lecture courses. There are four primary laboratory facilities within the department, and these facilities are home to the eight different laboratory experiences within the program. 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. Additional laboratory facilities support senior design projects and computational assignments.

The *Energy Systems Suite* includes the Mechanical Measurements Laboratory, the Small Engines Laboratory, and the Engine Test Cell. This facility provides the opportunity to study the laws governing energy transformations due to energy transport as work and heat. The space also enables the students to learn the science of experimental methods by working with state-of-the-art measurement equipment, calibration techniques, and computer data acquisition. This facility includes laboratory equipment such as an internal combustion engine, a gas turbine, a supersonic nozzle, a solar collector, a heat pump, and a wind tunnel.

The *Manufacturing Processes 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 Computer Numerical Control (CNC) machine tools.

The *Materials Science Laboratory* contains equipment for conducting a variety of materials experiments including impact, tension, creep, cold working, hardness, and nondestructive testing. Special emphasis is placed upon modification of material properties by heat treatment. Metallurgical specimens are prepared and examined.

The *Analog Circuits, Automatic Control, and Vibrations Laboratory* supports instruction in the study of mechanical and electrical systems. For example, the facility is used to control experiments with simulated process systems and the associated instrumentation to control these processes. It also contains mechanical and electrical vibration excitation and measuring devices along with equipment to perform modal analysis and sound measurement.

## Bachelor of Science in Mechanical Engineering – Mechanical Engineering Major (126 Cr.)

<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>CHEM 115</b>	Essentials of Chemistry for Engineers	3+2, 4 Cr.
<b>One course from the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		<b>3 Cr.</b>
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 109</b>	Mechanics_Statics	3 Cr.
<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>GE 497</b>	Senior Design Project I	3 Cr.
<b>GE 498</b>	Senior Design Project II	3 Cr.
<b>ECE 281</b>	Fundamentals of Electrical Engineering	2.5 Cr.
<b>ME 102</b>	Computer-Aided Design	1 Cr.
<b>ME 125</b>	Computer Programming for Mechanical Engineers and Bioengineers	1 Cr.
<b>ME 201</b>	Technical Writing for Mechanical Engineers and Bioengineers <sup>w</sup>	1 Cr.
<b>ME 209</b>	Mechanics-Dynamics	3 Cr.
<b>ME 215</b>	Mechanics of Materials	3 Cr.
<b>ME 251</b>	Introduction to Manufacturing	0.5+1.5, 1 Cr.
<b>ME 252</b>	Materials Science	2.5 Cr.
<b>ME 261</b>	Analog Circuits Laboratory	0+1.5, 0.5 Cr.
<b>ME 270</b>	Thermodynamics I	3 Cr.
<b>ME 317</b>	Sustainable Engineering	2 Cr.
<b>ME 333</b>	Mechanical Measurements Laboratory	3+3, 4 Cr.
<b>ME 351</b>	Manufacturing Processes	3 Cr.
<b>ME 352</b>	Materials Science and Mechanics Laboratory	0+1.5, 0.5 Cr.
<b>ME 354</b>	Mechanical Systems Laboratory I	0+1.5, 0.5 Cr.
<b>ME 355</b>	System Modeling and Numerical Methods	3 Cr.
<b>ME 363</b>	Machine Design I	3 Cr.
<b>ME 364</b>	Vibrations	2 Cr.
<b>ME 372</b>	Heat Power Laboratory I	0+1.5, 0.5 Cr.
<b>ME 373</b>	Fluid Mechanics	3 Cr.
<b>ME 376</b>	Heat Transfer	3 Cr.
<b>ME 442</b>	Automatic Control	3 Cr.
<b>Mechanical Engineering Electives</b>		<b>12 Cr.</b>
<b>Professional Elective</b>		<b>3 Cr.</b>
<b>Total Required for Graduation</b>		<b>126 Cr.</b>

### Writing Intensive Course (as indicated by a superscript "w")

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or ME 201 must be a Writing Intensive Course. A list of courses approved as a Writing Intensive Course is provided on page 443.

**Cooperative Education**

Courses GE 481-483 are graded S/U only.

**World Language/Diversity Elective**

Students will take three credits from either world languages at the 102 level or above or from the diversity list beginning on page 438.

**Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

**Mechanical Engineering Electives**

Twelve credits must be taken by choosing from the following courses: ME 361, 365, 366, 367, 368, 369, 377, 453, 455, 456, 457, 467, 475, 476, 477, and BE 200, 320, 340, 369, 468, and multiple sections of ME 490 or BE 490. Other courses may be used to satisfy this elective with the approval of the department faculty. Up to six credits may be substituted for students taking an approved second technical major, and three credits may be substituted for students taking an approved technical minor. 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 "m": (...)<sup>m</sup>.

**Professional Electives**

These courses are selected, in consultation with the advisor, to support the student's specific career goals. A current listing of approved professional electives is available on page 323. Other choices may be made available by petition to the MEBE Department.

**Mechanical Engineering Minor (Minimum 18 Cr.)**

A minor in mechanical engineering is available for students majoring in civil, computer, or electrical engineering.

<b>GE 109</b>	Mechanics-Statics	3 Cr.
<b>ME 209</b>	Mechanics-Dynamics	3 Cr.
<b>ME 270</b>	Thermodynamics I	3 Cr.

Nine credits of ME courses at 200-level or above

Note: ECE 460 may be taken in place of ME 444.

Note: Credit may not be received for both ME 215 and CE 215.

**Bioengineering****Program Overview**

Bioengineers analyze and design solutions to healthcare problems involving both biology and engineering. Typically these engineers design equipment, materials or software, or develop new procedures that will improve the quality and effectiveness of patient care. The Bioengineering Major offers three possible concentrations: Biomechanical, Bioelectrical, or Biomedical. The biomechanical and bioelectrical concentrations focus more heavily on an engineering foundation while the biomedical concentration includes additional science courses and is the main option for those engineering students interested in attending medical school after graduation.

Courses are sequenced to build upon a firm foundation in mathematics, basic sciences, and engineering sciences. Courses progressively involve students in engineering design activities and culminate in a major interdisciplinary design experience during the final year of study. Alongside technical issues, design activities address economic, safety, environmental, sustainability, product development, and social factors. Graduates of the Bioengineering Program at Valparaiso University are qualified to enter industry as practicing engineers or to pursue advanced degrees.

## Bachelor of Science in Bioengineering – Bioengineering Major (126 Cr.)

<b>BIO 151</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>One course from the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>MATH 131</b>	Calculus I	3+2, 4 Cr.
<b>MATH 132</b>	Calculus II	3+2, 4 Cr.
<b>MATH 253</b>	Calculus III	4 Cr.
<b>MATH 260</b>	Linear Systems and Matrices	1 Cr.
<b>MATH 270</b>	Ordinary Differential Equations	3 Cr.
<b>PHYS 141</b>	Newtonian Mechanics	3+0, 3 Cr.
<b>PHYS 141L</b>	Experimental Physics I	0+3, 1 Cr.
<b>PHYS 142</b>	Physics: Electricity, Magnetism and Waves	3+0, 3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>THEO 200</b>	The Christian Tradition <sup>w</sup>	3 Cr.
<b>World Language/Diversity Elective<sup>w</sup></b>		
<b>Humanities, Social Science, Theology Electives<sup>w</sup></b>		
<b>GE 100</b>	Fundamentals of Engineering	1+3, 2 Cr.
<b>GE 109</b>	Mechanics-Statics	3 Cr.
<b>GE 311</b>	Financial Decisions in Engineering	1.5 Cr.
<b>GE 312</b>	Ethical Decisions in Engineering	1.5 Cr.
<b>GE 497</b>	Senior Design Project I	3 Cr.
<b>GE 498</b>	Senior Design Project II	3 Cr.
<b>ECE 281</b>	Fundamentals of Electrical Engineering	2.5 Cr.
<b>ME 102</b>	Computer-Aided Design	1 Cr.
<b>ME 125</b>	Computer Programming for Mechanical Engineers and Bioengineers	1 Cr.
<b>ME 201</b>	Technical Writing for Mechanical Engineers and Bioengineers <sup>w</sup>	1 Cr.
<b>ME 209</b>	Mechanics-Dynamics	3 Cr.
<b>ME 252</b>	Materials Science	2.5 Cr.
<b>ME 261</b>	Analog Circuits Laboratory	0.5 Cr.
<b>ME 333</b>	Mechanical Measurements Laboratory	3+3, 4 Cr.
<b>ME 352</b>	Materials Science and Mechanics Laboratory	0+1.5, 0.5 Cr.
<b>ME 355</b>	System Modeling and Numerical Methods	3 Cr.
<b>BE 317</b>	Sustainable Engineering	2 Cr.
<b>BE 320</b>	Bioengineering Technologies Lab	0+3, 1 Cr.
<b>BE 340</b>	Bioelectricity	3 Cr.
<b>BE 369</b>	Biomechanics	3 Cr.
<b>BE 415</b>	Biomaterials	3 Cr.
<b>Bioengineering Electives</b>		
<b>Total Bioengineering Core Credits</b>		
<b>One of the following three tracks:</b>		

### Biomechanical Track

<b>CHEM 115</b>	Essentials of Chemistry for Engineers	3+2, 4 Cr.
<b>ME 215</b>	Mechanics of Materials	3 Cr.
<b>ME 270</b>	Thermodynamics I	3 Cr.
<b>ME 373</b>	Fluid Mechanics	3 Cr.
<b>ME 376</b>	Heat Transfer	3 Cr.
<b>ME 442</b>	Automatic Control	3 Cr.

**Bioelectrical Track**

<b>CHEM 115</b>	Essentials of Chemistry for Engineers	3+2, 4 Cr.
<b>ECE 221</b>	Digital Logic Design	2.5+1.5, 3 Cr.
<b>ECE 251</b>	Engineering Programming I	2.33+2, 3 Cr.
<b>ECE 322</b>	Embedded Microcontrollers	2.5+1.5, 3 Cr.
<b>ECE 360</b>	Signals and Systems	3 Cr.
<b>ECE 452</b>	Digital Signal Processing	2.5+1.5, 3 Cr.

**Biomedical Track**

<b>CHEM 121</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 122</b>	General Chemistry II	3+3, 4 Cr.
<b>CHEM 221</b>	Organic Chemistry I	3+3, 4 Cr.
<b>CHEM 222</b>	Organic Chemistry II	3+3, 4 Cr.
<b>ME 270</b>	Thermodynamics I	3 Cr.

**Writing Intensive Course (as indicated by a superscript "w")**

At least one course taken to satisfy the World Languages/Diversity Elective, Humanities, Social Science, and Theology Electives, THEO 200: The Christian Tradition, or ME 201 must be a Writing Intensive Course. A list of courses approved as a Writing Intensive Course is provided on page 443.

**Cooperative Education**

Courses GE 481-483 are graded S/U only.

**World Language/Diversity Elective**

Students will take three credits from either world languages at the 102 level or above or from the diversity list beginning on page 438.

**Humanities, Social Science, Theology Electives**

Students will take six credits from the approved list of Humanities courses, Social Science courses, or Theology courses. Courses may be from the same area or from different areas. See pages 439-442 for Humanities and Social Science courses.

**MCAT Preparation**

Students participating in the Biomedical Track that wish to take the Medical College Admission Test (MCAT) should take SOC 110 Introduction to Sociology (3 credits that count towards Humanities, Social Science, Theology Electives) and PSY 110 General Psychology (3 credits).

**Bioengineering Electives**

Additional bioengineering and mechanical engineering courses are to be selected to provide areas of individual study emphasis from the following courses: BE 200, 468, ME 253, 353, 361, 362, 364, 365, 366, 367, 368, 369, 374, 405, 452, 453, 455, 456, 457, 467, and multiple sections of BE 490 or ME 490. Other courses may be used to satisfy this elective with the approval of the department faculty. Up to three credits may be substituted for students taking an approved technical minor or second technical major. Only three hours of BE 499 or ME 499 course credits may be applied as an BE elective.

Courses which fulfill bioengineering elective requirements are indicated with a superscript "b": (...)<sup>b</sup>.

**Bioengineering Minor (Minimum 18 Cr.)**

A minor in bioengineering is available for students majoring in civil, computer, electrical, or mechanical engineering, or for students majoring in kinesiology.

<b>BIO 151</b>	Human Anatomy and Physiology I	4 Cr.
<b>GE 109</b>	Mechanics_Statics	3 Cr.
<b>ME 125</b>	Computer Programming for Mechanical Engineers and Bioengineers	1 Cr.
<b>ME 209</b>	Mechanics-Dynamics	3 Cr.

**Seven credits of BE courses at 200-level or above**

**Note:** Up to three credits of BE 499 may count toward the required seven credits of BE courses with approval from the department chair.

**Mechanical Engineering Courses**

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

<b>ME 102</b>	<b>Computer-Aided Design</b>	1 Cr.
	A course in the theory and technique of engineering graphics related to the design process. Emphasis is placed on orthographic and isometric projections, oblique and section views, and dimensioning and tolerancing. The course focuses on 3-D modeling strategies including line drawings, solid modeling, and parametric modeling using computer-aided design software. Prerequisite: enrollment in the College of Engineering or consent of the department chair.	
<b>ME 104</b>	<b>Computer-Aided Design</b>	2 Cr.
	A course in the theory and technique of engineering graphics related to the design process. Emphasis is placed on orthographic and isometric projections, oblique and section views, and dimensioning and tolerancing. The course focuses on 3-D modeling strategies including line drawings, solid modeling, and parametric modeling using computer-aided design software. Prerequisite: enrollment in the College of Engineering or consent of the department chair.	
<b>ME 125</b>	<b>Computer Programming for Mechanical Engineers and Bioengineers</b>	1 Cr.
	Introduction to writing computer code to solve engineering problems. The use of MATLAB as a programming language is developed. Prerequisite: enrollment in the College of Engineering or consent of the department chair.	
<b>ME 201</b>	<b>Technical Writing for Mechanical Engineers and Bioengineers<sup>w</sup></b>	1 Cr.
	An introduction to technical writing in mechanical engineering. Common technical formats such as reports, email, and memorandums will be covered. Topics include outlining, figure and table development, paragraph and sentence development, and overall communication of technical matter. Prerequisite: CORE 115 or CC 115.	
<b>ME 209</b>	<b>Mechanics-Dynamics</b>	3 Cr.
	A study of individual particles and systems of particles in rectilinear and curvilinear motion in two and three dimensions. The course includes motion of a rigid body in translation, rotation, and general plane motion; forces involved in moving systems; use of work and energy relations; and impulse and momentum. Prerequisites: MATH 132, GE 109, and ME 125 or ECE 251.	
<b>ME 215</b>	<b>Mechanics of Materials</b>	3 Cr.
	(Also offered as CE 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. Prerequisite: GE 109.	
<b>ME 251</b>	<b>Introduction to Manufacturing<sup>b</sup></b>	0.5+1.5, 1 Cr.
	A course in the techniques required to produce manufacturing drawings and use machine tools and machining operations to manufacture components to specification. The course includes a laboratory experience in manual machine shop operations including shop safety, inspection, operation planning, and metal cutting. Prerequisite: ME 102.	
<b>ME 252</b>	<b>Materials Science</b>	2.5 Cr.
	(Also offered as PHYS 252.) A study of structure-property-processing relationships of engineering materials related to their selection in design and manufacturing processes. Methods of controlling structure and mechanical properties of materials are studied with an emphasis on the strengthening mechanisms. Processes studied include solidification, phase transformation, and mechanical working of metals. Prerequisites: MATH 132 and CHEM 115 or CHEM 121.	
<b>ME 253</b>	<b>Introduction to Manufacturing Laboratory<sup>b</sup></b>	0+1.5, 0.5 Cr.
	A laboratory experience in manual machine shop operations including shop safety, inspection, operation planning, and metal cutting. Prerequisite: ME 104.	
<b>ME 261</b>	<b>Analog Circuits Laboratory</b>	0+1.5, 0.5 Cr.
	(Also offered as PHYS 281L.) Seven laboratory experiences will introduce AC and DC analog circuit analysis. Students will design, build, and analyze electrical circuits. Pre- or Corequisite: ECE 281.	
<b>ME 270</b>	<b>Thermodynamics I</b>	3 Cr.
	A study of the first and second laws of thermodynamics. Extensive use of these laws is made in analyzing processes and cycles. Additional topics covered are ideal gases, non-reactive gas, and gas-vapor mixtures, as well as other simple compressible substances. Prerequisites: MATH 132 and PHYS 141.	

<b>ME 317</b>	<b>Sustainable Engineering</b>	2 Cr.
	This course provides an introduction to sustainable engineering techniques. Topics include sustainable engineering terminology, applications, metrics, tools such as cost-benefit analysis and life-cycle analysis, design for sustainability, sustainable materials, and sustainable energy production. Prerequisites: ME 201 and ME 270.	
<b>ME 333</b>	<b>Mechanical Measurements Laboratory</b>	3+3, 4 Cr.
	A study of fundamental concepts and physical principles involved in the science of measurement and design of experiments. 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 analysis. A Writing in the Discipline course. Prerequisites: CORE 110 or CC 110, PHYS 142, and ME 201; Pre/corequisite: ME 125, ME 261, and STAT 240. Pre/corequisite may be waived with approval of the chair of the ME department.	
<b>ME 351</b>	<b>Manufacturing Processes <sup>b</sup></b>	3 Cr.
	Descriptive and analytical treatment of manufacturing processes and production equipment. Topics include metal forming, metal cutting, plastic fabrication, Statistical Process Control (SPC), and Computer Numerical Control (CNC). Prerequisites: ME 125, ME 215, and ME 252; Pre- or Corequisite: ME 251.	
<b>ME 352</b>	<b>Materials Science and Mechanics Laboratory</b>	0+1.5, 0.5 Cr.
	Experimental studies design to reinforce theory presented in material science and mechanics of materials. Experiments deal with topics such as mechanical properties of materials, microstructures of materials, strain hardening, and hardness testing. Prerequisite: ME 201. Pre/corequisite: ME 252 and ME 215 or CE 215.	
<b>ME 353</b>	<b>Manufacturing Processes <sup>b</sup></b>	3+1.5, 3.5 Cr.
	Descriptive and analytical treatment of manufacturing processes and production equipment. Topics include metal forming, metal cutting, plastic fabrication, Statistical Process Control (SPC), and Computer Numerical Control (CNC). Prerequisites: ME 125, ME 215, and ME 252 (or ME 352); Pre/corequisite: ME 253.	
<b>ME 354</b>	<b>Mechanical Systems Laboratory <sup>b</sup></b>	0+1.5, 0.5 Cr.
	Experimental studies designed to introduce or reinforce theory presented in the areas of electric machines, motors, mechanical vibrations, automatic control, and robotics. Prerequisites: ME 261; Pre/corequisite: ME 364.	
<b>ME 355</b>	<b>System Modeling and Numerical Methods</b>	3 Cr.
	This course provides instruction on the principles used to understand and model physical systems and introduces methods for building and solving mathematical models of engineering systems. Applications include the modeling of mechanical, thermal, biological and electrical systems and the use of numerical methods and computer programming to solve for the system outputs. Prerequisites: ME 125, ME 209, ME 215, MATH 260 (or MATH 264), MATH 270 and ECE 281 (or ECE 263).	
<b>ME 361</b>	<b>Mechatronics Laboratory</b>	0+1.5, 0.5 Cr.
	This laboratory will introduce students to a variety of mechatronic components including microprocessors, PLCs, actuators, sensors, and robotics and allow students to program mechatronics systems to complete a variety of tasks. Prerequisite: ME 366 (or ECE 322), ME 367 (or ECE 323), ME 368.	
<b>ME 362</b>	<b>Mechanisms <sup>b</sup></b>	3 Cr.
	Graphical and analytical approaches to kinematic analysis and synthesis of linkages, gears, and cams. Linkage topics include displacement, velocity, and acceleration analysis along with type, number, and dimensional synthesis. Fundamentals of gears and gear trains are investigated. Cam sizing and application of motion programs to cam design are considered. Prerequisites: ME 209 and ME 125; Pre/corequisite: MATH 253.	
<b>ME 363</b>	<b>Machine Design I <sup>b</sup></b>	3 Cr.
	The application of specialized topics in mechanics of materials to the design and analysis of machine elements. Topics include combined stress, contact stress, stress concentration, fatigue, deflection, and theories of failure. Stress principles are applied to springs, bolts, joints, and general machine elements. Prerequisite: (ME 102 or ME 104), ME 125, and ME 215.	
<b>ME 364</b>	<b>Vibrations <sup>b</sup></b>	2 Cr.
	Fundamentals and principles of mechanical vibration. Mathematical formulation of the equations of motion for single and multi-degree of freedom systems. Analysis of natural frequency, damped natural frequency, free and forced vibration of mechanical systems. Prerequisites: ME 209, ME 125, ME 215, MATH 260, and MATH 270.	
<b>ME 365</b>	<b>Mechatronics</b>	2.5+1.5, 3 Cr.
	A study of the field of mechatronics. Topics include digital logic, microcontrollers, programmable logic controllers, AC and DC motors, and pneumatic systems. Experimentation uses laboratory and industrial equipment. Prerequisites: ECE 281 and ME 261.	

<b>ME 366</b>	<b>Microcontrollers and Digital Logic</b>	1 Cr.
	An introduction to digital logic concepts, including combinational and sequential digital circuits, and microcontrollers, including development environments, CPUs, memory, interrupts, digital inputs and outputs, timers, A/D and D/A converters, and communication interfaces. Prerequisite: ECE 281 (or ECE 263), ME 125 (or ECE 251).	
<b>ME 367</b>	<b>PLCs and Sensors</b>	1 Cr.
	This class will introduce the fundamentals of Programmable Logic Controller (PLC) operations, including symbology and programming techniques. PLC hardware and data structures will be presented. This class will also introduce various sensors including their applications, benefits, and limitations. Prerequisite: ECE 281 (or ECE 263).	
<b>ME 368</b>	<b>Actuators</b>	1 Cr.
	This course covers the principles of AC and DC motors, and motor control, and the principles of fluid power technology using fluids or compressed air as the transfer media. Pneumatic systems are studied including power sources, reservoirs, pumps, compressors, lines, valves and actuators. Prerequisite: ECE 281 (or ECE 263).	
<b>ME 369</b>	<b>Robotics</b>	1.5 Cr.
	An application of linear algebra, trigonometric techniques, and kinematic principles to study the motion of spatial mechanisms. The course will examine various types of manipulators that range in complexity from simple two degree-of-freedom planar robots to the human arm. Prerequisite: ME 125 (or ECE 251), MATH 260 (or MATH 264), MATH 270. Pre/corequisite: ME 209.	
<b>ME 372</b>	<b>Heat Power Laboratory <sup>b</sup></b>	0+1.5, 0.5 Cr.
	Experimental studies designed to reinforce theory presented in the areas of heat transfer, thermodynamics, and fluid mechanics. Experiments deal with topics such as flow and heat transfer mechanisms, refrigeration, and internal combustion engines. Prerequisites: ME 333, ME 270, and ME 373; Pre/corequisite: ME 376.	
<b>ME 373</b>	<b>Fluid Mechanics</b>	3 Cr.
	The basic conservation equations in control volume form are developed and used in engineering applications of fluid motion. Topics include fluid statics and the dynamics of both compressible and incompressible flows. Prerequisite: ME 209.	
<b>ME 374</b>	<b>Heat Power Laboratory <sup>b</sup></b>	0+3, 1 Cr.
	Experimental studies designed to reinforce theory presented in the areas of heat transfer, thermodynamics, and fluid mechanics. Experiments deal with topics such as flow and heat transfer mechanisms, refrigeration, and internal combustion engines. Prerequisites: ME 333, ME 370 (or ME 270), and ME 373; Pre- or Corequisite: ME 376.	
<b>ME 376</b>	<b>Heat Transfer</b>	3 Cr.
	The fundamentals of heat transfer by conduction, radiation, and forced and free convection are developed and applied to engineering problems. Prerequisite: ME 270.	
<b>ME 377</b>	<b>Introduction to Renewable Energy <sup>m</sup></b>	1 Cr.
	A study of the global energy crisis. Students will identify the challenges of the current energy system and investigate alternative energy systems including renewables and their associated technologies. As a focus of their studies, students will evaluate the role that alternative energy systems can play in solving the energy crisis based on their availability and sustainability. Prerequisite: Instructor approval.	
<b>ME 405</b>	<b>Finite Element Analysis <sup>b</sup></b>	2 Cr.
	Finite element methods for analysis of steady-state and transient problems in solid, structural, fluid mechanics, and heat transfer. Presents finite element methods and solution procedures for linear problems. Modeling of problems and interpretation of numerical results. Prerequisites: ME 104, ME 125, ME 215, MATH 253, MATH 260, and MATH 270. Pre- or Corequisite: ME 373.	
<b>ME 442</b>	<b>Automatic Control</b>	3 Cr.
	Fundamentals of system modeling for various mechanical, electrical, electromechanical, and hydraulic systems. Stability analysis in time and frequency domains. Industrial controller design (P, PI, PD, PID), closed loop feedback construction and implementation. System identification and characterization using frequency and time domain responses. Time delay analysis and its impact on stability margins of feedback systems. Prerequisites: (MATH 260 or MATH 264) and MATH 270; Pre-or Corequisite: ME 333 and ME 355.	
<b>ME 444</b>	<b>Automatic Control</b>	2 Cr.
	Fundamentals of instrumentation and control with particular application to the process industries. System dynamics are analyzed using step, ramp, and frequency response techniques. Laboratory experiments involve system stability, controller selection and adjustment, numerical analysis techniques, and system sequencing to achieve specific control objectives. Prerequisites: MATH 260, and MATH 270; Pre-or Corequisite: ME 333.	

<b>ME 453</b>	<b>Advanced Materials Science</b>	3 Cr.
	A comprehensive overview of nanomaterials in terms of the synthesis, characterization, properties and applications. The course covers the fundamental scientific principles of synthesizing nanostructured materials and nanocharacterization techniques such as SEM, AFM and nano-indentation. Existing and emerging applications will also be discussed. Pre-requisite: ME 252.	
<b>ME 454</b>	<b>Mechanical Systems Laboratory II</b>	0+1.5, 0.5 Cr.
	Advanced experimental studies designed to introduce or reinforce theory presented in the areas of electric machines, motors, mechanical vibrations, automatic control, and robotics. Prerequisite: ME 354.	
<b>ME 455</b>	<b>Production Systems and Automation</b> <sup>b, m</sup>	3 Cr.
	A study of production system theory including Lean Manufacturing, Theory of Constraints, Six Sigma and Group Technology, and a study of automation implementation in manufacturing and distribution facilities including material handling systems, automatic data capture systems, and machine tools. Prerequisite: ME 251.	
<b>ME 456</b>	<b>Non-Traditional Manufacturing</b> <sup>b, m</sup>	3 Cr.
	A study of non-traditional manufacturing technologies that utilize photonic, electrical, chemical, ultrasonic, and magnetic energy sources to process materials. This course provides an introduction to the machine tools that utilize these energy sources, examines the physics driving the processes, and discusses possible applications for each technology. Prerequisite: ME 251.	
<b>ME 457</b>	<b>Advanced Manufacturing Laboratory</b> <sup>b, m</sup>	1 Cr.
	A laboratory experience in CAM programming, CNC machining, welding, and non-traditional manufacturing including 3D printing, plasma cutting, and laser etching and cutting. Prerequisite or Corequisite: ME 251.	
<b>ME 460</b>	<b>Spatial Manipulators</b> <sup>b, m</sup>	3 Cr.
	An application of linear algebra, trigonometric techniques, and kinematic principles to study the motion of spatial mechanisms. The course will examine various types of manipulators that range in complexity from simple two-degree-of-freedom planar robots to the human arm. Prerequisites: (ME 125 or ME 225), ME 209, MATH 260, and MATH 270.	
<b>ME 467</b>	<b>Robotics, Vibrations, Controls, and Electromachinery Laboratory</b> <sup>b, m</sup>	1 Cr.
	A laboratory experience in robotic programming, modal testing techniques, system modeling and control design algorithms, and DC/AC motor systems. Prerequisite or Corequisite: ME 261 or ECE 261.	
<b>ME 470</b>	<b>Thermodynamics II</b>	3 Cr.
	Continuation of ME 270. Topics include combustion principles and cycle optimization using the second law of thermodynamics. Prerequisites: ME 370 (or ME 270) and CHEM 115.	
<b>ME 472</b>	<b>Heat Power Laboratory II</b> <sup>b</sup>	0.5+1.5, 0.5 Cr.
	Advanced experimental studies designed to reinforce theory presented in the areas of heat transfer, thermodynamics, and fluid mechanics. Experiments deal with topics such as flow and heat transfer mechanisms, refrigeration, and internal combustion engines. Prerequisites: ME 333, ME 270, and ME 373; Pre/corequisite: ME 376.	
<b>ME 475</b>	<b>Advanced Topics in Thermodynamics and Heat Transfer</b> <sup>m</sup>	3 Cr.
	Topics may include a continuation of material in ME 376 such as advanced conduction, convection, or radiation heat transfer. It may include a continuation of topical material in ME 270 in the area of thermodynamics. The topic is determined by the instructor prior to the course offering and based, in part, on student interest. Prerequisites: ME 270. Pre/corequisite: ME 373.	
<b>ME 476</b>	<b>Advanced Topics in Fluid Mechanics</b> <sup>m</sup>	3 Cr.
	Topics may include computational fluid dynamics or a continuation of topical material in ME 373 such as compressible fluid flow. The topic is determined by the instructor prior to the course offering based, in part, on student interest. Prerequisites: ME 370 (or ME 270) and ME 373; Pre- or Corequisite: ME 376.	
<b>ME 477</b>	<b>Solar Thermal Technology</b> <sup>m</sup>	3 Cr.
	The fundamentals and applications of solar thermal energy systems are developed and discussed. Topics include residential water heating, residential and commercial space heating, and solar concentrating systems. The subject is an application of thermodynamics, fluid mechanics, and heat transfer. Prerequisite: ME 370 (or ME 270). Prerequisite or Corequisite: ME 376.	
<b>ME 490</b>	<b>Topics in Mechanical Engineering</b> <sup>b, m</sup>	0.5-3 Cr.
	Seven weeks or full semester. The investigation of mechanical engineering topics of special interest. Prerequisite: consent of the department chair. Offered upon sufficient demand.	

<b>ME 499</b>	<b>Undergraduate Research in Mechanical Engineering</b> <sup>m, b</sup>	0.5-3 Cr.
	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 Department of Mechanical Engineering and Bioengineering.	

## Bioengineering Courses

See page 51 for the number of credit hours that may be applied toward a degree in the College of Arts and Sciences.

<b>BE 200</b>	<b>Bioengineering Seminar</b> <sup>m</sup>	1 Cr.
	An examination of the various industries that belong to the field of bioengineering. Topics will include prosthetics, implants, biosignals, bioethics, musculoskeletal modeling, and other areas reflected in current industrial trends. Pre/corequisites: ME 201.	
<b>BE 317</b>	<b>Sustainable Engineering</b>	2 Cr.
	This course provides an introduction to sustainable engineering techniques. Topics include sustainable engineering terminology, applications, metrics, tools such as cost-benefit analysis and life-cycle analysis, design for sustainability, sustainable materials, and sustainable energy production. Prerequisites: ME 201.	
<b>BE 320</b>	<b>Bioengineering Technologies Lab</b> <sup>m</sup>	0+3, 1 Cr.
	Experimental studies designed to reinforce theory presented in the areas of biomechanics, biomaterials, and bioelectricity. Experiments deal with topics such as simulation of human movement using musculoskeletal models, motion capture of human movement, acquiring and filtering bioelectrical signals from human subjects, and testing of materials used in joint replacements. Prerequisites: ME 201, ME 333.	
<b>BE 340</b>	<b>Bioelectricity</b> <sup>m</sup>	3 Cr.
	Introduction to biomedical signals and systems. Time and frequency domain analysis: convolution representation, Fourier series, Fourier transforms, frequency response, filtering, and sampling. Prerequisites: ME 125, ECE 281 (or ECE 263), and MATH 270.	
<b>BE 369</b>	<b>Biomechanics</b> <sup>m</sup>	3 Cr.
	An application of linear algebra, engineering principles, and anatomical knowledge to study the motion of human bodies. The course will examine how the nervous system stimulates various muscles which in turn actuates the skeletal system in a desired movement based on the complex, three-dimensional kinematic and kinetic descriptions of human anatomy. Prerequisites: ME 125, ME 209, and MATH 260.	
<b>BE 415</b>	<b>Biomaterials</b>	3 Cr.
	An expansion of the principles of materials science and mechanics of materials; biocompatibility and biological reactions to implanted materials; natural biomaterials and synthetic materials used in biological applications. Prerequisites: ME 252.	
<b>BE 468</b>	<b>Human-Machine Interfaces</b> <sup>b, m</sup>	3 Cr.
	The study of human-machine interfaces, with a focus on rehabilitation applications. Human motor and sensory capabilities are described using models from control theory. The human and machine are analyzed together as a closed-loop system. Communication between rehabilitation patients, machines, engineers, clinicians, and the media is discussed. Prerequisites: ME 333.	
<b>BE 490</b>	<b>Topics in Bioengineering</b> <sup>b, m</sup>	3 Cr.
	Seven weeks or semester. The investigation of bioengineering topics of special interest. Prerequisites: approval of the instructor.	
<b>BE 499</b>	<b>Undergraduate Research in Bioengineering</b> <sup>b, m</sup>	0.5-3 Cr.
	Independent study of an advanced topic in bioengineering. This course may be repeated for additional credit. Available by invitation only. Prerequisite: approval by the Department of Mechanical Engineering and Bioengineering.	

# College of Engineering Electives

## Approved Civil Engineering Professional Electives

Any CE approved Technical Elective

CE 290 – Professional Engineering Management

ENE 260: Environmental Sustainability

GE 493: Professional Communication & Interpersonal Relations

Minor courses: Any class above required for a CE degree that is used to fulfill a minor requirement

World Language: Any world language class (language only not other courses offered in a world language department)

ACC: Any ACC course

BLAW: Any BLAW course

FIN: Any FIN course

IDS: Any IDS course

MGT: Any MGT course

MKT: Any MKT course

Any ROTC course

## Approved Civil Engineering Science Electives

BIO 215 or CE 281

## Approved Civil Engineering Technical Electives

Biology: Any biology course beyond that required for graduation, or their equivalent.

Chemistry: Any chemistry course beyond that required for graduation, or their equivalent.

Physics: Any physics course beyond that required for graduation, or their equivalent.

CE: Any CE course beyond that required for graduation.

ME: Any ME course.

ECE: Any ECE course.

ENE: ENE 210, ENE 310, ENE 330 and any ENE course numbered 400 or higher

Math: Any math course beyond that required for graduation and numbered 250 or higher.

CS: Any CS course numbered 156 or higher.

ENVS: Any ENVS course.

GEO: 215, 415/515, 225, 230, 321

MET: 372, 373, 369

GE 481, 482, 483

## Approved Environmental Engineering Professional Electives

Any approved Environmental Engineering Elective

GEO: 104, 215, 265, 330

MET: 103, 240

ECON: 210

PHIL: 330

GE: 493

World Language: Any world language class (language only, not other world language courses offered)

ACC: Any ACC course

BLAW: Any BLAW course

BUS: Any BUS course

FIN: Any FIN course

MGT: Any MGT course

MKT: Any MKT course

Any ROTC course

Any course beyond that required for the ENE degree that is used to fulfill a minor requirement

### **Approved Electrical and Computer Engineering Math/Science Electives**

Astronomy 252 and 253

Biology: 151, 152, 171, 172, 210, 260, and 270.

Chemistry: Any courses numbered 115 and above

Mathematics: 220, 264, 314, 320, 321, 322, 323, 330, 334, 370, 371, 373, 374, 421, 422, 451, 452, 461, and 462.

Statistics: IDS 340, STAT 340, 343, and 344.

Meteorology: 215, 216, and 240.

Physics: 142L, 243, 245, 250, 345, 360, 371, 372, 381, 421, 422, 430, 430L, and 440.

### **Approved Electrical and Computer Engineering Professional Electives**

#### ***Engineering Courses***

Civil Engineering: Any CE course other than CE 202.

Electrical and Computer Engineering: Any ECE course (other than 281) not used for another graduation requirement.

Mechanical Engineering: Any ME course other than ME 125 or ME 261.

General Engineering: GE 109 and GE 493 (Dale Carnegie). GE 481, 482, and 483 may be used only if the student has completed at least six credits of a cooperative education program in engineering.

#### ***Mathematics, Science, and Computer Science Courses***

Astronomy: 101, 101L, 221, 252, and 253.

Biology: 125, 151, 152, 171, 172, 210, 260, and 270.

Chemistry: Any courses numbered 115 and above

Computer Science: 225, 230, 240, 245, 250, 260, 325, 330, 335, 340, 345, 358, 365, and 372.

Data Science: DATA 151

Mathematics: 220, 264, 314, 320, 321, 322, 323, 330, 334, 370, 371, 373, 374, 421, 422, 451, 452, 461, and 462.

Physics: 142L, 243, 245, 250, 345, 360, 371, 372, 381, 421, 422, 430, 430L, and 440.

Statistics: STAT 340, 343, and 344.

#### ***Business Courses***

Accounting: ACC 205, 206, and any courses numbered 300 and above.

Business Law: BLAW 104 and 404.

Information and Decision Sciences: Any courses numbered 300 and above.

Finance: Any courses numbered 300 and above.

Management: Any courses numbered 300 and above.

Marketing: Any courses numbered 300 and above.

#### ***ROTC Courses***

Any ROTC course used to satisfy the Army ROTC or Air Force ROTC program requirements.

#### ***World Language Courses***

Chinese: CHIN 101, 102, 203, 204, 305, 306, 407, and 408.

East Asian Studies: EAST 109, 110, 209, 210, 309, and 310.

French: FREN 101, 102, 203, 204, and 305.

German: GER 101, 102, 203, 204, and 307.

Japanese: JAPN 101, 102, 203, 204, 305, and 306.

Spanish: SPAN 101, 102, 203, 204, and 307.

### **Other Arts and Sciences Courses**

Communication: 145, 243, 345, 360, 366, and 372.

Economics: ECON 221, 222, 233, 321, 322, 325, 326, 336, 337, and 339.

English: ENGL 300 and 310.

Geography: GEO 101, 102, 104, and 301.

Meteorology: MET 103, 215, 216, and 240.

### **Approved Mechanical Engineering Professional Electives**

Civil Engineering: Any CE course other than CE 151, 202, 212, 213, 215, 334, and 351

Electrical and Computer Engineering: Any ECE course other than ECE 100, 211, 263, and 281

Environmental Engineering: Any ENE course other than ENE 260

General Engineering: GE 493 (Professional Communication & Interpersonal Relations)

World Language: Any world language class (language only- not other courses offered in the World Languages and Cultures Department)

ACC: Any accounting course

ASTR: Any Astronomy Course

BIO: Any Biology course

BLAW: Any business law course

CHEM: Any chemistry course numbered above the courses required for graduation, or their equivalent

CS: Any computer science course numbered 156 or higher

ECON 221, 222, 233, 321, 322, 325, 326, 336, 337, or 339

ENT: Any entrepreneurship course

ENVS: Any environmental science course

FIN: Any finance course

GEO 215, 225, 230, 321, or 415

IDS: Any information and decision science courses other than IDS 205

DATA/MATH/STAT: Any data science, mathematics, or statistics course above that required for graduation

MET 369, 372, 373

MGT: Any management course

MKT: Any marketing course

PHYS: Any physics course numbered above the courses required for graduation, or their equivalent

ROTC: Any ROTC course

# College of Nursing and Health Professions

Visit the [College of Nursing and Health Professions](#) online.

**Dean Karen Allen, Ph.D., RN, FAAN**

The college offers curricula leading to the Bachelor of Science in Nursing, Health Care Leadership, Health Sciences, and Public Health.

## Mission

The mission of Valparaiso University College of Nursing and Health Professions at the undergraduate and graduate levels is to prepare critically inquiring and competent professional nurses and other healthcare providers who embrace truth and learning and who respect Christian values while promoting health for persons in dynamic health care environments.

Please note that students who matriculate in the CONHP will be guided about how to obtain a certified criminal background check, which may be required for placement in health care facilities. Infractions will be reviewed by the dean and students will be counseled as to repercussions of a positive background check. Infractions might make it impossible to place students in health care facilities for practical experience, prevent graduates from sitting for certification or licensing exams, and interfere with employment options.

## CONHP Computer Policy

1. All CONHP students are required to have a personal laptop for testing purposes beginning their sophomore year.
2. Wireless technology is available in all academic buildings and dorms on campus, including LeBien Hall, LeBien Annex B, and Promenade West.
3. Recommended computer specifications are provided by IT at Valparaiso University and can be found on their [website](#).

# Interprofessional Education

## Purpose

According to the World Health Organization (2010), “interprofessional education (IPE) occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Once students understand how to work interprofessionally, they are ready to enter the workplace as a member of the collaborative practice team.” At the College of Nursing and Health Professions, IPE is not a major, but rather a curriculum that is integrated throughout the different programs.

## *Interprofessional Education Courses*

Grades from IPE courses are included in the cumulative GPAs for each undergraduate program in the CONHP.

<b>IPE 103</b>	<b>Exploring the Health Professions</b>	3 Cr.
	Introduces health care and public health in its social context, from the 18th century to the present day. The class will explore the evolution of health care and public health in the framework of interprofessional roles; professional educational preparation; collaborative relationships; and health, illness, and disease.	
<b>IPE 213</b>	<b>Social Determinants of Health</b>	3 Cr.
	Investigates social determinants of health that influence health outcomes within the United States. Focuses on the need for cultural competence in health professions. Explores opportunities for interprofessional collaboration related to health promotion.	
<b>IPE 233</b>	<b>Principles of Health Education and Promotion</b>	3 Cr.
	Examines social and behavioral theories underlying health education of individuals, families, and communities. Applies teaching and learning principles to promote health across the wellness-illness continuum. Explores health education concepts from an ecological perspective such as health literacy and use of technology for health education and use of technology for health education.	
<b>IPE 253</b>	<b>Introduction to Interprofessional Communication for Health Professionals</b>	3 Cr.
	Introduces communication processes involving health service organizational settings. An emphasis will be placed on the examination of concepts including professional language, verbal and nonverbal communication techniques, presentation skills, and interpersonal team dynamics. Explores opportunities for interprofessional communication, principles of persuasion, and conflict resolution using an evidence-based approach.	

<b>IPE 318</b>	<b>Global Health Issues</b>	3 Cr.
	Immerses students in an interprofessional education (IPE) opportunity that explores social determinants of health from a global perspective. Students will engage in a team-based comparative analysis of selected health care delivery systems from around the world. A Writing in the Discipline course. Fulfills the Cultural Diversity General Education requirement.	
<b>IPE 390</b>	<b>Topics in Interprofessional Education: Health, Healthcare, and Public Health</b>	3 Cr.
	An open topic course which may cover specialized areas of health and current concepts and concerns in the delivery of healthcare and public health. The course may be taken more than once for a maximum of six credit hours provided there is not duplication of topics. Prerequisites: determined by the instructor. Selected topics offered to non-College of Nursing and Health Professions majors. May be taken on the S/U grade basis.	
<b>IPE 490</b>	<b>Topics in Interprofessional Education: Health, Healthcare, and Public Health</b>	3 Cr.
	An open topic course which may cover advanced, specialized areas of health and current concepts and concerns in the delivery of healthcare and public health. The course may be taken more than once for a maximum of six credit hours provided there is not duplication of topics. Prerequisites: determined by the instructor. Selected topics offered to non-College of Nursing and Health Professions majors. May be taken on the S/U grade basis.	

## Nursing

**Professors T. Kessler, N. Schmidt; Associate Professors Brandy, Buckenmeyer, Cavinder (Assistant Dean of Graduate Nursing Programs), Genovese, Koch, Kurtz, Z. Li; Assistant Professors Munden, Ostrowski-Winkler, Rayman (Assistant Dean of Undergraduate Nursing Programs), Samis-Smith, Spain; Clinical Associate Professors Kost; Clinical Assistant Professors Bump, Felton, Hernes, Migler, Sheets, Slack, Zart.**

### Purpose

The purpose of the nursing programs is to prepare beginning and advanced professionals of nursing and to provide an educational base for graduate study based on professional standards.

### Objectives

The BSN graduate will:

1. Enter the profession as a critically inquiring competent professional nurse who uses the processes of critical thinking, communication, change, and lifelong learning.
2. Engage in the role components of provider of care, teacher, manager, and research consumer wherever persons live, work, play, and/or worship.
3. Appreciate how the environmental influences of culture, economics, ethics, law, policy, politics, society, and technology impact a person's health.
4. Promote the health of persons in dynamic health care environments using primary, secondary, and tertiary prevention strategies.

In accordance with the philosophy of Valparaiso University, the faculty of the nursing program believes its responsibility is to foster intellectual, emotional, and spiritual growth of the student as an educated person and as a competent professional nurse. The curriculum, therefore, includes a wide variety of foundational courses in the natural and social sciences and the liberal arts as well as courses related to the principles and practice of nursing. Permeating 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.

**Bachelor of Science in Nursing (Minimum 124 Cr.)**

<b>Nursing</b>		<b>64 Cr.</b>
<b>NUR 201*</b>	Professional Role in Nursing	3 Cr.
<b>NUR 203*</b>	Health Assessment	2+1, 3 Cr.
<b>NUR 210*</b>	Therapeutic Interventions for the Professional Nurse	2+2, 4 Cr.
<b>NUR 325*</b>	Nursing Care of the Childbearing Family	3+2, 5 Cr.
<b>NUR 341*</b>	Psychiatric Mental Health Nursing	3+2, 5 Cr.
<b>NUR 351*</b>	Gerontological Nursing	3 Cr.
<b>NUR 354*</b>	Nursing Care of Adults I	3+2, 5 Cr.
<b>NUR 356*</b>	Nursing Care of Adults II	3+2, 5 Cr.
<b>NUR 415*</b>	Introduction to Nursing Research for Evidence-Based Practice	3 Cr.
<b>NUR 425*</b>	Nursing Care of the Childrearing Family	3+2, 5 Cr.
<b>NUR 458*</b>	Complex Health Care Needs of Adults	2.5+1.5, 4 Cr.
<b>NUR 460*</b>	Public Health Nursing	3+2, 5 Cr.
<b>NUR 470*</b>	Management and Leadership Strategies for the Professional Nurse	3 Cr.
<b>NUR 480*</b>	Professional Role Practicum	1+4, 5 Cr.
<b>Interprofessional Education</b>		<b>6 Cr.</b>
<b>IPE 213*</b>	Social Determinants in Health	3 Cr.
<b>IPE 318*</b>	Global Health Issues	3 Cr.
<b>Arts and Sciences</b>		<b>49 Cr.</b>
<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.
<b>THEO 200</b>	The Christian Tradition	3 Cr.
<b>Upper Level Theology</b>		3 Cr.
<b>ENGL 205</b>	Writing in the Health Sciences**	3 Cr.

**One of the following options:**

<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.

**Humanities****One course from the following options:**

<b>CHEM 111*</b>	Introduction to Chemistry	3+2, 4 Cr.
<b>CHEM 121*</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131*</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.
<b>BIO 151*</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152*</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>BIO 210*</b>	Microbiology	3+3, 4 Cr.
<b>BIO 260*</b>	Human Nutrition	3 Cr.
<b>PSY 110*</b>	General Psychology	3 Cr.
<b>PSY 201*</b>	Statistical Methods	3 Cr.
<b>PSY 215*</b>	Lifespan Development	3 Cr.

**Electives****11 Cr.**

**Note: No more than four credit hours in applied music, including ensemble, and no more than four credit hours of KIN 101-149 may be applied toward a Bachelor of Science in Nursing degree. No more than 6 credits may be baccalaureate nursing credits.**

\* Grade of C (2.000) or better required

\*\*RN-BSN students will fulfill this requirement by taking NUR 275

**Requirements for Admission to the Nursing Program**

Freshman transfer students and registered nurses who want to earn a baccalaureate degree, who have declared nursing as a major, will be admitted directly into the nursing program. Registered nurses, accelerated, and transfer students may complete the requirements for the Bachelor of Science in Nursing degree in less than four years.

The minimum criteria for admission into the Accelerated Bachelor of Science in Nursing option is a cumulative 3.000 grade point average in previous college course work, completion of all science prerequisite courses, and a minimum of 76 transfer credits.

Associate degree and diploma graduates are eligible for admission to the R.N.-BSN degree program if they are licensed as a registered nurse in Indiana. Registered nurses are eligible for admission to the R.N.-MSN option if they have a 3.000 grade point average and specific prerequisite course work.

## **Progression**

Beginning in NUR 203, students are required to present evidence of a criminal background check, current immunizations, and rubella titer. Additionally, the following requirements must be updated annually: physical examination, TB test, influenza vaccine, Covid vaccine, CPR certification or recertification, and a negative drug screen. Drug screening can be requested randomly. The College of Nursing and Health Professions does not make arrangements for meeting these requirements.

Students must maintain a minimum cumulative grade point average of 2.500 in all course work. In addition, students must maintain a minimum cumulative grade point average of 2.500 in the required nursing and interprofessional education courses in the nursing major to remain in the nursing program. Students must earn a grade of C (2.000) or better in courses designated with an asterisk (\*) as indicated in the above table of graduation requirements.

Dismissal from the nursing program occurs when a student earns two infractions. Infractions include: a grade of less than C (2.000) in any required course with a nursing number, interprofessional education number, BIO 151, BIO 152, BIO 210, and CHEM 111/121/CHEM 131; a cumulative grade point average less than 2.500; or a grade point average of required nursing and interprofessional education courses less than 2.500.

All nursing students are required to take a series of evaluative achievement tests throughout their nursing coursework. The fee is currently \$1210, payable when registered for NUR 201, but is subject to change.

## **Minor**

A nursing student may declare a minor in another college provided that no more than six credit hours of courses required for the nursing major are used in fulfilling requirements of the minor. The minor is noted on the student's academic record.

## **Course Intensification**

A student in the nursing program may propose a special project for earning one extra credit in one nursing course in which they are enrolled in a given semester. Only 6 credits of nursing courses count toward the required 9 elective credits for the Bachelor of Science in Nursing degree.

The following regulations pertain to this option for a student:

1. Student must have a nursing GPA of 2.700 or above.
2. The course must be offered in the College of Nursing and Health Professions for 3 or more credits.
3. Student must meet with the academic advisor to determine if course intensification is appropriate. The initiative and responsibility for developing a satisfactory proposal lie with the student.
4. Student must submit a one-page proposal for the intensification project and the petition online. It will be forwarded to the advisor, the instructor of the course, and the dean for approval.

## **Student Nurses Association**

All student nurses are invited to join the Student Nurses Association.

## **Sigma Theta Tau International**

Students who have completed at least one-half of the required nursing courses and who have demonstrated superior scholastic achievement and evidence of professional leadership potential may be elected to membership in this international honor society of nursing. The Zeta Epsilon Chapter was installed at Valparaiso University in 1982.

## **Commission on Collegiate Nursing Education (CCNE)**

The baccalaureate degree program in nursing at Valparaiso University is accredited by the Commission on Collegiate Nursing Education (655 K Street, NW, Suite 750, Washington, DC, 20001; Tel: 202.887.6791; [www.ccneaccreditation.org](http://www.ccneaccreditation.org)).

## Nursing Courses

**Note:** Students are responsible for transportation to and from all clinical and community agencies and for transportation associated with home visits. The College of Nursing and Health Professions 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.

<b>NUR 201</b>	<b>Professional Role in Nursing</b>	3 Cr.
	An overview of professional nursing practice, analyzing the concepts of person, health, nursing, and environment. Explores the expanding role of the professional nurse including provider of care, teacher, manager, and research consumer. Students develop communication skills used in professional nursing. Sophomore standing and a cumulative GPA of 2.500 required. Prerequisites: C or better in BIO 151, BIO 152, and CHEM 111.	
<b>NUR 203</b>	<b>Health Assessment</b>	2+1, 3 Cr.
	Clinical practice in assessment skills of persons across the life-span. Emphasis is placed on those communication and psychomotor techniques that are fundamental for an organized and comprehensive health assessment relating to the nursing process. Sophomore standing and a cumulative GPA of 2.500 required. Prerequisites: C or better in BIO 151, BIO 152, and CHEM 111.	
<b>NUR 210</b>	<b>Therapeutic Interventions for the Professional Nurse</b>	2+2, 4 Cr.
	An introduction to the concepts and principles of therapeutic and pharmacological interventions applied by the professional nurse in a dynamic health care environment. Sophomore standing and a cumulative GPA of 2.500 required. Prerequisites: C or better in BIO 151, BIO 152, CHEM 111, NUR 201, and NUR 203.	
<b>NUR 275</b>	<b>Transition to Professional Nursing</b>	4 Cr.
	Concepts relevant to professional nursing are discussed and applied. Explores the expanding role of the professional nurse including provider of care, teacher, manager, and research consumer while emphasizing the process of communication, critical thinking, change, and lifelong learning. R.N. license, sophomore standing, and a cumulative GPA of 2.500 required. Prerequisites: C or better in BIO 151, BIO 152, and CHEM 111.	
<b>NUR 325</b>	<b>Nursing Care of the Childbearing Family</b>	3+2, 5 Cr.
	The study and practice of professional nursing with a focus on childbearing women, families, and newborns at all levels of prevention. Emphasis is placed on a family-centered approach in community settings. Cumulative GPA of 2.500 required and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213.	
<b>NUR 341</b>	<b>Psychiatric Mental Health Nursing</b>	3+2, 5 Cr.
	The application of psychiatric mental health nursing principles in the care of persons who have been impacted by psychiatric disturbances. Using psychobiological and behavioral theories and therapeutic communication skills, emphasis is placed on the promotion of optimal mental health functioning for individuals, families, and communities. Cumulative GPA of 2.500 required and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213.	
<b>NUR 351/551</b>	<b>Gerontological Nursing</b>	2.5+0.5, 3 Cr.
	This course focuses on gerontological nursing. Theories and various dimensions of aging are discussed. Normal biological aging, attitudes towards aging, health issues facing the elderly, and nursing interventions to promote quality care for older adults will be explored. Service learning activities will promote a holistic understanding of the aging process. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213.	
<b>NUR 354</b>	<b>Nursing Care of Adults I</b>	3+2, 5 Cr.
	Concentrates on the development of professional nursing practice with adults experiencing acute and chronic changes in health, contains half of the content. Emphasis is placed on meeting the health needs of these adults and their families in a variety of environments at all levels of prevention. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213.	
<b>NUR 356</b>	<b>Nursing Care of Adults II</b>	3+2, 5 Cr.
	Concentrates on the development of professional nursing practice with adults experiencing acute and chronic changes in health, contains half of the content. Emphasis is placed on meeting the health needs of these adults and their families in a variety of environments at all levels of prevention. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213.	

<b>NUR 360</b>	<b>Interprofessional Service Learning in Health in Central America</b>	1+2, 3 Cr.
	(Also offered as PHS 360). This course focuses on the application of principles from international health, public health, and community-based participatory action to population-based health care services in rural Central America. Emphasis is placed on assessing, diagnosing, planning, and evaluating health and implementing strategies at all levels of prevention during this service learning experience. As a member of an interprofessional health care team, students will explore the roles of public health professionals in collaboration with local care providers in the provision of services to disparate populations. May be used to fulfill the Cultural Diversity course component of the General Education requirements. Participation in the spring break trip to Central America is a required element in this course.	
<b>NUR 381</b>	<b>Cooperative Education in Nursing</b>	1-3 Cr.
	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. Dean's approval, cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in BIO 210, NUR 201, NUR 203, NUR 210, and IPE 213. May be taken on S/U basis.	
<b>NUR 390</b>	<b>Topics in Nursing and Health Care</b>	1-3 Cr.
	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: determined by the instructor. Selected topics offered to non-nursing majors. May be taken on the S/U grade basis.	
<b>NUR 395</b>	<b>Independent Study in Nursing</b>	1-6 Cr.
	Independent study of a selected topic. Prerequisite: determined by the instructor. May be taken on S/U basis. May be repeated for additional credit.	
<b>NUR 415</b>	<b>Introduction to Nursing Research for Evidence-Based Practice</b>	3 Cr.
	An overview of scientific research as applied to nursing and the role of the professional nurse as a research consumer. The course includes the study of the research process and implications of findings for evidence-based nursing practice. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, NUR 356 (or NUR 275), and PSY 201 (or equivalent).	
<b>NUR 415AC</b>	<b>Introduction to Nursing Research for Evidence-Based Practice</b>	3 Cr.
	An overview of scientific research as applied to nursing and the role of the professional nurse as a research consumer. The course includes the study of the research process and implications of findings for evidence-based nursing practice. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisite: C or better in PSY 201 (or equivalent). Pre/corequisites: NUR 325, NUR 351, and NUR 356.	
<b>NUR 425</b>	<b>Nursing Care of the Childrearing Family</b>	3+2, 5 Cr.
	The study and practice of professional nursing care of children in a variety of settings. Using a family-centered approach, students engage with children and their families at all levels of prevention. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, NUR 356, and PSY 215 (or equivalent).	
<b>NUR 425AC</b>	<b>Nursing Care of the Childrearing Family</b>	3+2, 5 Cr.
	The study and practice of professional nursing care of children in a variety of settings. Using a family-centered approach, students engage with children and their families at all levels of prevention. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 351, NUR 356, and PSY 215 (or equivalent).	
<b>NUR 458</b>	<b>Complex Health Care Needs of Adults</b>	2.5+1.5, 4 Cr.
	This course focuses on professional nursing care necessary for adults experiencing complex health needs. Emphasis is placed on meeting the multiple requisites of these adults and their families in rehabilitation and critical care settings. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, and NUR 356.	
<b>NUR 458AC</b>	<b>Complex Health Care Needs of Adults</b>	2.5+1.5, 4 Cr.
	This course focuses on professional nursing care necessary for adults experiencing complex health needs. Emphasis is placed on meeting the multiple requisites of these adults and their families in rehabilitation and critical care settings. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 351, and NUR 356. Pre/corequisites: NUR 341 and NUR 354.	

<b>NUR 460</b>	<b>Public Health Nursing</b>	3+2, 5 Cr.
	Focuses on the roles of the public health nurse in providing care at all levels of prevention to individuals, families, and aggregates at home and in other community settings. Emphasis is placed on the synthesis of knowledge in nursing, public health, humanities, and sciences as students apply the nursing process to promote and preserve the health of a community and its members. Students will have the opportunity to explore the role of the public health nurse as a member of an interdisciplinary health care team. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, NUR 356, NUR 425, and NUR 458 (or NUR 275).	
<b>NUR 470</b>	<b>Management and Leadership Strategies for the Professional Nurse</b>	3 Cr.
	An overview of management and leadership theories as applied by professional nurses in health care environments. Roles and functions of the management process including planning, organizing, staffing, directing, and controlling are explored. Synthesis of the role components of the professional nurse and strategies for managing a career are emphasized. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, and NUR 356 (or NUR 275).	
<b>NUR 480</b>	<b>Professional Role Practicum</b>	1+4, 5 Cr.
	A course which facilitates the transition from student to beginning professional nurse. Within a clinical setting, students integrate knowledge from nursing and the arts and sciences to assist persons to achieve health. Only offered on S/U grade basis. All degree requirements must be met prior to beginning clinical practicum experience. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, NUR 356, NUR 425, NUR 458, and NUR 470. Pre/corequisite: NUR 415 and NUR 460.	
<b>NUR 480AC</b>	<b>Professional Role Practicum</b>	1+4, 5 Cr.
	A course which facilitates the transition from student to beginning professional nurse. Within a clinical setting, students integrate knowledge from nursing and the arts and sciences to assist persons to achieve health. Only offered on S/U grade basis. All degree requirements must be met prior to beginning clinical practicum experience. Cumulative GPA of 2.500 and Nursing and Interprofessional Education GPA of 2.500 required. Prerequisites: C or better in NUR 325, NUR 341, NUR 351, NUR 354, NUR 356, NUR 425, NUR 458, and NUR 470. Pre/corequisite: IPE 318.	
<b>NUR 490</b>	<b>Topics in Nursing and Health Care</b>	1-3 Cr.
	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. Selected topics offered to non-nursing majors. Prerequisites: determined by the instructor. May be taken on the S/U grade basis.	
<b>NUR 495</b>	<b>Independent Study in Nursing</b>	1-6 Cr.
	Independent study of a selected topic. May be repeated for additional credit. Dean's approval required. Prerequisite: determined by the instructor. May be taken on S/U basis.	

# Health Care Leadership

**Associate Professors Genovese, Li; Assistant Professors McClanahan, Samis-Smith (Program Director), Spain; Clinical Assistant Professors Migler, Sheets, Zart.**

The Bachelor of Science in Health Care Leadership (HCL) program prepares students to be health care leaders by providing theoretical and experiential learning focused on critical knowledge associated with setting vision, guiding change, leading teams and inspiring people within health care.

Once admitted, students take 29 HCL credits and 21 IPE credits of 124 credits for the degree. Students may elect to follow a three-year or four-year plan of study to complete this degree. The final semester includes a culminating five-credit practicum experience in a health care organization in the local community. Courses focus on the knowledge domains identified in the National Center for Healthcare Leadership competency model: communication, leadership, professionalism, knowledge of the health care environment, and stimulating the change process.

## Purpose

The purpose of the health care leadership program is to develop graduates who will function in diverse leadership positions within varied health care environments.

## Objectives

The B.S. in Health Care Leadership graduate will:

1. Demonstrate proficiency in the knowledge and skills required for positions of professional leadership in the health care industry.
2. Characterize leadership skills of service minded, purpose driven, ethical decision making, empowering individuals and visionary perspectives.
3. Appreciate how the environmental influences of culture, economics, ethics, law, policy, politics, society, and technology impact the intersection of individuals within the health care industry.
4. Promote the health of persons in dynamic health care environments.

## Bachelor of Science in Health Care Leadership Degree (Minimum 124 Cr.)

<b>Health Care Leadership</b>		<b>29 Cr.</b>
HCL 105	Fundamentals of Health Care Leadership	3 Cr.
HCL 121	Environment and Health	3 Cr.
HCL 211	Principles of Health Care Supervision	3 Cr.
HCL 255	Communication Strategies for Public Health and Health Care Leadership	3 Cr.
HCL 301	Health Care Strategic Planning	3 Cr.
HCL 302	Health Care Ethics and Legal Issues	3 Cr.
HCL 303	Health Care Management Information Systems	3 Cr.
HCL 470	Health Care Leadership Strategies	3 Cr.
HCL 480	Health Care Leadership Practicum	5 Cr.
<b>Interprofessional Education</b>		<b>21 Cr.</b>
IPE 103	Exploring the Health Professions	3 Cr.
IPE 213	Social Determinants in Health	3 Cr.
IPE 233	Principles of Health Education and Promotion	3 Cr.
IPE 253	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
IPE 304	Introduction to Epidemiology	3 Cr.
IPE 315	Introduction to Evidence-Based Practice in Health Professions	3 Cr.
IPE 318	Global Health Issues	3 Cr.
<b>Arts and Sciences</b>		<b>49 Cr.</b>
CORE 110	The Human Experience	4 Cr.
CORE 115	The Human Experience	4 Cr.
THEO 200	The Christian Tradition	3 Cr.
<b>Upper Level Theology</b>		3 Cr.
ENGL 205	Writing in the Health Sciences	3 Cr.
<b>One of the following options:</b>		
KIN 100	Healthy Lifestyles	1 Cr.
KIN 101	Wellness and Stress	1 Cr.
<b>Humanities Elective</b>		3 Cr.

College of Nursing and Health Professions

<b>CHEM 111</b>	Introduction to Chemistry	3+2, 4 Cr.
<b>BIO 151</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>BIO 210</b>	Microbiology	3+3, 4 Cr.
<b>BIO 260</b>	Human Nutrition	3 Cr.
<b>PSY 110</b>	General Psychology	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>PSY 215</b>	Lifespan Development	3 Cr.
<b>Electives</b>		<b>25 Cr.</b>

**Nine credits from the following guided elective options:**

<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>BLAW 104</b>	Legal Environment of Business	3 Cr.
<b>CVA 243</b>	Public Speaking	3 Cr.
<b>CVA 244</b>	Persuasion and Advocacy	3 Cr.
<b>CVA 265</b>	Public Relations Principles	3 Cr.
<b>CVA 311</b>	Organizational Communication	3 Cr.
<b>CVA 345</b>	Leadership Communication	3 Cr.
<b>CVA 365</b>	Corporate Advocacy and Activist Communication	3 Cr.
<b>ECON 136</b>	The Economics of Health, Education, and Welfare	3 Cr.
<b>ECON 210</b>	Environmental Economics and Policy	3 Cr.
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>GEO 201</b>	Economic Geography	3 Cr.
<b>GEO 280</b>	Geography of Cyberspace	3 Cr.
<b>GEO 320</b>	Urban Geography	3 Cr.
<b>GEO 321</b>	Urban and Regional Planning	3 Cr.
<b>GEO 420</b>	Rural Geography	3 Cr.
<b>KIN 250</b>	Medical Terminology	3 Cr.
<b>PHIL 130</b>	Death and Immortality	3 Cr.
<b>POLS 120</b>	The Government of the United States	3 Cr.
<b>POLS 130</b>	Comparative Politics	3 Cr.
<b>POLS 361</b>	Public Policy	3 Cr.
<b>PSY 235</b>	Abnormal Psychology	3 Cr.
<b>SOC 210</b>	Contemporary Social Problems	3 Cr.
<b>SOC 220</b>	The Family	3 Cr.
<b>SOC 245</b>	Social Psychology	3 Cr.
<b>SOC 255</b>	Sociology of Health and Health Care	3 Cr.
<b>SOC 260</b>	Deviance	3 Cr.
<b>SOC 270</b>	Juvenile Delinquency	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOCW 151</b>	Introduction to the Profession of Social Work	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Development	3 Cr.
<b>SOCW 240</b>	Communication and Counseling Skills	3 Cr.

**Sixteen open Elective credits**

## Health Care Leadership Minor (Minimum 15 Cr.)

On a smaller scale than the major, the minor in Health Care Leadership provides a foundation for students desiring to explore a career in health care. A student interested in this minor should consult with his or her academic advisor as soon as possible to plan a course of study.

### Required Courses:

<b>IPE 103</b>	Exploring the Health Professions	3 Cr.
<b>HCL 105</b>	Fundamentals of Health Care Leadership	3 Cr.

### Two courses from the following options:

<b>HCL 211</b>	Principles of Health Care Supervision	3 Cr.
<b>HCL 301</b>	Health Care Strategic Planning	3 Cr.
<b>HCL 302</b>	Health Care Ethics & Legal Issues	3 Cr.
<b>HCL 303</b>	Health Care Management Information Systems	3 Cr.
<b>IPE 253</b>	Introduction to Interprofessional Communication for Health Professionals	3 Cr.

### One course from the following options:

<b>HCL 121</b>	Environment and Health	3 Cr.
<b>HCL 255</b>	Communication Strategies for Public Health and Health Care Leadership	3 Cr.
<b>IPE 213</b>	Social Determinants of Health	3 Cr.
<b>IPE 233</b>	Principles of Health Education and Health Promotion	3 Cr.
<b>IPE 318</b>	Global Health Issues	3 Cr.

### Requirements for Admission to the Health Care Leadership program

Freshman students who have declared Health Care Leadership as their major will be admitted directly into the health care leadership program. The general requirements for admission to the University are found in this catalog.

### Progression

Students must maintain a minimum grade point average of 2.000 to progress in the program. A student must earn a C- or better in all Health Care Leadership (HCL) and Interprofessional Education (IPE) courses. A HCL or IPE course may not be repeated more than once. Dismissal from the HCL program occurs when a student incurs two infractions. Infractions include: earning a cumulative grade point average that is less than 2.000; or earning a grade of D+ (1.300) or lower in any HCL or IPE course.

Students are required to present evidence of a criminal background check and a negative drug screen during the first semester of admission to the program. Students will also have to repeat a criminal background check, negative drug screen, and any additional requirements as required by the agency a second time during the fall semester of their graduating year, prior to the practicum placement. Drug screening can be requested randomly. Students are responsible for meeting these requirements according to CONHP policies.

### Minor

A health care leadership student may declare a minor in another college. The minor is noted on the student's academic record.

### Course Intensification

A health care leadership student may propose a special project for earning one extra credit in one health care leadership course in which they are enrolled in a given semester. The following regulations pertain to this option for a student;

1. Student must have a health care leadership GPA of 2.500 or above.
2. The course must be offered in the College of Nursing and Health Professions for 3 or more credits.
3. Student must meet with the academic advisor to determine if course intensification is appropriate. The initiative and responsibility for developing a satisfactory proposal lies with the student.
4. Student must submit a one-page proposal for the intensification project and the petition online. It will be forwarded to the advisor, the instructor of the course, and the dean for approval.

### Transportation

Students are responsible for providing their own transportation to and from all community agency and practicum experiences. Access to a car is necessary for the practicum course.

### Health Care Leadership Student Association (HCLSA)

All HCL students are invited to join HCLSA.

# Bachelor of Science in Health Care Leadership/ Master of Health Administration 4+1 Degree (Minimum 124 Cr.)

During the junior year, students who have a 3.000 cumulative GPA, who have a 3.000 GPA in the required health care leadership courses, who have not earned grades of less than C in science courses and courses required for the health care leadership major, and who have completed the program of study through the junior year, will be invited to enroll in the 4+1 program.

## Admission Requirements

Students who are admitted into the HCL/MHA 4+1 during their senior year will be admitted directly into the MHA program upon graduation from their HCL program assuming they continue to meet the progression requirements.

## Progression

Requirements for progression include maintenance of a cumulative GPA of at least 3.000 average in all graduate level classes, and no grades of less than B- in any required graduate courses.

<b>Health Care Leadership</b>		<b>38 Cr.</b>
HCL 105	Fundamentals of Health Care Leadership	3 Cr.
HCL 121	Environment and Health	3 Cr.
HCL 211	Principles of Health Care Supervision	3 Cr.
HCL 255	Communication Strategies for Public Health and Health Care Leadership	3 Cr.
HCL 301	Health Care Strategic Planning	3 Cr.
HCL 302	Health Care Ethics and Legal Issues	3 Cr.
HCL 303	Health Care Management Information Systems	3 Cr.
HCL 470	Health Care Leadership Strategies	3 Cr.
HCL 480	Health Care Leadership Practicum	5 Cr.
HADM 501	Understanding the Profession and Health Care Organizations	3 Cr.
HADM 601	Research and Program Evaluation	3 Cr.
HADM 675	Organizational and Government Policy in Health Care	3 Cr.
<b>Interprofessional Education</b>		<b>21 Cr.</b>
IPE 103	Exploring the Health Professions	3 Cr.
IPE 213	Social Determinants in Health	3 Cr.
IPE 233	Principles of Health Education and Promotion	3 Cr.
IPE 253	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
IPE 304	Introduction to Epidemiology	3 Cr.
IPE 315	Introduction to Evidence-Based Practice in Health Professions	3 Cr.
IPE 518	Global Health Care Systems	3 Cr.
<b>Arts and Sciences</b>		<b>49 Cr.</b>
CORE 110	The Human Experience	4 Cr.
CORE 115	The Human Experience	4 Cr.
THEO 200	The Christian Tradition	3 Cr.
<b>Upper Level Theology</b>		3 Cr.
ENGL 205	Writing in the Health Sciences	3 Cr.
<b>One of the following options:</b>		
KIN 100	Healthy Lifestyles	1 Cr.
KIN 101	Wellness and Stress	1 Cr.
<b>Humanities Elective</b>		3 Cr.
CHEM 111	Introduction to Chemistry	3+2, 4 Cr.
BIO 151	Human Anatomy and Physiology I	3+3, 4 Cr.
BIO 152	Human Anatomy and Physiology II	3+3, 4 Cr.
BIO 210	Microbiology	3+3, 4 Cr.
BIO 260	Human Nutrition	3 Cr.
PSY 110	General Psychology	3 Cr.
PSY 201	Statistical Methods	3 Cr.
PSY 215	Lifespan Development	3 Cr.

<b>Electives</b>	<b>16 Cr.</b>
<b>Nine credits from the following guided elective options:</b>	
ACC 205 Financial Accounting	3 Cr.
BLAW 104 Legal Environment of Business	3 Cr.
CVA 243 Public Speaking	3 Cr.
CVA 244 Persuasion and Advocacy	3 Cr.
CVA 265 Public Relations Principles	3 Cr.
CVA 311 Organizational Communication	3 Cr.
CVA 345 Leadership Communication	3 Cr.
CVA 365 Corporate Advocacy and Activist Communication	3 Cr.
ECON 136 The Economics of Health, Education, and Welfare	3 Cr.
ECON 210 Environmental Economics and Policy	3 Cr.
ECON 221 Principles of Microeconomics	3 Cr.
ECON 222 Principles of Macroeconomics	3 Cr.
ECON 233 The Economics of Race and Gender	3 Cr.
GEO 201 Economic Geography	3 Cr.
GEO 280 Geography of Cyberspace	3 Cr.
GEO 320 Urban Geography	3 Cr.
GEO 321 Urban and Regional Planning	3 Cr.
GEO 420 Rural Geography	3 Cr.
KIN 250 Medical Terminology	3 Cr.
PHIL 130 Death and Immortality	3 Cr.
POLS 120 The Government of the United States	3 Cr.
POLS 130 Comparative Politics	3 Cr.
POLS 361 Public Policy	3 Cr.
PSY 235 Abnormal Psychology	3 Cr.
SOC 210 Contemporary Social Problems	3 Cr.
SOC 220 The Family	3 Cr.
SOC 245 Social Psychology	3 Cr.
SOC 255 Sociology of Health and Health Care	3 Cr.
SOC 260 Deviance	3 Cr.
SOC 270 Juvenile Delinquency	3 Cr.
SOC 275 Systems of Social Stratification	3 Cr.
SOCW 151 Introduction to the Profession of Social Work	3 Cr.
SOCW 210 Social Welfare Policy: History and Programs	3 Cr.
SOCW 220 Human Behavior and Social Development	3 Cr.
SOCW 240 Communication and Counseling Skills	3 Cr.
<b>Six to seven open elective credits</b>	
<b>Health Administration</b>	<b>34 Cr.</b>
HADM 520 Financial Management	2 Cr.
HADM 550 Human Resource Management	2 Cr.
HADM 602 Managing and Analyzing Health Care Information	3 Cr.
HADM 640 Quality Health Care Management	3 Cr.
HADM 650 Leadership and Managing People	2 Cr.
HADM 670 Legal Issues in Health Care	3 Cr.
HADM 671 Ethical Issues in Health Care	3 Cr.
HADM 685 Practicum	3 Cr.
HADM 686 Internship	3 Cr.
<b>Two courses from the following core enhancement options:</b>	
HADM 530 Marketing and Promotion	2 Cr.
HADM 662 Health in the Community	3 Cr.
HADM 664 International Health and Health Care Organizations	3 Cr.
<b>Five to six graduate elective credits from business, health, information technology, professional writing, ethics, and other fields.</b>	
<b>5-6 Cr.</b>	

## **Health Care Leadership Courses**

<b>HCL 105</b>	<b>Fundamentals of Health Care Leadership</b>	3 Cr.
	An overview of the scope of leadership styles necessary for effective outcomes in various health care environments. Examines the role of the health care leader in promoting an environment that allows for the well-being of both the individual and the organization. Learners identify, interpret, and analyze their individual leadership attitudes, abilities, styles, and strengths.	
<b>HCL 121</b>	<b>Environment and Health</b>	3 Cr.
	(Also offered as PHS 121.) Explores health and environmental controversies from the dual perspectives of scientific uncertainty and mass media coverage. Examines genetic engineering, biotechnology, environmental health risks, and human behavior. Includes discussion of ethical and social responsibilities from a health care system perspective.	
<b>HCL 211</b>	<b>Principles of Health Care Supervision</b>	3 Cr.
	Identifies supervision as a component in the leadership process of the organizational context of health care. Developmental experiences of supervision and leadership are incorporated into class simulations, exercises, and other healthcare scenarios. Prerequisite: HCL 105.	
<b>HCL 255</b>	<b>Communication Strategies for Public Health and Health Care Leadership</b>	3 Cr.
	(Also offered as PHS 255.) This course explores the impact of communication on health policy, health systems, and public health. An emphasis will be placed on promoting the health and wellness of populations through interpersonal, organizational, cultural, and mass communication; examining how communication strategies are used to share health-related information; and using processes of communication to promote a shared understanding about public health, health policy, and health systems.	
<b>HCL 301</b>	<b>Health Care Strategic Planning</b>	3 Cr.
	Examines key concepts of health care strategic planning. Identifies marketing strategies and strategic planning in diverse health care organizations. Introduces key concepts of resource allocation and fiscal management including interpretation of industry reports.	
<b>HCL 302</b>	<b>Health Care Ethics and Legal Issues</b>	3 Cr.
	(Also offered as HS 302.) This course examines ethical and legal issues that affect health care delivery, health systems, and public health. Professional values and service are emphasized.	
<b>HCL 303</b>	<b>Health Care Management Information Systems</b>	3 Cr.
	Investigates information technology and its managerial applications in health care organizations. Management of the development process, the organizational flow of information, database management concepts, evaluation, selection, and strategic uses of information systems, as well as security, audit, and control of data are discussed. Health care specific case studies will be used, covering topics such as HIPAA (Health Insurance Portability and Accountability Act) and electronic medical records.	
<b>HCL 390</b>	<b>Topics in Health Care Leadership</b>	1-3 Cr.
	An open topic course which may cover specialized areas of health care leadership, current concepts and 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: determined by the instructor. Selected topics offered to non-health care leadership majors. May be taken on the S/U grade basis.	
<b>HCL 395</b>	<b>Independent Study in Health Care Leadership</b>	1-6 Cr.
	Independent study of a selected topic. Prerequisite: determined by the instructor. May be taken on S/U basis. Prerequisite: approval of the dean of the college.	
<b>HCL 470</b>	<b>Health Care Leadership Strategies</b>	3 Cr.
	Emphasizes essential health care leadership competencies by focusing on communication, collaboration, change mastery, and conflict resolution. Focuses on organizational structures and systems, leading change and innovation, development of values-based cultures, the art of successful acquisition approaches, centralized and decentralized management, and leadership styles. Provides opportunity to discover one's own leadership abilities with respect to each of the discussed competencies.	

<b>HCL 480</b>	<b>Health Care Leadership Practicum</b>	5 Cr.
	Provides experiential opportunities to demonstrate professional behaviors. The practicum course is designed to explore the role of health care leader in an organizational or community setting. Students collaborate with faculty and preceptors to examine the role of the health care leader.	
<b>HCL 490</b>	<b>Topics in Health Care Leadership</b>	1-3 Cr.
	An open topic course which may cover specialized areas of health care leadership, current concepts and 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: determined by the instructor. Selected topics offered to non-health care leadership majors. May be taken on the S/U grade basis.	
<b>HCL 495</b>	<b>Independent Study in Health Care Leadership</b>	1-6 Cr.
	Independent study of a selected topic. Prerequisite: determined by the instructor. May be taken on S/U basis. Prerequisite: approval of the dean of the college.	

## Health Science

**Associate Professors Buckenmeyer, Genovese, Li; Assistant Professors McClanahan, Samis-Smith (Program Director), Spain; Clinical Assistant Professors Migler, Sheets, Slack, Zart.**

The Bachelor of Science in Health Science (BSHS) prepares students with a foundation of interdisciplinary knowledge that allows, upon graduation in three years (full-time and year-round), a career in a health profession, or the pursuit of further graduate study and/or a professional degree. This degree serves as the prerequisite course work for students admitted to the Master of Science in Physician Assistant Studies program (3+2) at Valparaiso University. In the BSHS program, students will follow a curriculum comprised of general education, health science, and interprofessional requirements, in addition to courses that will provide a strong science background.

### Purpose

The purpose of the BSHS degree is to prepare graduates to pursue positions within varied health care environments.

### Objectives

The B.S. in Health Science graduate will:

1. Demonstrate proficiency in foundational knowledge and skills required for physician assistants or other health care providers.
2. Engage in critical thinking, communication, change, and lifelong learning.
3. Integrate professional health care ethics, values, service, and leadership skills.
4. Evaluate the influences of culture, economics, ethics, law, policy, and technology on the health of persons.
5. Through experiential learning, promote the health of persons in dynamic health care environments.

**Bachelor of Science in Health Science Degree (Minimum 124 Cr.)**

<b>Health Science</b>		<b>26 Cr.</b>
HS 180*	Field Experience I	0+3, 3 Cr.
HS 203*	Human Health and Disease	3 Cr.
HS 210*	Prevention to Population Health	3 Cr.
HS 280*	Field Experience II	0+3, 3 Cr.
HS 302*	Health Care Ethics and Legal Issues	3 Cr.
HS 381*	Field Experience III	1+4, 5 Cr.
HS 440*	Exercise and Chronic Health Conditions	3 Cr.
HS 470*	Health Care Leadership Strategies	3 Cr.
<b>Interprofessional Education</b>		<b>21 Cr.</b>
IPE 103*	Exploring the Health Professions	3 Cr.
IPE 213*	Social Determinants of Health	3 Cr.
IPE 233*	Principles of Health Education and Promotion	3 Cr.
IPE 253*	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
IPE 304*	Introduction to Epidemiology	3 Cr.
IPE 315*	Introduction to Evidence-Based Practice in Health Professions	3 Cr.
IPE 318*	Global Health Issues	3 Cr.
<b>Public Health</b>		<b>3 Cr.</b>
PHS 101*	Introduction to Public Health	3 Cr.
<b>Arts and Sciences</b>		<b>65 Cr.</b>
CORE 110	The Human Experience	4 Cr.
CORE 115	The Human Experience	4 Cr.
THEO 200	The Christian Tradition	3 Cr.
<b>Upper Level Theology</b>		3 Cr.
ENGL 205	Writing in the Health Sciences	3 Cr.
<b>One of the following options:</b>		
KIN 100	Healthy Lifestyles	1 Cr.
KIN 101	Wellness and Stress	1 Cr.
<b>Humanities Elective</b>		<b>3 Cr.</b>
BIO 151*	Human Anatomy and Physiology I	3+3, 4 Cr.
BIO 152*	Human Anatomy and Physiology II	3+3, 4 Cr.
BIO 210*	Microbiology	3+3, 4 Cr.
BIO 260*	Human Nutrition	3 Cr.
BIO 270*	Genetics and Genome Evolution	3+3, 4 Cr.
CHEM 121*	General Chemistry I	3+3, 4 Cr.
CHEM 122*	General Chemistry II	3+3, 4 Cr.
CHEM 221*	Organic Chemistry I	3+3, 4 Cr.
KIN 250*	Medical Terminology	3 Cr.
PSY 110*	General Psychology	3 Cr.
PSY 201*	Statistical Methods	3 Cr.
PSY 215*	Lifespan Development	3 Cr.
<b>Electives</b>		<b>9 Cr.</b>

\*Grade of C (2.000) or better required

**Requirements for Admission to the Health Science Program**

All students applying for the Health Science degree must meet the required admissions standards. Freshman students who have been admitted to the Health Science program and declare the Master of Science in Physician Assistant Studies (MSPA) program as their goal, may be eligible for direct admission. This assumes that they meet the progression requirements, meet the criteria for the graduate program, and seats are available. If seats in the MSPA program are not available, students can still be admitted into the Health Science degree with a goal to join the program later if seats become available. Non-BSHS students who want to be eligible for admission into the MSPA program must meet the admission requirements for the BSHS degree and transfer at the end of their freshman year.

**Lab Science Transfer Credit**

Incoming students who will be completing credits towards the BSHS degree may apply transfer credit or dual-credit for Human Anatomy and Physiology I & II (BIO 151 and 152) if the student received a minimum grade point average of 3.000 (B) in the courses. There will be no acceptance of other lab science credit. AP or dual-credit for Chemistry (Chem 121 and 122) will not be accepted. For AP and transfer credit other than the lab sciences, please refer to the University policy.

## **Progression**

Students must maintain a minimum cumulative grade point average of 3.000, a minimum of 3.000 GPA in all required health science (HS) and interprofessional education (IPE) courses, a minimum of 3.000 GPA in all required lab science courses, and a grade of no less than C (2.000) in all required HS, IPE, KIN, PHS, and science courses (including Psychology) to remain in the program. Health science and interprofessional education courses may not be repeated more than once.

Dismissal from the BSHS program will occur when a student earns two infractions. Infractions include: a grade of less than C (2.000) in any required health science, interprofessional education, or psychology courses, BIO 151, BIO 152, BIO 210, BIO 270, CHEM 121, CHEM 122, or CHEM 221, PHS 101; a cumulative GPA less than 3.000; a cumulative GPA less than 3.000 in all required lab science courses; or a cumulative GPA less than 3.000 in health science and interprofessional education courses. Students who are dismissed from the program do have an opportunity to appeal the decision with the College of Nursing and Health Professions Academic Standards Committee.

Over the course of the program, students are required to present evidence of specific requirements (i.e., criminal background check, a negative drug screen). Students should refer to the most recent **COLLEGE OF NURSING AND HEALTH PROFESSIONS UNDERGRADUATE ACADEMIC GUIDE** for complete requirements.

## **Minor**

A health science student may declare a minor provided that no more than six credit hours of courses required for the Health Science major are used in fulfilling requirements of the minor. The minor is noted on the student's academic record.

## **5 Year Physician Assistant Club (5PAC)**

All health science students are invited to join 5PAC.

## **Transportation**

Students are responsible for transportation to and from all field experiences. Students will be required to participate in a wide range of experiences, consequently, access to a car is necessary in most field experience courses.

## **Health Science Courses**

<b>HS 180</b>	<b>Field Experience I</b>	0+3, 3 Cr.
	This is an experiential observational course in a health-related setting either in the capacity of volunteerism or employment. The primary focus is examining the effect of various social determinants of health on the individual and/or population at-large. This course requires completion of 36 clock hours. S/U grade.	
<b>HS 203</b>	<b>Human Health and Disease</b>	3 Cr.
	(Also offered as PHS 203.) Overview of basic biological concepts, molecular biology, genetics, and infectious and chronic diseases of public health concern. Biological perspective on public health issues related to chronic and infectious diseases.	
<b>HS 210</b>	<b>Prevention in Population Health</b>	3 Cr.
	(Also offered as PHS 210.) Introduction to the clinical basis of preventive health care, including human growth and development, nutrition, and immunology. Overview of the goals and methods used for disease prevention.	
<b>HS 280</b>	<b>Field Experience II</b>	0+3, 3 Cr.
	This is an experiential observational course in a health-related setting either in the capacity of volunteerism or employment. The primary focus of observation is on interdisciplinary and interprofessional communication in a health-related setting. This course requires completion of 48 clock hours. S/U grade.	
<b>HS 302</b>	<b>Health Care Ethics and Legal Issues</b>	3 Cr.
	(Also offered as HCL 302.) This course examines ethical and legal issues that affect health care delivery, health systems, and public health. Professional values and service are emphasized.	
<b>HS 381</b>	<b>Field Experience III</b>	1+4, 5 Cr.
	This is an experiential observational course in a health-related setting either in the capacity of volunteerism or employment. The primary focus of this course is on a capstone paper with a self-assessment of all field experiences. This course requires completion of 48 clock hours. S/U grade. All degree requirements must be met prior to beginning this capstone course.	
<b>HS 440</b>	<b>Exercise and Chronic Health Conditions</b>	3 Cr.
	Focuses on the role of health care professionals in assisting individuals, families, and communities to incorporate exercise as an evidence-based strategy for the prevention, treatment, and management of chronic health conditions.	

<b>HS 470</b>	<b>Health Care Leadership Strategies</b>	3 Cr.
An overview of management and leadership theories as applied in health care environments. Emphasizes essential health care leadership competencies. Focuses on organizational structures and systems, leading change and innovation, and development of values-based cultures. Provides opportunity to discover one's own leadership abilities. Prerequisite: HS 213.		

## Public Health

**Associate Professor Buckenmeyer (Program Director); Assistant Professors Li, Samis-Smith, Spain.**

The Bachelor of Science in Public Health (BSPH) program prepares students in a community of learning, dedicated to excellence and grounded in the Lutheran tradition, to lead and serve in the field of public health to promote health and prevent disease in human populations.

The interprofessional curriculum is designed to prepare entry level public health practitioners with knowledge, skills, and attitudes in the core concepts of public health including health behavior, health services administration, environmental health, epidemiology, and statistics as well as in the ability to identify, assess, plan, implement, and evaluate the needs of populations to promote and protect the health of the community. The BSPH courses provide the strong science background necessary for academic success in the MPH program and in any graduate health-related field, including medicine.

### Purpose

The purpose of the BSPH degree is to prepare graduates to pursue entry-level positions within varied public health settings.

### Objectives

The B.S. in Public Health graduate will:

1. Demonstrate proficiency in foundational knowledge and skills required for public health professionals.
2. Engage in the processes of critical thinking, communication, change, and lifelong learning.
3. Integrate public health ethics, values, service, and leadership skills.
4. Evaluate the influences of culture, economics, ethics, law, policy, politics, society, and technology on a population's health.
5. Promote the health of populations in dynamic public health environments through experiential learning.

### Bachelor of Science in Public Health Degree (Minimum 124 Cr.)

<b>Public Health</b>		<b>39 Cr.</b>
<b>PHS 101*</b>	Introduction to Public Health	3 Cr.
<b>PHS 121*</b>	Environment and Health	3 Cr.
<b>PHS 203*</b>	Human Health and Disease	3 Cr.
<b>PHS 210*</b>	Prevention in Population Health	3 Cr.
<b>PHS 255</b>	Communication Strategies for Public Health and Health Care Leadership	3 Cr.
<b>PHS 316*</b>	Community-Based Participatory Research	3 Cr.
<b>PHS 318*</b>	Health Services Leadership and Administration	3 Cr.
<b>PHS 370*</b>	Program Planning and Evaluation	3 Cr.
<b>PHS 413*</b>	Social, Behavioral, and Cultural Factors in Health Care	3 Cr.
<b>PHS 421*</b>	Environmental Health for a Sustainable Future	3 Cr.
<b>PHS 460*</b>	Public Health Advocacy	3 Cr.
<b>PHS 470*</b>	Public Health Practicum	1+2, 3 Cr.
<b>PHS 480*</b>	Public Health Capstone	1+2, 3 Cr.
<b>Interprofessional Education</b>		<b>21 Cr.</b>
<b>IPE 103*</b>	Exploring the Health Professions	3 Cr.
<b>IPE 213*</b>	Social Determinants in Health	3 Cr.
<b>IPE 233*</b>	Principles of Health Education and Promotion	3 Cr.
<b>IPE 253*</b>	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
<b>IPE 304*</b>	Introduction to Epidemiology	3 Cr.
<b>IPE 315*</b>	Introduction to Evidence-Based Practice in Health Professions	3 Cr.
<b>IPE 318*</b>	Global Health Issues	3 Cr.
<b>Arts and Sciences</b>		<b>49 Cr.</b>
<b>CORE 110</b>	The Human Experience	4 Cr.
<b>CORE 115</b>	The Human Experience	4 Cr.

<b>THEO 200</b>	The Christian Tradition	3 Cr.
<b>Upper Level Theology</b>		3 Cr.
<b>ENGL 205</b>	Writing in the Health Sciences	3 Cr.
<b>One of the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>Humanities Elective</b>		3 Cr.
<b>BIO 151*</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152*</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>BIO 210*</b>	Microbiology	3+3, 4 Cr.
<b>BIO 260*</b>	Human Nutrition	3 Cr.
<b>One course from the following options:</b>		
<b>CHEM 111*</b>	Introduction to Chemistry	3+3, 4 Cr.
<b>CHEM 121*</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131*</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.
<b>PSY 110*</b>	General Psychology	3 Cr.
<b>PSY 201*</b>	Statistical Methods	3 Cr.
<b>PSY 215*</b>	Lifespan Development	3 Cr.
<b>Electives</b>		<b>15 Cr.</b>

\* Courses marked with an asterisk require a C grade or better.

## Public Health Minor (Minimum 15 Cr.)

<b>Public Health</b>		<b>6 Cr.</b>
<b>PHS 101</b>	Introduction to Public Health	3 Cr.
<b>PHS 121</b>	Environment and Health (also HCL 121)	3 Cr.
<b>Interprofessional Education</b>		<b>6 Cr.</b>
<b>IPE 304</b>	Introduction to Epidemiology	3 Cr.
<b>IPE 318</b>	Global Health Issues	3 Cr.
<b>One course from the following options:</b>		<b>3 Cr.</b>
<b>IPE 233</b>	Principles of Health Education and Promotion	3 Cr.
<b>PHS 210</b>	Prevention in Population Health	3 Cr.
<b>PHS 318</b>	Health Services Leadership and Administration	3 Cr.
<b>PHS 460</b>	Health Advocacy	3 Cr.

## Admission Requirements

Freshman students who have declared public health as their major will be admitted directly into the public health program.

Students in the BSPH program who are eligible for admission to the BSPH MPH 4+1 option will be invited to enroll in graduate level public health courses in their senior year if they have a 3.000 GPA, have earned grades of a C or better in science courses and courses required for the public health major, and have completed the program of study through the junior year. Students who are admitted into the BSPH MPH 4+1 during their senior year will be admitted directly into the MPH upon graduation from the BSPH assuming they continue to meet the progression requirements.

## Progression

Students must maintain a minimum cumulative grade point average of 2.500 in all course work. In addition, students must maintain a minimum cumulative grade point average of 2.500 in the required public health and interprofessional education courses in the public health major to remain in the public health program. Students must earn a grade of C (2.000) or better in courses designated with an asterisk (\*) as indicated in the above table of graduation requirements.

Dismissal from the public health program occurs when a student earns two infractions. Infractions include: a grade of less than C (2.000) in any required course with a public health or interprofessional education number, BIO 151, BIO 152, BIO 210, or CHEM 111/121/131; a cumulative grade point average less than 2.500; or a grade point average of required public health and interprofessional education courses less than 2.500. Requirements for progression into the MPH program include maintenance of a cumulative GPA of at least 3.000, a 3.000 minimum average in all graduate level courses, and no grades of less than a B- in any required graduate course.

Students are required to present evidence of a criminal background check and a negative drug screen during the first semester of admission to the program. Students will also have to repeat a criminal background check, negative drug screen, and any additional requirements as required by the agency a second time during the fall semester of their graduating year, prior to the practicum placement. Drug screening can be requested randomly. Students are responsible for meeting these requirements according to CONHP policies.

**Minor**

A public health student may declare a minor in another college provided that no more than six credit hours of courses required for the Public Health major are used in fulfilling requirements of the minor. The minor is noted on the student's academic record.

**Course Intensification**

A public health student may propose a special project for earning one extra credit in one public health course towards the required 12 elective credits for the Bachelor of Science in Public Health degree. The following regulations pertain to this option for a student:

1. Student must have a public health GPA of 2.700 or above
2. The course must be offered in the College of Nursing and Health Professions for three or more credits.
3. Student must meet with the academic advisor to determine if course intensification is appropriate. The initiative and responsibility for developing a satisfactory proposal lie with the student.
4. Student must submit a one-page proposal for the intensification project and the petition online. It will be forwarded to the advisor, the instructor of the course, and the dean for approval.

**Note:** Students are responsible for transportation to and from all practicum and community agencies and for transportation associated with home visits. The College of Nursing and Health Professions uses a variety of accredited health facilities to provide broad practicum experience for students; consequently, access to a car is necessary in most practicum experiences.

## Bachelor of Science in Public Health/ Master of Public Health 4+1 Degree (Minimum 124 Cr.)

During the junior year, students who have a 3.000 cumulative GPA, who have a 3.000 GPA in the required public health courses, who have not earned grades of less than C in science courses and courses required for the public health major, and who have completed the program of study through the junior year, will be invited to enroll in the 4+1 program.

**Admission Requirements**

Students who are admitted into the BSPH/MPH 4+1 during their senior year will be admitted directly into the MPH program upon graduation from their BSPH program assuming they continue to meet the progression requirements.

**Progression**

Requirements for progression include maintenance of a cumulative GPA of at least 3.000 average in all graduate level classes, and no grades of less than B- in any required graduate courses.

<b>Public Health</b>		<b>39 Cr.</b>
PHS 101*	Introduction to Public Health	3 Cr.
PHS 121*	Environment and Health	3 Cr.
PHS 203*	Human Health and Disease	3 Cr.
PHS 210*	Prevention in Population Health	3 Cr.
PHS 255	Communication Strategies for Public Health and Health Care Leadership	3 Cr.
PHS 316*	Community-Based Participatory Research	3 Cr.
PHS 318*	Health Services Leadership and Administration	3 Cr.
PHS 370*	Program Planning and Evaluation	3 Cr.
PHS 413*	Social, Behavioral, and Cultural Factors in Health Care	3 Cr.
PHS 421*	Environmental Health for a Sustainable Future	3 Cr.
PHS 460*	Public Health Advocacy	3 Cr.
PHS 470*	Public Health Practicum	1+2, 3 Cr.
PHS 480*	Public Health Capstone	1+2, 3 Cr.
<b>Interprofessional Education</b>		<b>21 Cr.</b>
IPE 103*	Exploring the Health Professions	3 Cr.
IPE 213*	Social Determinants in Health	3 Cr.
IPE 233*	Principles of Health Education and Promotion	3 Cr.
IPE 253*	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
IPE 304*	Introduction to Epidemiology	3 Cr.
IPE 315*	Introduction to Evidence-Based Practice in Health Professions	3 Cr.
IPE 318*	Global Health Issues	3 Cr.
<b>Arts and Sciences</b>		<b>49 Cr.</b>
CORE 110	The Human Experience	4 Cr.
CORE 115	The Human Experience	4 Cr.
THEO 200	The Christian Tradition	3 Cr.

<b>Upper Level Theology</b>		3 Cr.
<b>ENGL 205</b>	Writing in the Health Sciences	3 Cr.
<b>One of the following options:</b>		
<b>KIN 100</b>	Healthy Lifestyles	1 Cr.
<b>KIN 101</b>	Wellness and Stress	1 Cr.
<b>Humanities Elective</b>		3 Cr.
<b>BIO 151*</b>	Human Anatomy and Physiology I	3+3, 4 Cr.
<b>BIO 152*</b>	Human Anatomy and Physiology II	3+3, 4 Cr.
<b>BIO 210*</b>	Microbiology	3+3, 4 Cr.
<b>BIO 260*</b>	Human Nutrition	3 Cr.
<b>One course from the following options:</b>		
<b>CHEM 111*</b>	Introduction to Chemistry	3+3, 4 Cr.
<b>CHEM 121*</b>	General Chemistry I	3+3, 4 Cr.
<b>CHEM 131*</b>	General Chemistry I for Chemistry Careers	3+3, 4 Cr.
<b>PSY 110*</b>	General Psychology	3 Cr.
<b>PSY 201*</b>	Statistical Methods	3 Cr.
<b>PSY 215*</b>	Lifespan Development	3 Cr.
<b>Electives</b>		15 Cr.
<b>Public Health</b>		<b>42 Cr.</b>
<b>MPH Core Requirements</b>		<b>21 Cr.</b>
<b>IPE 603</b>	Principles of Epidemiology	3 Cr.
<b>PHS 503<sup>EE</sup></b>	Biostatistics	3 Cr.
<b>PHS 513<sup>EE</sup></b>	Social, Behavioral, and Cultural Factors in Health	3 Cr.
<b>PHS 520<sup>EE</sup></b>	Biological Basis of Disease	3 Cr.
<b>PHS 521<sup>EE</sup></b>	Environmental Health for a Sustainable Future	3 Cr.
<b>PHS 560</b>	Public Health Policy, Leadership, and Administration	3 Cr.
<b>PHS 662</b>	Public Health Program Planning, Management, and Evaluation	3 Cr.
<b>MPH Concentration (select one concentration)</b>		<b>12 Cr.</b>
<b>Epidemiology Concentration</b>		
<b>PHS 613</b>	Applied Epidemiology	3 Cr.
<b>PHS 618</b>	Global Health Epidemiology	3 Cr.
<b>PHS 619</b>	Applied Health Data Analysis	3 Cr.
<b>PHS 673</b>	Epidemiologic Research Methods	3 Cr.
<b>Global Health Concentration</b>		
<b>PHS 612</b>	Global Health Systems	3 Cr.
<b>PHS 618</b>	Global Health Epidemiology	3 Cr.
<b>PHS 624</b>	Reducing Global Health Disparities	3 Cr.
<b>PHS 670</b>	Community-Based Participatory Research	3 Cr.
<b>Internship/Culminating Experience</b>		<b>6 Cr.</b>
<b>PHS 680</b>	Public Health Internship	3 Cr.
<b>PHS 681</b>	Public Health Culminating Experience	3 Cr.
<b>Electives</b>		<b>3 Cr.</b>

EE – Courses marked with <sup>EE</sup> are approved for the Graduate School Early Entry Program (see page 13).

**Note:** GRD 500 Graduate Academic Success is required for all new international graduate students in their first semester of enrollment.

## Public Health Courses

<b>PHS 101</b>	<b>Introduction to Public Health</b>	3 Cr.
Introduction to aspects of best practice of public health, including public health services, administration, and policy, environmental health, community health, and health promotion and education. This course is open to all University students.		
<b>PHS 121</b>	<b>Environment and Health</b>	3 Cr.
(Also offered as HCL 121.) Explores health and environmental controversies from the dual perspectives of scientific uncertainty and mass media coverage. Examines genetic engineering, biotechnology, environmental health risks, and human behavior. Includes discussion of ethical and social responsibilities from a health care system perspective.		

<b>PHS 203</b>	<b>Human Health and Disease</b>	3 Cr.
	(Also offered as HS 203.) Overview of basic biological concepts, molecular biology, genetics, and infectious and chronic diseases of public health concern. Biological perspective on public health issues related to chronic and infectious diseases.	
<b>PHS 210</b>	<b>Prevention in Population Health</b>	3 Cr.
	(Also offered as HS 210.) Introduction to the clinical basis of preventive health care, including human growth and development, nutrition, and immunology. Overview of the goals and methods used for disease prevention.	
<b>PHS 255</b>	<b>Communication Strategies for Public Health and Health Care Leadership</b>	3 Cr.
	(Also offered as HCL 255.) This course explores the impact of communication on health policy, health systems, and public health. An emphasis will be placed on promoting the health and wellness of populations through interpersonal, organizational, cultural, and mass communication; examining how communication strategies are used to share health-related information; and using processes of communication to promote a shared understanding about public health, health policy, and health systems.	
<b>PHS 316</b>	<b>Community-Based Participatory Research</b>	3 Cr.
	Explores the practice of community-based participatory research as an innovative approach to improving, sustainable health outcomes. Analyzes the key steps involved in developing community-based participatory research including partnerships, community assessment, planning, implementation, and evaluation of public health programs.	
<b>PHS 318</b>	<b>Health Services Leadership and Administration</b>	3 Cr.
	Introduction to the basic concepts of public health leadership and management in health service organizations, administration, and health policy in developed, developing, and underdeveloped countries.	
<b>PHS 360</b>	<b>Interprofessional Service Learning in Health in Central America</b>	1+2, 3 Cr.
	(Also offered as NUR 360.) This course focuses on the application of principles from international health, public health, and community-based participatory action to population-based health care services in rural Central America. Emphasis is placed on assessing, diagnosing, planning, and evaluating health and implementing strategies at all levels of prevention during this service-learning experience. As a member of an interprofessional health care team, students will explore the roles of public health professionals in collaboration with local care providers in the provision of services to disparate populations. May be used to fulfill Cultural Diversity course component of the General Education requirements. Participation in the spring break trip to Central America is a required element in this course.	
<b>PHS 370</b>	<b>Program Planning and Evaluation</b>	3 Cr.
	Explores the role of public health programs in the community, including needs assessment, program planning, implementation, and evaluation. Students will develop a public health program.	
<b>PHS 390</b>	<b>Topics in Public Health</b>	1-3 Cr.
	An open topic course which may cover specialized areas of public health and current concepts and concerns in the delivery of population health. The course may be taken more than once for a maximum of six credit hours provided there is not duplication of topics. Prerequisites: determined by the instructor. Selected topics offered to non-public health majors. May be taken on the S/U grade basis.	
<b>PHS 395</b>	<b>Independent Study in Public Health</b>	1-6 Cr.
	Independent study of a selected topic. Prerequisite: determined by the instructor. May be taken on S/U basis. Prerequisite: approval of the dean of the college.	
<b>PHS 415/513</b>	<b>Social, Behavioral, and Cultural Factors in Health Care</b>	3 Cr.
	Examines theoretical relationships among the social context, behavior, and health at the intrapersonal, interpersonal, and community levels. Identifies key social and behavioral determinants of health in the United States and throughout the world.	
<b>PHS 421/521</b>	<b>Environmental Health for a Sustainable Future</b>	3 Cr.
	Examines the connection between public health and environmental exposures to biological, chemical, and physical agents. Through the use of problem-solving frameworks, students become familiar with assessment, planning, action, evaluation, and policy necessary to address environmental impacts on public health. This course will integrate concepts of environmental health with principles of sustainability to examine how policy and practice on the local, state, national, and global levels affect population health.	

<b>PHS 460</b>	<b>Public Health Advocacy</b>	3 Cr.
	Focuses on the application of knowledge, skills, and attitudes about public health advocacy in the United States. Emphasis is placed on organizing, planning, implementing, and evaluating health advocacy for social change. Public health advocacy will be examined on local, state, and national levels. Students will explore the role of the advocate in global health systems and policy-making.	
<b>PHS 470</b>	<b>Public Health Practicum</b>	1+2, 3 Cr.
	Provides students with an overview of field experiences in public health. Explores public health professional roles through representatives from various public health organizations. Students will implement their public health program in collaboration with a public health agency. Prerequisite: PHS 370.	
<b>PHS 480</b>	<b>Public Health Capstone</b>	1+2, 3 Cr.
	Integrates, synthesizes, and applies knowledge developed through the public health curriculum. Students will evaluate their public health program in collaboration with a public health agency. Prerequisite: PHS 470.	
<b>PHS 490</b>	<b>Topics in Public Health</b>	1-3 Cr.
	An open topic course which may cover advanced, specialized areas of public health and current concepts and concerns in the delivery of population health. The course may be taken more than once for a maximum of six credit hours provided there is not duplication of topics. Prerequisites: determined by the instructor. Selected topics offered to non-public health majors. May be taken on the S/U grade basis.	
<b>PHS 495</b>	<b>Independent Study in Public Health</b>	1-6 Cr.
	Independent study of a selected topic. Prerequisite: determined by the instructor. May be taken on S/U basis. Prerequisite: approval of the dean of the college.	

# Interdisciplinary Programs

Learn more about [Interdisciplinary Programs](#) at Valpo online.

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.

## Interdisciplinary Minors

The interdisciplinary minors in this section may be presented in partial fulfillment of the Major Field Requirements for the Bachelor of Arts degree (see page 44).

## Restrictions for Interdisciplinary Minors

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. This restriction does not apply to majors or minors in the College of Engineering and the College of Business.

## Interdisciplinary Majors

The interdisciplinary majors offered in the College of Arts and Sciences lead to the Bachelor of Arts or Bachelor of Science degree. These include Actuarial Science (page 61), , Data Science (page 91), Environmental Science (page 122), , Global Studies (page 251), and Theology and Ministry (page 190).

## Restrictions for Interdisciplinary Majors

A student may combine an additional major or minor with an interdisciplinary major. If there are overlapping courses, the following restrictions apply. An additional major requires at least four courses of at least three credits each beyond those courses in the interdisciplinary major. An additional minor requires at least two courses of at least three credits each beyond those courses in the interdisciplinary major.

An administrative committee for an interdisciplinary major or minor may set further restrictions for their major or minor if desired.

# Business Programs

The following interdisciplinary programs are administered by the College of Business.

# 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 Fundamentals of Business Minor. This is a comprehensive business minor covering all the major areas of course work to prepare one for entering a master's program. Students intending to transfer into the College of Business need another math course in addition to these courses and the math course taken as a prerequisite for IDS 205. The College of Business requires each student to maintain a minimum minor cumulative grade point average of 2.250.

## Business Administration Minor (Minimum 27 Cr.)

<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>ACC 206</b>	Managerial Accounting	3 Cr.
<b>BLAW 104</b>	Legal Environment of Business	3 Cr.
<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ECON 222</b>	Principles of Macroeconomics	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>FIN 304</b>	Financial Management	3 Cr.
<b>MGT 304</b>	Management and Organizational Behavior	3 Cr.
<b>MKT 304</b>	Marketing Management	3 Cr.

Note: MATH 124 is a prerequisite for IDS 205. STAT 340 or IDS 340 may be substituted for IDS 205.

# Business Analytics

## Objective

The Business Analytics minor is intended for students who want to enhance their skills through the effective use of data. These data savvy professionals will not possess the deep analytical skills obtained from a more quantitatively intensive program, but address a wider scale of industry needs by offering a broader range of content, ensuring that, at a minimum, students understand data management and quantitative analysis and are able to effectively communicate this information in a business context. The College of Business requires each student to maintain a minimum minor cumulative grade point average of 2.250.

## Business Analytics Minor (Minimum 18-19 Cr.)

### One course from the following options:

<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>BUS 330</b>	Database Management Systems	3 Cr.
<b>BUS 440</b>	Data Mining	3 Cr.
<b>IDS 115</b>	Business Applications for Decision Making	3 Cr.
<b>IDS 340</b>	Statistics for Decision Making	3 Cr.

### One course from the following options:

<b>BUS 315</b>	Analytical Modeling	3 Cr.
<b>BUS 370</b>	Visual Effects	3 Cr.
<b>BUS 470</b>	Business Analytics Practicum	3 Cr.
<b>GEO 215</b>	Introduction to Geographical Information Systems	4 Cr.

# Fundamentals of Business

## Objective

The objective of the Fundamentals of Business Minor is to introduce nonbusiness majors in Arts and Sciences, Engineering, and Nursing and Health Professions to the fundamentals of business. The College of Business requires each student to maintain a minimum minor cumulative grade point average of 2.250.

## Fundamentals of Business Minor (Minimum 18 Cr.)

<b>ECON 221</b>	Principles of Microeconomics	3 Cr.
<b>ACC 205</b>	Financial Accounting	3 Cr.
<b>BLAW 104</b>	Legal Environment of Business	3 Cr.
<b>FIN 304</b>	Financial Management	3 Cr.
<b>MGT 304</b>	Management and Organizational Behavior	3 Cr.
<b>MKT 304</b>	Marketing Management	3 Cr.

**Note: MATH 124 is a prerequisite for IDS 205.**

Students who are considering the possibility of becoming Business Majors must take the prerequisite courses in mathematics, statistics, etc., in order to qualify for admission to the College of Business.

Students earning a Bachelor's degree in the College of Arts and Sciences may apply the 18 credits earned in the courses offered by the College of Business toward the 124 required for graduation (see page 51).

**General Programs**

# Applied Statistics

**Administration**

This minor is administered by the Department of Mathematics and Statistics in consultation with the appropriate departments within the College of Arts and Sciences and the professional colleges.

**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.

## Applied Statistics Minor (Minimum 15 Cr.)

A minimum of 15 credit hours is required to complete this minor. Students who intend to complete this minor are strongly encouraged to consult their academic advisor 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 advisors to determine which requirements these other courses fulfill.

**One course from the following:**

<b>STAT 140</b>	General Statistics	3 Cr.
<b>STAT 240</b>	Statistical Analysis	3 Cr.
<b>PSY 201</b>	Statistical Methods	3 Cr.
<b>IDS 205</b>	Business Statistics	3 Cr.
<b>CE 202</b>	Statistical Applications in Civil Engineering	3 Cr.

**One course from the following:**

<b>STAT 340</b>	Statistics for Decision Making	3 Cr.
<b>IDS 340</b>	Statistics for Decision Making	3 Cr.
<b>ECON 325</b>	Econometrics	3 Cr.

**At least 9 credits from the following:**

<b>BIO/MATH 321</b>	Mathematical Models of Infectious Diseases	3 Cr.
<b>BUS 440</b>	Data Mining	3 Cr.
<b>CS 325</b>	Simulation and Modeling	3 Cr.
<b>DATA 433</b>	Data Mining and Applications	3 Cr.
<b>ECON 473</b>	Applied Data Science	3 Cr.
<b>GEO/MET 460</b>	Data Analysis	3 Cr.
<b>POLS 210</b>	Research Methods in Political Science	3 Cr.
<b>PSY 202</b>	Research Methods in Psychology	3 Cr.
<b>SOC 320</b>	Research Methods in Sociology	3 Cr.
<b>STAT 299</b>	Statistics Colloquium I	1 Cr.
<b>STAT 343</b>	Time Series Analysis	3 Cr.
<b>STAT 344</b>	Stochastic Processes	3 Cr.
<b>STAT 361</b>	Introduction to R	1 Cr.
<b>STAT 363</b>	Introduction to SAS	3 Cr.
<b>STAT 399</b>	Statistics Colloquium II	1 Cr.
<b>STAT 441</b>	Probability	4 Cr.
<b>STAT 442</b>	Mathematical Statistics	3 Cr.
<b>STAT 490</b>	Advanced Topics in Statistics	3 Cr.
<b>STAT 499</b>	Statistics Colloquium III	1 Cr.

Note that due to restrictions on overlapping of courses in different programs, Actuarial Science majors may not use STAT 343, STAT 344, STAT 363, STAT 441, or STAT 442 to fulfill minor requirements. Students selecting the full Statistics major are not eligible to earn the Applied Statistics minor.

# Cinema and Media Studies

**Administrative Committee:** Professor Tomasik (World Languages and Cultures); Associate Professors Anderson (Communication and Visual Arts), Potter (English), Wolff (Communication and Visual Arts, coordinator), Wuerffel (Communication and Visual Arts).

## Objectives

The minor in Cinema and Media Studies offers the opportunity to study the role of films and other media as artistic expressions and cultural forces. Students will learn critical and theoretical tools for analyzing motion pictures and their historically evolving role in reflecting and shaping social ideologies and norms. The minor in Cinema and Media Studies allows the small-scale but concentrated study of one important art form, and through it, our contemporary world.

## Cinema and Media Studies Minor (Minimum 15 Cr.)

CVA 270/ ENGL 270	Introduction to Cinema Studies	3 Cr.
<b>At least one course from each of the following areas:</b>		<b>6 Cr.</b>
<b>Production:</b>		
CVA 271 Cinema Production 3 Cr.		
CVA 324 Video Art 1+4, 3 Cr.		
<b>Culture/History:</b>		
CHIN 291 Topics in World Cinema 3 Cr.		
CVA 291 Topics in World Cinema 3 Cr.		
ENGL 204 Middle Eastern Cinemas 3 Cr.		
FREN 291 Topics in World Cinema 3 Cr.		
GER 291 Topics in World Cinema 3 Cr.		
GKRO 291 Topics in World Cinema 3 Cr.		
HIST 393 History through Film 3 Cr.		
SPAN 291 Topics in World Cinema 3 Cr.		
<b>Electives:</b>		<b>6 Cr.</b>
<b>Note: Electives may be chosen from any of the above courses that have not already been taken, any other courses approved by the Cinema and Media Studies administrative committee, and any of the following courses when they are taught on film topics.</b>		
CC 300 Seminar 3 Cr.		
CVA 290 Topics in Communication and Visual Arts 3 Cr.		
CVA 371 Advanced Cinema Production 3 Cr.		
CVA 390 Topics in Communication and Visual Arts 3 Cr.		
CVA 472 Screenwriting 3 Cr.		
CVA 490 Topics in Communication and Visual Arts 3 Cr.		
ENGL 490 Topics in Literature 3 Cr.		
FREN 290 Topics in French 3 Cr.		
FREN 300 Topics in French and Francophone Cultures 3 Cr.		
FREN 390 Seminar in French 3 Cr.		
FREN 493 Senior French Seminar 3 Cr.		
GER 390 Seminar in German 3 Cr.		
GER 493 Senior German Seminar 3 Cr.		
SPAN 390 Seminar in Spanish 3 Cr.		
SPAN 493 Senior Spanish Seminar 3 Cr.		
SOC 280 Media and Crime 3 Cr.		
SOC 315 Mass Media and Society 3 Cr.		
THTR 252 Writing for Stage and Screen 3 Cr.		
THTR 390 Topics and Projects 3 Cr.		

# Environmental Studies

**Administrative Committee:** Professors Aljobeh (Civil and Environmental Engineering), Devaraj (Economics), Eberhardt (Biology), Ganesh Babu (Geography and Meteorology), Iceman (Chemistry), Longan (Geography and Meteorology), McCool (Geography and Meteorology), Peller (Chemistry), Raridon (Sociology).

## 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.

## Environmental Studies Minor (Minimum 16 Cr.)

<b>Environmental Studies Core</b>		<b>3 Cr.</b>
GEO 260	Environmental Conservation	3 Cr.
<b>Environment and Society Elective</b>		<b>3 Cr.</b>
One course from the following options:		
GEO 265	Sustainability: Environment, Economy, Society	3 Cr.
GEO 321	Urban and Regional Planning	3 Cr.
ECON 210	Environmental Economics and Policy	3 Cr.
SOC 240	Food Systems	3 Cr.
Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee		
<b>Environmental Meanings and Values Elective</b>		<b>3 Cr.</b>
One course from the following options:		
GEO 475	Culture, Nature, Landscape	3 Cr.
PHIL 230	Environmental Philosophy and Ethics	3 Cr.
Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee		
<b>Environmental Studies Electives</b>		<b>6-7 Cr.</b>
Two courses from the following options:		
BIO 172	Diversity of Life	3+3, 4 Cr.
BIO 215	Fundamental Microbiology for Engineers	3 Cr.
BIO 350	Field Biology: Spring	2+4, 3 Cr.
BIO 430	Plant Biology	3+3, 4 Cr.
BIO 435	Insect Biology	3+3, 4 Cr.
BIO 440	Ecology	3+4, 4 Cr.
CHEM 221	Organic Chemistry I	3+3, 4 Cr.
CHEM 222	Organic Chemistry II	3+3, 4 Cr.
CHEM 230	Quantitative Analysis	3+3, 4 Cr.
CHEM 341	Environmental Chemistry	3+0, 3 Cr.
CE 364	Environmental Engineering I	3+3, 4 Cr.
ENVS 290	Topics in Environmental Science	1-3 Cr.
ENVS 490	Advanced Topics in Environmental Science	1-3 Cr.
GEO 304	Process Geomorphology and Terrain Analysis	3+3, 4 Cr.
Any new or topic course approved by the coordinator of the Environmental Science Administrative Committee		
<b>Capstone Experience</b>		<b>1-3 Cr.</b>
One course from the following options:		
ENVS 381	Cooperative Education in Environmental Science	1-2 Cr.
ENVS 386	Internship in Environmental Science	1-3 Cr.
ENVS 495	Independent Research in Environmental Science	1 Cr.
ENVS 499	Colloquium on Environmental Science and Management	1 Cr.

**Note:** No more than two courses for this minor may overlap with other requirements whether within general education or within requirements for any majors or other minors. Other appropriate topics courses may be substituted for requirements with the approval of the coordinator.

# Ethnic Studies

**Administrative Committee: Professor Kilpinen (Geography and Meteorology, coordinator).**

## Objectives

The Ethnic 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.

## Ethnic Studies Minor (Minimum 15 Cr.)

### Program Core

One course from the following options:

<b>HIST 225</b>	Alternative Perspectives of United States History	3 Cr.
<b>ENGL 365</b>	Studies in American Literature	3 Cr.

### Elective Courses

<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>ENGL 365</b>	Studies in American Literature	3 Cr.
<b>GEO 200</b>	American Ethnic Geography	3 Cr.
<b>HIST 323</b>	Civil War and Reconstruction	3 Cr.
<b>MUS 101</b>	Introduction to Music	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>THEO 333</b>	Black Theology and Black Church	3 Cr.
<b>THEO 349</b>	Topics in Religious Ethics	3 Cr.
<b>THEO 364</b>	Native American Religions	3 Cr.

Additional courses for the minor will consist of topics courses and departmental seminars, each of which must be approved and will be publicized by the administrative committee. Students wishing to use a course not listed must have the course approved by the administrative committee prior to enrolling in the course. No more than one course at the 100 level may apply towards the minor. At least two of the courses applying towards the minor must be at the 300 level or above.

# Forensic Science

**Administration: This minor is administered by the Biology and Chemistry departments in consultation with the Sociology and Psychology departments, and other interested parties.**

## Objective

The forensic science minor is intended for students majoring in Biology or Chemistry who are interested in the field of forensic science. Students will learn laboratory techniques applicable to forensic science and be exposed to a variety of disciplines within the field.

## Forensic Science Minor (Minimum 18 Cr.)

### Required Courses

<b>BIO 445</b>	Forensic Biology	3+3, 4 Cr.
<b>BIO 493</b>	Seminar in Biology: Forensic Science	1 Cr.
<b>CHEM 340</b>	Forensic Chemistry	2+3, 3 Cr.
<b>PSY 465</b>	Psychology and Law	3 Cr.
<b>SOC 130</b>	The Criminal Justice System	3 Cr.

### One course from the following options:

<b>BIO 450</b>	Molecular Biology	3+3, 4 Cr.
<b>CHEM 315</b>	Biochemistry I	3+3, 4 Cr.

**Total**

**18 Cr.**

Prerequisites for courses in the minor, in addition to courses in the major – Biology majors: CHEM 230, and PSY 110

Prerequisites for courses in the minor, in addition to courses in the major – Chemistry majors: BIO 171, BIO 172, and PSY 110

Notes:

1. Students completing this minor with a major in Biology are encouraged to take BIO 340: Human Molecular Genetics, and BIO 360: Modern Microscopy.
2. Students completing this minor with a major in Chemistry are encouraged to take CHEM 316: Biochemistry II, and CHEM 430: Advanced Instrumental Analysis.
3. Students cannot have more than two courses that overlap between the Forensic Science minor and their major, any minors, or general education.

## Gender Studies

**Administrative Committee: Professors J. Moore (Theology, coordinator); Associate Professors Burow-Flak (English), N. Corazzo (Art), Seguin (History).**

### 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 development, 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.

## Gender Studies Minor (Minimum 15 Cr.)

### Core Requirement

<b>GNST 201</b>	Introduction to Gender Studies	3 Cr.
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### Social and Life Sciences

#### One course from the following options:

<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>PSY 390</b>	Special Topics in Psychology (when appropriate topic)	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>SOCW 390</b>	Advanced Topics in Social Work (when appropriate topic)	3 Cr.
<b>SOC 220</b>	The Family	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOC 340</b>	Gender	3 Cr.

### Humanities and Fine Arts

#### One course from the following options:

<b>CVA 322</b>	Sports Media Formats	3 Cr.
<b>ENGL 200</b>	Literary Studies	3 Cr.
<b>ENGL 490</b>	Topics in Literature (when appropriate topic)	3 Cr.
<b>THEO 317</b>	The World of the New Testament	3 Cr.

## Interdisciplinary Programs

<b>THEO 319</b>	Topics in Biblical Studies	3 Cr.
<b>THEO 343</b>	Theology of Marriage and Sexuality	3 Cr.
<b>CC 300</b>	Seminar	3 Cr.

### **Electives**

**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.**

## **Gender Studies Courses**

<b>GNST 201</b>	<b>Introduction to Gender Studies</b>	3 Cr.
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 gender studies minor as a foundation for studying the issues related to gender in the other courses included in the minor.		
<b>GNST 290</b>	<b>Topics in Gender Studies</b>	1-3 Cr.

Intensive study of a special topic in gender studies. Topics may focus on theory and method; on the intersection of gender studies with other disciplines; or on particular groups, such as women of color. May be repeated for credit if the topic varies. Prerequisite may vary with topic.

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**

**Administrative Committee: Professor Nelson (Psychology, coordinator).**

### **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, psychological, and spiritual dimensions, as well as the role of the older individual in society. It is the premise of the program that these changes are best understood and explored in an interdisciplinary context. As the average human life-span increases 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 social or biomedical sciences or theology will find this minor to be an essential part of their preparation.

## **Human Aging Minor (Minimum 18 Cr.)**

<b>Aging, Behavior, and Society</b>	<b>3 Cr.</b>
<b>Three credits from the following options:</b>	
<b>PSY 332</b>	Psychology of Adulthood and Aging
<b>PSY 375</b>	Human Neuropsychology
<b>Aging and Religious Faith</b>	
<b>Three credits from the following options:</b>	
<b>THEO 343</b>	Theology of Marriage and Sexuality (when appropriate)
<b>THEO 349</b>	Topics in Religious Ethics (when appropriate)
<b>THEO 353</b>	Studies in Theology and Practice
<b>Aging and Health</b>	
<b>Three credits from the following options:</b>	
<b>IPE 318</b>	Global Health Issues
<b>NUR 351</b>	Gerontological Nursing
<b>NUR 390</b>	Topics in Nursing and Health Care

<b>Elective Courses</b>		<b>9 Cr.</b>
<b>Nine credits from the following options:</b>		
<b>BIO 260</b>	Human Nutrition	3 Cr.
<b>SOCW 390</b>	Advanced Topics in Social Work (when appropriate)	2-3 Cr.
<b>SOC 220</b>	The Family	3 Cr.
<b>SOC 390</b>	Issues in Sociology (when appropriate)	3 Cr.
<b>THEO 341</b>	Bioethics	3 Cr.

## Neuroscience Minor

**Administrative Committee:** Professors Carlson (Psychology), Nelson (Psychology), Scaglione-Sewell (Biology); Associate Professors Anderson (English), Glass (Computing and Information Sciences); Assistant Professors Berberoglu (Biology), Butler (Psychology, coordinator), R. Johnson (Engineering), Nakamoto (Biology).

### Objectives

An understanding of the mind is one of the most important and fascinating human quests. For those who want to join this important endeavor, the Neuroscience minor offers an interdisciplinary perspective on the structure and function of the human nervous system and the mental abilities that depend upon its operation.

Neuroscience is a central topic of contemporary scientific inquiry, with many large research initiatives underway in the US and international settings. It is an exciting field that attempts to study (1) the basic structure and characteristics of human mental processes, (2) the anatomy and physiology of the nervous system, and (3) how mental and physical processes relate to each other. The field of neuroscience is both fascinating and complex, as it draws on insights from many different fields including bioengineering, cognitive science, computer science, experimental and clinical psychology, linguistics and philosophy.

Students entering many research and professional careers will find a background in neuroscience to be helpful or even essential in a number of fields such as artificial intelligence, clinical neuropsychology, medicine (especially neurology and psychiatry), neurolinguistics, and philosophy (especially philosophy of mind). Integral to the program is a set of learning objectives that orient faculty and students toward the acquisition of critical knowledge and skills necessary for understanding, appreciating and using the tools of modern neuroscience.

The minor in Neuroscience may be used in partial fulfillment for the degree of Bachelor of Science.

### Neuroscience Minor (Minimum 16 Cr.)

<b>Core Courses</b>		<b>10 Cr</b>
<b>BIO 370</b>	Neurobiology	3 Cr.
<b>PSY 375</b>	Human Neuropsychology	3 Cr.
<b>Take four credits of the following course:</b>		
<b>NSCI 393</b>	Neuroscience Seminar	2 Cr.
<b>Elective Courses</b>		<b>6 Cr.</b>
<b>Choose 6 credits from two different departments from the following options:</b>		
<b>BE 200</b>	Bioengineering Seminar	1 Cr.
<b>BE 468</b>	Human-Machine Interfaces	3 Cr.
<b>BIO 380</b>	Principles of Human Physiology	3 Cr.
<b>BIO 493</b>	Seminar in Biology (with committee approval)	1 Cr.
<b>ENGL 343</b>	Introduction to Linguistics	3 Cr.
<b>PHIL 315</b>	Philosophy of Mind and Language	3 Cr.
<b>PSY 245</b>	Physiological Psychology	3 Cr.
<b>PSY 345</b>	Sensation and Perception	3 Cr.
<b>PSY 346</b>	Laboratory in Sensation and Perception	1 Cr.
<b>PSY 350</b>	Cognitive Psychology	3 Cr.
<b>PSY 351</b>	Laboratory in Human Cognition	1 Cr.
<b>PSY 376</b>	Laboratory in Neuropsychology	1 Cr.
<b>Capstone Course</b>		<b>0-1 Cr.</b>
<b>NSCI 499</b>	Neuroscience Capstone Project	0-1 Cr.

## Interdisciplinary Programs

Core classes should be completed during the sophomore or junior year if possible, while Electives may be taken at any time. The Capstone experience will normally be taken in the senior year. Prerequisite courses are required prior to registration in Core classes and are typically completed during the freshman or sophomore year of study. In addition, the core program courses require a significant background in the biological and psychological sciences to allow full engagement with the technical aspects of neuroscience. Students are encouraged to consult with a neuroscience advisor to assist in selecting courses that will support their professional goals.

### **Neuroscience Courses**

<b>NSCI 393</b>	<b>Seminar in Neuroscience</b>	2 Cr.
	A discussion of basic research, issues and methods in the study of the human nervous system and mental abilities. May be repeated for credit up to a maximum of 4 credits. Prerequisite: BIO 151 or BIO 171, plus one of the following: CHEM 115, CHEM 121, or PSY 110. S/U grade only.	
<b>NSCI 499</b>	<b>Neuroscience Capstone Project</b>	0-1 Cr.
	A research project or study of an advanced topic related to neuroscience, typically done during the senior year of study. Typically taken for 0 credits. Approval of the administrative committee is required prior to registration. A public presentation of the project is required. Prerequisite: BIO 370 and PSY 375.	

## **Peace and Social Justice Studies**

**Administrative Committee:** Professor Winquist (Psychology), Yogan (Sociology and Criminology); Associate Professor Geiman (Philosophy); Assistant Professor Ban (Social Work); Instructor Western (Christ College, coordinator).

### **Objectives**

Valparaiso University nurtures a community whose members learn to embody social responsibility. The community challenges its members to discover ways of using their abilities in the service of the whole human family. The Peace and Social Justice Studies Minor is an interdisciplinary program focusing on social responsibility by examining the means of establishing justice, achieving peace, and resolving conflicts nonviolently. Peace rooted in justice requires the nurturing of a culture of peace in homes, schools, communities, religious institutions, nations, and across the world. Peace rooted in justice requires teaching peace and social justice to cultivate those who will become socially responsible leaders.

### **Peace and Social Justice Studies Minor (Minimum 15 Cr.)**

#### **Program Core**

<b>PSJ 201</b>	Principles of Peace and Social Justice	3 Cr.
<b>PSJ 386</b>	Internship in Peace and Social Justice Studies	3 Cr.
		<b>9 Cr.</b>

#### **International/Global Track**

**Concentrates on social responsibility between nations and other large groups**

**Nine credits from the following options (no more than two courses from specified**

**General Electives & no more than two courses from a single department):**

<b>HIST 329</b>	Revolution! Insurgence in Latin America	3 Cr.
<b>HIST 350</b>	Colonialism and Independence: Understanding Modern Africa	3 Cr.
<b>HIST 355</b>	Modern Middle Eastern History	3 Cr.
<b>POLS 150</b>	International Relations	3 Cr.
<b>THEO 334</b>	Holocaust Theology	3 Cr.
<b>THEO 345</b>	The Church in the World	3 Cr.
<b>THEO 362</b>	Islamic Religion and Culture	3 Cr.
		<b>9 Cr.</b>

#### **Individual/Local Track**

**Concentrates on social responsibility among individuals, small groups, and communities**

**Nine credits from the following options (no more than two courses from specified**

**General Electives & no more than two courses from a single department):**

<b>ECON 136</b>	The Economics of Health, Education, and Welfare	3 Cr.
<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>HIST 225</b>	Alternative Perspectives of United States History	3 Cr.
<b>POLS 371</b>	Constitutional Law I	3 Cr.
<b>POLS 271</b>	The Judicial Process	3 Cr.
<b>SOC 130</b>	The Criminal Justice System	3 Cr.
<b>SOC 210</b>	Contemporary Social Problems	3 Cr.

## Interdisciplinary Programs

<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOC 360</b>	Penology	3 Cr.
<b>SOC 390</b>	Issues in Sociology	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>THEO 329</b>	Topics in Christian History (when topic is appropriate)	3 Cr.
<b>THEO 333</b>	Black Theology and Black Church	3 Cr.
<b>THEO 349</b>	Topics in Religious Ethics (when topic is appropriate)	3 Cr.
<b>THEO 353</b>	Studies in Theology and Practice	3 Cr.

**General Electives**

<b>No more than one course at the 100-level and no more than two courses from a single department</b>		
<b>POLS 241</b>	Political Philosophy	3 Cr.
<b>POLS 361</b>	Public Policy	3 Cr.
<b>POLS 490</b>	Advanced Topics in Political Science II	3 Cr.
<b>PSY 225</b>	Social Psychology	3 Cr.
<b>PSY 390</b>	Special Topics in Psychology	3 Cr.
<b>THEO 318</b>	Jesus and the Gospels	3 Cr.

Several other courses, offered as topics courses and seminars, will be publicized when approved by the administrative committee. A student who wishes to include a course not on the list of electives must obtain the approval of the administrative committee before enrolling in that course.

## **Peace and Social Justice Courses**

<b>PSJ 201</b>	<b>Principles of Peace and Social Justice</b>	3 Cr.
This course focuses on social responsibility by examining the means of establishing justice, achieving peace, and resolving conflicts nonviolently. The causes, nature, and processes of conflict are reviewed. That conflicts are frequently rooted in injustice requires an understanding of the nature of social justice. These injustices may arise from economic, political, sociological, religious, and/or psychological sources. The nature and methods of nonviolent conflict resolution and reconciliation are also considered. This course is intended to introduce students to the peace and social justice minor as a foundation for studying these issues as they are treated in the other courses included in this program. At the end of this course, students will decide whether they wish to pursue either the International/Global Track or the Individual/ Local Track of the program.		
<b>PSJ 386</b>	<b>Internship in Peace and Social Justice Studies</b>	3 Cr.
The coordinator of the minor will assist in arranging an appropriate internship for the track chosen. Prerequisite: Approval of the advising instructor and consent of the program coordinator.		

## **Philanthropic Leadership and Service**

**Administrative Committee: Professor Buinicki (English, coordinator); Clinical Assistant Professor Sheets (Nursing).**

### **Objectives**

There are currently over one million registered non-profit organizations in the United States. While each organization may attract individuals with particular interests and expertise, these agencies also need leaders with consistent abilities in oral and written communication, critical thinking, problem solving, organization, and public advocacy within the corporate and governmental spheres. The minor in Leadership and Service further develops these core competencies while introducing students to the range of issues facing our communities. Students working in the minor will demonstrate that they have gone beyond volunteering at local organizations to thinking about how they can best continue contributing to these organizations in a long-term and professional capacity. Finally, the minor gives students seeking degrees in other fields an opportunity to develop and to pursue their passion for service in a thoughtful and rigorous fashion.

## Philanthropic Leadership and Service Minor (Minimum 18 Cr.)

**Required Courses**

<b>GS 220</b>	Contemporary Issues in Philanthropy and Service	<b>3 Cr.</b>
<b>ENGL 296</b>	Traditions of Giving and Serving in American Life	<b>3 Cr.</b>

**Elective Courses**

Twelve credits from the following options:		
<b>CVA 265</b>	Public Relations Principles	3 Cr.
<b>CVA 345</b>	Leadership Communication	3 Cr.
<b>CVA 362</b>	Communication Cases and Campaigns	3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>ENGL 210*</b>	Introduction to Business and Professional Writing	3 Cr.
<b>SPAN 308*</b>	Spanish for Service Professionals	3 Cr.
<b>HCL 301</b>	Health Care Strategic Planning	3 Cr.
<b>HCL 302</b>	Health Care Ethics and Legal Issues	3 Cr.
<b>IPE 213</b>	Social Determinants of Health	3 Cr.
<b>IPE 253</b>	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
<b>IPE 318</b>	Global Health Issues	3 Cr.
<b>MGT 304*</b>	Management and Organizational Behavior	3 Cr.
<b>MGT 315*</b>	Leadership and Interpersonal Skills	3 Cr.
<b>PHIL 125</b>	The Good Life	3 Cr.
<b>POLS 261</b>	State and Local Politics	3 Cr.
<b>POLS 360</b>	Public Administration	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>THEO 332</b>	Christian Theology and the Moral Life	3 Cr.

**Note: No more than two courses (six credits) may be taken from any one department.**

\* Denotes course requires a prerequisite

Within this set of courses, students may choose to develop a focus area that addresses their specific interest in the non-profit sector, although such focus areas are not required to complete the minor. Some sample focus areas and possible courses are listed below, but keep in mind that no more than two courses may be taken from any one department:

**Communications**
**For students interested in marketing and public relations**

<b>CVA 265</b>	Public Relations Principles	3 Cr.
<b>CVA 345</b>	Leadership Communication	3 Cr.
<b>CVA 362</b>	Communication Cases and Campaigns	3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.

**Health and Social Work**
**For students interested in service and philanthropy related to the health or social work professions**

<b>SPAN 308</b>	Spanish for Service Professionals	3 Cr.
<b>HCL 301</b>	Health Care Strategic Planning	3 Cr.
<b>HCL 302</b>	Health Care Ethics and Legal Issues	3 Cr.
<b>IPE 213</b>	Social Determinants of Health	3 Cr.
<b>IPE 253</b>	Introduction to Interprofessional Communication for Health Professionals	3 Cr.
<b>IPE 318</b>	Global Health Issues	3 Cr.
<b>POLS 361</b>	Public Policy	3 Cr.
<b>SOC 275</b>	Systems of Social Stratification	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.

**Humanities**
**For students interested in graduate work in philanthropic studies**

<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>PHIL 125</b>	The Good Life	3 Cr.
<b>THEO 332</b>	Christian Theology and the Moral Life	3 Cr.

**Non-Profit Management****For students interested in pursuing service in an executive capacity**

<b>ENGL 210</b>	Introduction to Business and Professional Writing	3 Cr.
<b>MGT 304</b>	Management and Organizational Behavior	3 Cr.
<b>MGT 315</b>	Leadership and Interpersonal Skills	3 Cr.
<b>POLS 360</b>	Public Administration	3 Cr.

# Professional Studies

**Administrative Committee: Assistant Dean Douglas; Adjunct Instructor Scannell.****Objectives**

The professional studies minor provides opportunities for students to develop professional skills in the areas of communication, leadership and team building, resource management, human relations and diversity, and using technology.

## Professional Studies Minor (16-21 Cr.)

<b>1. Communication Skills</b>	<b>3 Cr.</b>	
<b>One course from the following options:</b>		
CVA 145	Interpersonal and Small Group Communication	3 Cr.
CVA 243	Public Speaking	3 Cr.
ENGL 210	Introduction to Business and Professional Writing	3 Cr.
<b>2. Leadership and Team Building</b>	<b>3 Cr.</b>	
<b>One course from the following options:</b>		
CVA 311	Organizational Communication	3 Cr.
CVA 345	Leadership Communication	3 Cr.
GS 220	Contemporary Issues in Philanthropy and Service	3 Cr.
MGT 315	Leadership and Interpersonal Skills*	3 Cr.
POLS 360	Public Administration*	3 Cr.
<b>3. Resource Management</b>	<b>3 Cr.</b>	
<b>One course from the following options:</b>		
ACC 205	Financial Accounting	3 Cr.
BLAW 104	Legal Environment of Business*	3 Cr.
ECON 136	The Economics of Health, Education, and Welfare	3 Cr.
ECON 221	Principles of Microeconomics	3 Cr.
FIN 282	Personal Finance*	3 Cr.
GEO 321	Urban and Regional Planning*	3 Cr.
MKT 304	Marketing Management*	3 Cr.
PSY 270	Introduction to Industrial/Organizational Psychology*	3 Cr.
<b>4. Human Relations and Diversity</b>	<b>3 Cr.</b>	
<b>Three credits from the following options:</b>		
ECON 233	Economics of Race and Gender	3 Cr.
ENGL 344	Sociolinguistics: Language Across Cultures	3 Cr.
GS 201	Study Circle on Race relations	3 Cr.
GS 201	Facilitator Training for Study Circles*	1 Cr.
GS 489	Professional and Career Development	1 Cr.
MGT 304	Management and Organizational Behavior*	3 Cr.
PHIL 120	Culture, Identity, and Values	3 Cr.
SOC 210	Contemporary Social Problems	3 Cr.
SOC 275	Systems of Social Stratification	3 Cr.
SOCW 260	Diverse Populations: Human Rights and Justice	3 Cr.
<b>5. Using Technology</b>	<b>3 Cr.</b>	
<b>Three credits from the following options:</b>		
CE 151	Introduction to Computer-Aided Drafting	0+3, 1 Cr.
CS 115	Computers and Computation*	3 Cr.
CS 128	Introduction to Programming*	1-2 Cr.
CS 157	Algorithms and Programming*	2+3, 3 Cr.
CVA 110	History and Evolution of Internet Communication	3 Cr.

<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 230</b>	Graphic Design	1+4, 3 Cr.
<b>CVA 401</b>	Social Media	3 Cr.
<b>DATA 151</b>	Introduction to Data Science	2+3, 3 Cr.
<b>ENGL 310</b>	New Literacies, Technologies, and Cultures of Writing*	3 Cr.
<b>GE 290</b>	Issues in Technology	3 Cr.
<b>GEO 215</b>	Introduction to Geographic Information Systems	3+2, 4 Cr.
<b>GEO 225</b>	Cartography and Map Design	3 Cr.
<b>IDS 115</b>	Business Applications for Decision Making	3 Cr.
<b>6. Capstone Integrative Project</b>		<b>1-6 Cr.</b>
<b>At least one credit from the following options:</b>		
<b>GS 386</b>	Internship (or an equivalent departmental internship)	1-6 Cr.
<b>GS 390</b>	Special Topics (as approved by committee)	1 Cr.
<b>CPED 381</b>	Cooperative Education I	0.5-3 Cr.
<b>CPED 382</b>	Cooperative Education II	0.5-3 Cr.
<b>CPED 383</b>	Cooperative Education III	0.5-3 Cr.

\*Courses marked with an asterisk have prerequisites.

## Urban Studies

**Administrative Committee:** Professors Longan (Geography and Meteorology, coordinator), Buggeln (Christ College), Hora (Political Science), Yogan (Sociology and Criminology), Assistant Professor Blake (Sociology and Criminology).

### Objectives

The Urban Studies Minor provides students with an interdisciplinary consideration of the diverse social, cultural, economic, political, and spatial issues confronting contemporary American cities. The goal of the minor is to enhance students' career opportunities in a variety of fields, including urban and regional planning, urban design, public administration, law, real estate, economic development, non-profit management, social work, social justice advocacy, and education. The minor also helps to equip students to contribute meaningfully to public life and discourse in cities. Courses that explore the societal context in which cities operate introduce students to urban studies and ensure that they have a grounding in social sciences. Courses focusing on urban places and processes help students understand how cities work, as well as their history and geography. Finally, students choose one or two elective courses to explore a specialized topic or to gain practical experience through an internship, research, or training in civic engagement. Several courses in the minor take advantage of Valparaiso's location on the fringe of the Chicago Region to provide first-hand experiences of urban places and processes through field trips to Chicago.

### Urban Studies Minor (Minimum 16 Cr.)

#### Urban Context

**Three credits from the following options:**

<b>ECON 136</b>	The Economics of Health, Education, and Welfare	3 Cr.
<b>ECON 233</b>	The Economics of Race and Gender	3 Cr.
<b>GEO 101</b>	World Human Geography	3 Cr.
<b>SOC 110</b>	Introduction to Sociology	3 Cr.
<b>SOCW 210</b>	Social Welfare Policy: History and Programs	3 Cr.
<b>SOCW 220</b>	Human Behavior and Social Environment	3 Cr.
<b>POLS 120</b>	The Government of the United States	3 Cr.

#### Urban Places and Processes

**Nine credits from the following options:**

<b>GEO 320</b>	Urban Geography	3 Cr.
<b>GEO 321</b>	Urban and Regional Planning	3 Cr.
<b>HIST 327</b>	History of Chicago	3 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.

**Four credits from the following options:**

<b>ECON 337*</b>	Public Economics	3 Cr.
<b>GEO 320</b>	Urban Geography	3 Cr.
<b>GEO 321</b>	Urban and Regional Planning	3 Cr.
<b>GEO 420</b>	Rural Geography	3 Cr.
<b>GS 180</b>	Civic Engagement	1-2 Cr.
<b>GS 200</b>	Study Circle on Race Relations	2 Cr.
<b>GS 202*</b>	Study Circles on Race Relations: Civic Engagement	2 Cr.
<b>POLS 261</b>	State and Local Politics in the United States	3 Cr.
<b>POLS 361*</b>	Public Policy	3 Cr.
<b>SOC 325</b>	Urban Sociology	3 Cr.
<b>SOC 350*</b>	Police in Society	3 Cr.
<b>SOCW 260</b>	Diverse Populations: Human Rights & Justice	3 Cr.
<b>UST 386</b>	Internship in Urban Studies	1-3 Cr.
<b>UST 490</b>	Topics in Urban Studies	1-3 Cr.
<b>UST 495</b>	Independent Study	1-3 Cr.
<b>UST 496</b>	Research in Urban Studies	1-3 Cr.

\*Denotes that course requires a prerequisite course

A student may substitute an appropriate topics course or departmental seminar not cross-listed with UST 490 in place of one of the elective courses listed above, provided the topic has an urban focus and is approved by the coordinator of the administrative committee prior to the student's enrolling in the course.

<b>UST 386</b>	<b>Internship in Urban Studies</b>	1-3 Cr.
Professional experience in cooperating non-profit organizations, companies, or government agencies with an urban focus. Examples might include planning or economic development agencies, social service agencies, urban history museums, or neighborhood organizations. Final report required. S/U grade only. Prerequisites: Urban Studies minor and consent of the Urban Studies Coordinator.		
<b>UST 490</b>	<b>Topics in Urban Studies</b>	1-3 Cr.
Study of topical themes in urban studies. Topics may include urban politics, cultural history of cities, urban social justice, urban environments, cities in literature or the arts, or other topics of interest. May be repeated when the topic is different. Prerequisite: junior or senior standing.		
<b>UST 495</b>	<b>Independent Study</b>	1-3 Cr.
Individual research readings on a topic in urban studies agreed upon by a student and a faculty member from the urban studies committee. Prerequisites: junior or senior standing and consent of the Urban Studies Coordinator.		
<b>UST 496</b>	<b>Research in Urban Studies</b>	1-3 Cr.
Students working individually or as part of a research group conduct original research in urban studies under the direction of a faculty member. Students collect and analyze data and report their results in both writing and in an oral presentation. S/U grade. Prerequisite: consent of the instructor and the Urban Studies Coordinator.		

# Reserve Officer Training Corps

Learn more about [Reserve Officer Training Corps \(ROTC\)](#) at Valpo online.

The University offers two programs for the Reserve Officer Training Corps, one for the Air Force and one for the Army. Both programs are administered by Professor Nick Rosasco. A Military Leadership Minor is available to cadets in either program. The Military Leadership Minor will not fulfill any graduation requirements at Valparaiso University, but is intended to recognize students who complete the ROTC Program.

## Use of ROTC Credit Toward Graduation Requirements

The policy of applying ROTC credit toward degree requirements varies from college to college.

The **College of Arts and Sciences** will grant up to sixteen (16) credits of ROTC coursework for free electives only.

The **College of Business** will grant credit as follows:

- Upon the completion of the military Leadership Minor–Air Force, then credit earned for AS 312, Air Force Leadership Studies (Cr. 3) will be considered equivalent to credit for MGT 315, Leadership and Interpersonal Skills (Cr. 3).
- Upon the completion of the Military Leadership Minor–Army, then credit earned for MS 301, Training, Management, and the Warfighting Functions (Cr. 3) and MS 416, Military History: Strategy and Tactics (Cr. 1) will be considered equivalent to credit for MGT 315, Leadership and Interpersonal Skills (Cr. 3)
- Credit toward graduation in the College of Business will be granted up to the maximum number of elective credits required in the BSBA degree.

The **College of Engineering** policy varies by major.

- Civil Engineering will grant three (3) credits of ROTC coursework toward the Professional Elective.
- Computer Engineering will grant three (3) credits of ROTC coursework toward Professional Electives.
- Electrical Engineering will grant up to six (6) credits of ROTC coursework toward the Professional Electives.

The **College of Nursing and Health Professions** will grant twelve (12) credits of ROTC coursework toward the 12 elective credits required for the BSN degree.

## Military Leadership – Air Force

Valparaiso University has an enrollment agreement with the University of Notre Dame enabling Valparaiso University students to participate in their Air Force ROTC program.

The Air Force Reserve Officer Training Corps (ROTC) is an educational program designed to give men and women the opportunity to become an Air Force Officer while completing a degree. The Air Force ROTC Programs develop leadership and management skills that students need to become leaders in the twenty-first century. In return for challenging and rewarding work, the Air Force offers the opportunity for advancement, education, and training, and the sense of pride that comes from serving one's country. Upon completion of the Air Force ROTC program, students are commissioned as second lieutenants in the Air Force. Following commissioning there are excellent opportunities for additional education in a wide variety of academic fields.

Course numbers ending in 11 are taught during the fall semester; course numbers ending in 12 are taught during the spring semester. Leadership Laboratory is open to students who are members of ROTC or who are eligible to pursue a commission.

### Objectives

This minor is available to all students who are choosing to complete the Air Force Reserve Officers Training Corp (AFROTC) Program.

## Military Leadership Minor – Air Force Minor (Minimum 16 Cr.)

Required Courses	16 Cr.
AS 111 Heritage and Values of the United States Air Force I	1 Cr.
AS 111L Leadership Laboratory I	0 Cr.
AS 112 Heritage and Values of the United States Air Force II	1 Cr.
AS 112L Leadership Laboratory II	0 Cr.
AS 211 Team and Leadership Fundamentals I	1 Cr.
AS 211L Leadership Laboratory III	0 Cr.
AS 212 Team and Leadership Fundamentals II	1 Cr.
AS 212L Leadership Laboratory IV	0 Cr.
AS 311 Leading People and Effective Communication I	3 Cr.
AS 311L Leadership Laboratory V	0 Cr.

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<b>AS 312</b>	Leading People and Effective Communication II	3 Cr.
<b>AS 312L</b>	Leadership Laboratory VI	0 Cr.
<b>AS 411</b>	National Security Affairs/ Preparation for Active Duty I	3 Cr.
<b>AS 411L</b>	Leadership Laboratory VII	0 Cr.
<b>AS 412</b>	National Security Affairs/ Preparation for Active Duty II	3 Cr.
<b>AS 412L</b>	Leadership Laboratory VIII	0 Cr.

## *Air Force ROTC Courses*

- |                |  |       |
|----------------|--|-------|
| <b>AS 111</b>  | <b>Heritage and Values of the United States Air Force I</b>  | 1 Cr. |
|                | An initial survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force.   |       |
| <b>AS 111L</b> | <b>Leadership Laboratory I</b>   | 0 Cr. |
|                | Leadership Laboratory (LLAB) is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.   |       |
| <b>AS 112</b>  | <b>Heritage and Values of the United States Air Force II</b>   | 1 Cr. |
|                | Continuation of a course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force.   |       |
| <b>AS 112L</b> | <b>Leadership Laboratory II</b>  | 0 Cr. |
|                | A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.  |       |
| <b>AS 211</b>  | <b>Team and Leadership Fundamentals I</b>  | 1 Cr. |
|                | A course focused on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate.  |       |
| <b>AS 211L</b> | <b>Leadership Laboratory III</b>   | 0 Cr. |
|                | A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. As a complement to AS 211, cadets will attend Field Training Preparation (FTP) directly before Leadership Laboratory. The FTP objectives provide training to ensure every cadet is mentally and physically prepared for the rigorous field training environment. S/U grade only. |       |
| <b>AS 212</b>  | <b>Team and Leadership Fundamentals II</b>   | 1 Cr. |
|                | Further study focused on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The course will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate.  |       |

<b>AS 212L</b>	<b>Leadership Laboratory IV</b>	0 Cr.
	A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. As a complement to AS 212, cadets will attend Field Training Preparation (FTP) directly before Leadership Laboratory. The FTP objectives provide training to ensure every cadet is mentally and physically prepared for the rigorous field training environment. S/U grade only.	
<b>AS 311</b>	<b>Leading People and Effective Communication I</b>	3 Cr.
	Teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.	
<b>AS 311L</b>	<b>Leadership Laboratory V</b>	0 Cr.
	A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.	
<b>AS 312</b>	<b>Leading People and Effective Communication II</b>	3 Cr.
	Further educates cadets on advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.	
<b>AS 312L</b>	<b>Leadership Laboratory VI</b>	0 Cr.
	A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.	
<b>AS 411</b>	<b>National Security Affairs/ Preparation for Active Duty I</b>	3 Cr.
	Course designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare cadets for Active Duty.	
<b>AS 411L</b>	<b>Leadership Laboratory VII</b>	0 Cr.
	A continuation of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.	
<b>AS 412</b>	<b>National Security Affairs/ Preparation for Active Duty II</b>	3 Cr.
	Further investigation within a course designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare cadets for Active Duty.	

<b>AS 412L</b>	<b>Leadership Laboratory VIII</b>	0 Cr.
A capstone section of Leadership Laboratory (LLAB), which is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the detachment commander and operations flight commander. The focus LLAB objectives/activities are to promote the Air Force way of life and help effectively recruit and retain qualified cadets. This time is spent acquainting the cadets with basic Air Force knowledge and skills to help them determine whether they wish to continue with the AFROTC program. S/U grade only.		

## Military Leadership - Army

Valparaiso University has an enrollment agreement with the University of Illinois at Chicago (via Purdue University Northwest) enabling Valparaiso University students to participate in their Army ROTC program.

As one of the premier Army ROTC programs in the country, the mission is to educate, train, develop, and inspire participants to become officers and leaders of character for the U.S. Army and the nation. The program does this through a combination of classroom instruction, leadership labs, and experiential learning opportunities focused on developing the mind, body, and spirit of participants. These opportunities are designed specifically to enhance character and leadership ability in the students/cadets and to allow them to practice the essential components of leadership: influencing, acting, and improving. Participants become members of the Fightin' Irish Cadet Battalion and complete a planned and managed sequence of classroom courses and practical exercises intended to develop each participant into what an officer must be – a leader of character, a leader with presence, and a leader of intelligence – to enable them to reach their full potential as an individual and as an effective leader of groups. The program affords students an excellent opportunity to serve and focuses on the role of Army officers in the preservation of peace and national security, with particular emphasis placed on ethical conduct and the officer's responsibility to society to lead, develop themselves and others, and achieve success. The experience culminates ideally with participants earning commissions as Second Lieutenants in the Active Army, Army Reserve, or Army National Guard. As an organization committed to lifelong learning, participants may elect to pursue one of the Army's numerous opportunities for follow-on postgraduate study as well.

Course numbers ending in an odd number are taught during the fall semester; course numbers ending in an even number are taught during the spring semester.

### Objectives

This minor is available to all students who are choosing to complete the Army Reserve Officers Training Corp (AROTC) Program.

## Military Leadership Minor – Army Minor (Minimum 21 Cr.)

<b>Required Courses</b>		<b>18 Cr.</b>
MS 101	Introduction to the Army and Critical Thinking	1 Cr.
MS 102	Introduction to the Profession of Arms	1 Cr.
MS 201	Leadership and Decision Making	2 Cr.
MS 202	Army Doctrine and Team Development	2 Cr.
MS 301	Training, Management, and the Warfighting Functions	3 Cr.
MS 302	Applied Leadership in Small Unit Operations	3 Cr.
MS 401	The Army Officer	3 Cr.
MS 402	Company Grade Leadership	3 Cr.
<b>Electives:</b>		<b>3 Cr.</b>
MS 414	American Military History I	1 Cr.
MS 415	American Military History II	1 Cr.
MS 416	Military History: Strategy and Tactics	1 Cr.
MS 495	Topics in Military Science	2 Cr.
<b>Total Credits:</b>		<b>21 Cr.</b>

MS 495 can be substituted for one of the required courses. Students must satisfy course prerequisites.

## Army ROTC Courses

<b>MS 101</b>	<b>Introduction to the Army and Critical Thinking</b>	1 Cr.
A study of the organization of the Army with an emphasis on understanding and implementing officership, leadership, and the Army values. Military courtesy, discipline, customs, and traditions of the service, fitness, and communication are taught and demonstrated through practical exercise. Includes a 48-hour field training exercise and a weekly two-hour laboratory emphasizing basic soldier skills such as land navigation and marksmanship.		

<b>MS 102</b>	<b>Introduction to the Profession of Arms</b>	1 Cr.
	A study of functions, duties, and responsibilities of junior leaders. Emphasizes operations of the basic military team to include an introduction to the Army's problem-solving process as well as the fundamentals of time and resource management. Includes a 48-hour field training exercise and a weekly two-hour laboratory emphasizing basic soldier skills such as first aid, U.S. weapons, and military communication.	
<b>MS 201</b>	<b>Leadership and Decision Making</b>	2 Cr.
	Study and application of map-reading skills, military communication, and development of individual leadership techniques by learning the fundamentals of small-unit tactical operations. Emphasis on individual physical fitness and conducting self-evaluation to facilitate growth. Includes a 48-hour field training exercise as well as a weekly two-hour laboratory that offers the opportunity to demonstrate learned leadership techniques along with instruction on basic military skills of land navigation and rifle marksmanship.	
<b>MS 202</b>	<b>Army Doctrine and Team Development</b>	2 Cr.
	Study and application of mission planning and orders with an emphasis on small-unit leadership in tactical settings. Land navigation, map-reading, marksmanship, and communication skills will be evaluated. Students are expected to demonstrate that they have mastered basic soldier skills and leadership fundamentals. Includes a 48-hour field training exercise as well as a weekly two-hour laboratory that offers the opportunity to demonstrate learned leadership skills along with advanced instruction on military skills.	
<b>MS 301</b>	<b>Training, Management, and the Warfighting Functions</b>	3 Cr.
	Military decision making, problem analysis, and integrated planning of platoon operations. Analysis of the components of leadership through practical exercises and historical examples. Includes one 48-hour field exercise.	
<b>MS 302</b>	<b>Applied Leadership in Small Unit Operations</b>	3 Cr.
	Advanced military decision making, problem analysis, and integrated planning with synchronization of multiple assets. This is conducted on the basis of platoon operation and tactics. Includes two 48-hour field exercises.	
<b>MS 401</b>	<b>The Army Officer</b>	3 Cr.
	Advanced study of military leadership and management. Discusses staff organization, functions, and processes. Analyzes counseling methods and responsibilities. Examines organization climate and training management.	
<b>MS 402</b>	<b>Company Grade Leadership</b>	3 Cr.
	Study in the Law of War, Code of Conduct, personnel management, information on awards, separations, promotions, evaluations, assignments, and counseling techniques. Includes pre-commissioning seminars to address current military problems, trends, and customs.	
<b>MS 414</b>	<b>American Military History I</b>	1 Cr.
	This course is the first part of a two semester survey course with an analysis of American military history from the early American colonial period through the current global war on terrorism. This course is designed to be an exploration into the evolution of modern warfare, with special emphasis on the technological developments, organization adaptations, and doctrinal innovations that have shaped American military from its first conception in 1607 through 1900. The successful completion of MS 414 and MS 415 meets the military history pre-commissioning requirements for U.S. Army ROTC cadets.	
<b>MS 415</b>	<b>American Military History II</b>	1 Cr.
	This military history course is the second part of a two semester survey course with an analysis of American military history from the Revolutionary War through the current global war on terrorism. This course is designed to be an exploration into the evolution of modern warfare with a special emphasis on the technological developments, organization, adaptations, and doctrinal innovations that have shaped the American military from 1900 through the modern day war on terrorism. Part of this course includes a field trip to the nearby First Division Museum at Cantigny in Wheaton, IL. The successful completion of MS 414 and MS 415 meets the military history pre-commissioning requirements required for U.S. Army ROTC cadets. Prerequisite: MS 414.	
<b>MS 416</b>	<b>Military History: Strategy and Tactics</b>	1 Cr.
	This course is a study of military tactics, leadership, doctrine, technologies, techniques, and procedures as they related to historical military campaigns.	
<b>MS 495</b>	<b>Topics in Military Science</b>	2 Cr.
	This is an independent study course that will allow contracted ROTC cadets to design a course of study to investigate selected topics in military science more completely.	

# Graduate School

Visit the [Graduate School](#) online.

## Acting Dean Patricia J. Mileham, MALIS

A program of graduate studies was initiated by Valparaiso University in 1963 to serve a variety of educational needs, including those of Northwest Indiana and the Great Lakes region. Today, through the Graduate School, Valparaiso University offers graduate degrees and certificates in programs in nine departments in the College Arts and Sciences, as well as in the College of Nursing and Health Professions, and the College of Business.

With an emphasis on professional master's degree programs including accredited programs leading to licensure, Valpo graduate programs emphasize career and professional development and prepare graduates to lead and serve in a global society. Although most graduate students attend full time, a significant number attend the University while holding full- or part-time employment. Select graduate programs draw strong interest from international applicants such that international students comprise over a third of graduate students at Valpo; and, Valpo graduate alumni hail from over 40 countries. Current initiatives include strengthening pathways that integrate undergraduate and graduate programs, and expanding into online formats.

Details about all of the graduate programs and opportunities may be found in the **GRADUATE CATALOG**, which can be found online. Contact the Graduate School, Valparaiso University by phone (219.464.5313) or visit their website [valpo.edu/grad](http://valpo.edu/grad) for more information.

The graduate programs are under the general supervision of the provost and the faculty of the University. Its policies are defined by the Graduate Educational Policy Committee and are administered by the dean of the Graduate School.

# Summer Sessions

The University offers one twelve-week and two six-week sessions. Although most courses are six weeks, within each six-week term usually a number of specialized courses 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: traditional Valparaiso University students accelerating their study, in-service teachers desiring further professional education, visiting students from other colleges earning credit while on summer vacation, junior and senior high school students beginning their college careers early, and other interested persons who would like to take coursework toward degree objectives or simply for personal enrichment.

Undergraduate 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. Graduate students may generally earn a maximum of six credit hours in each six-week term, or 12 for the entire summer (see the **GRADUATE CATALOG** for exceptions).

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 and graduate courses in the College of Business, the College of Engineering, and the College of Nursing and Health Professions. Students in Arts and Sciences, Nursing and Health Professions, and Engineering may complete most of the coursework for the Fundamentals of Business Minor through one summer of intensive academic coursework.

Each summer session features a variety of courses in the morning and evening to accommodate the student who wishes to take course work while employed full- or part-time. A selection of online courses offers maximum flexibility in scheduling and permits students to take coursework with minimal residency on campus. 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 schedule, as well as in special descriptive brochures.

Students who want to pursue summer internships for credits must discuss the curricular expectations with their academic advisors or supervising instructors.

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 advisor or the Dean's Office of the College of Arts and Sciences for more information.

## **Fees and Tuition for 2020 Summer Sessions**

### **Tuition per credit hour**

<b>Undergraduate</b>	\$540.00
<b>Undergraduate Nursing</b>	\$840.00
<b>Graduate</b>	\$650.00
<b>MBA (per course)</b>	\$2500.00
<b>Graduate Nursing</b>	\$715.00
<b>PA Program</b>	\$840.00
<b>RN/Special</b>	\$530.00
<b>SAGE (Adults 60 +) Audit only</b>	\$60.00

# Continuing Education

Learn more about the [Continuing Education](#) online.

Valparaiso University Continuing Education offers several programs which allow students to enroll in undergraduate courses.

## Non-Degree Students

Students may enroll in undergraduate courses through Continuing Education as non-degree students. Continuing Education non-degree students are eligible for the Continuing Education tuition rate. Students currently enrolled in a Valparaiso University degree program may not simultaneously enroll as a non-degree student through Continuing Education. Non-degree students enrolled through Continuing Education may not enroll for more than 9 credits per semester. Non-degree students may not directly matriculate to a degree program; students wishing to seek an undergraduate degree must apply as a degree-seeking student through Office of Undergraduate Admission.

## Admission

Application to non-degree student status is made through the Office of Continuing Education in the Graduate School. Applicants must be 18 years of age or older and provide an official high school transcript or equivalent. Students who are homeschooled are encouraged to contact the Office of Continuing Education for specific requirements. ACT/SAT scores are not required. The final decision for admission rests with the Graduate School and the Office of Continuing Education, based on the student's ability to benefit from the program.

## Sage Program

Continuing Education also enrolls students in the SAGE (Senior Adult Growth through Education) program which allows seniors who are at least 60 years old, or 55 years old and retired, to audit undergraduate courses for a low tuition rate. Students must apply to the SAGE program through the Graduate School Office of Continuing Education. The final decision for admission rests with the Graduate School and the Office of Continuing Education, based on the student's ability to benefit from the program.

## Advising and Registration

Advising and registration of students in Continuing Education programs is done through the Office of Continuing Education in the Graduate School. Students interested in enrolling in a Continuing Education program should call 219.464.5313, visit the office in Kretzmann Hall, or visit the website at [valpo.edu/continuing-education](http://valpo.edu/continuing-education).

# Admission

Learn more about [Admission](#) online.

Application for admission on a form provided by the Office of Undergraduate Admission may be filed at any time, but should be filed well in advance of the semester for which admission is desired. The online application is located at [valpo.edu/apply](http://valpo.edu/apply). Applications for admission to undergraduate programs are sent to the Office of Undergraduate Admission. For admission to the Graduate School, consult the **GRADUATE CATALOG**.

## General Requirements

Valparaiso University admits those students who demonstrate potential for success in rigorous academic work. The credentials of each applicant are individually evaluated, with consideration given to academic record, standardized test 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 undergraduate application; and 2) an official high school transcript. Valparaiso University has adopted a test-optional policy through the entering class of fall 2020. Official scores on the SAT or the ACT are not required but may be submitted for consideration, if desired.

Most Valparaiso University applicants will have taken and successfully completed the most challenging program of studies available in their high schools. The number of high school units expected is listed below. One (1) unit is equal to one (1) year of satisfactory work (C or better) in an accredited secondary school. Entrance requirements differ slightly for some colleges and academic programs.

For students intending to choose a major in the **College of Arts and Sciences**, high school preparation is expected to include:

English	4
Algebra, geometry, and advanced algebra	3
Laboratory Science	2
History	2
World Language	2
Additional science, history, social sciences, language, English, and mathematics courses	3

For students intending to major in the **College of Nursing and Health Professions**, high school preparation is expected to include:

English	4
Algebra, geometry, and advanced algebra	3
Laboratory Science including biology and chemistry	3
History	2
Additional science, history, social sciences, language, English and mathematics courses	3

For students intending to major in the **College of Business**, high school preparation is expected to include:

English	4
Algebra, geometry, and advanced algebra	3
Laboratory Science	2
History	2
World Language	2
Additional science, history, social sciences, language, English, and mathematics courses	3

For students intending to major in the **College of Engineering**, high school preparation is expected to include:

English	4
Algebra, geometry, advanced algebra, and precalculus	4
Laboratory Science including chemistry/physics	3
History	2
Additional science, history, social sciences, language, English, and mathematics courses	3

**Homeschooled Requirements:** Students who are homeschooled are encouraged to contact the Office of Undergraduate Admission for specific requirements.

## **Transfer Requirements**

A student who wishes to be considered for admission as a transfer student must submit the following items:

1. a completed transfer admission application;
2. official copies of ALL college transcripts, and if a student has successfully completed (C or better) less than 24 semester hours of college credit, a high school transcript;
3. a transfer applicant, currently on academic probation, cannot be considered for admission until in good academic standing with the current school.

To be considered for admission, a minimum 2.500 (C+) cumulative grade point average in college coursework is required for most programs. However, some programs require a minimum 3.000 (B) grade point average.

## **Special Requirements for 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**

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) Admission is required.

This status is not available to a student dismissed from the University.

## **Enrollment Deposit**

A link to the online enrollment deposit form will be sent to each newly admitted student. The enrollment deposit form and payment (\$400 for domestic and international students) should be submitted as soon as the student has decided to enroll at Valparaiso University. Deposits will be refunded if written notice of cancellation is received by the Office of Undergraduate Admission by March 1 for the summer terms, May 1 for the fall semester, or November 1 for the spring semester.

## **International Student Information**

### **International Requirements**

Valparaiso University welcomes applications from qualified international students. At present, over forty-five nations are represented in the University's international student population.

In order to be considered for admission to Valparaiso University, an international student will need to submit the following items to the Office of Undergraduate Admission by June 15 for fall semester and Nov. 1 for spring semester.

1. **Application**—Applicants may complete the online application.
2. **Official Transcripts** — Applicants must submit original or certified copies of transcripts from all secondary schools (high schools), colleges, or universities attended. All transcripts must be sent directly from the school to Valparaiso University's Office of Admission in a separate, sealed envelope. If relevant, include a school-leaving certificate. Valparaiso University will make the initial admission decision based off digital copies of transcripts.
3. **SAT or ACT Test Scores**—Official test results are recommended for admission and must arrive directly from the testing agency. Please note Valparaiso University's SAT code-1874, ACT code-1256.
4. **Proof of English Proficiency**—All applicants must meet a minimum level of proficiency in the English language and submit proof of the proficiency to the Office of Admission. Minimum proficiency may be met by one of the following exams:
  - TOEFL—score of 538 paper, 205 computer, 75 internet
  - SAT—verbal score of 500
  - ACT—English score of 24
  - IELTS—score of 6.0
  - ITEP—score of 3.8
  - PTE—score of 56
  - GCE or GCSE English exam—grade of A or B
  - IB Higher Level English exam—score of 5–7 or grade of A or B.
  - Exceptions will be made on a case-by-case basis.

## Full-Time Enrollment

All international students who are studying on F-1 visas are required by the Department of Homeland Security 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 or to transfer to another school should first be discussed with the international student advisor.

## International Transfer Students

To receive transfer credit for university courses completed outside the United States, international applicants should submit detailed descriptions of their previous coursework. Valparaiso University may require that such coursework be evaluated by a professional evaluation service at the applicant's expense. Suggested evaluation services include World Education Services (WES, [www.wes.org](http://www.wes.org)) and Educational Credential Evaluators (ECE, [www.ece.org](http://www.ece.org)).

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 world languages)
2. At least three credits in theology
3. At least thirty of the last forty credits presented for the degree

## Financial Aid

A limited number of international merit scholarships are available. Amounts vary.

## 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, but after that 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 emergency medical treatment up to \$500.00. In addition, Valparaiso University requires that all international students enroll in a special insurance policy (limit \$250,000.00) in case there are major medical expenses.

For further information regarding admission of international students, please write to: Associate Director for International Admission, Valparaiso University, Valparaiso, IN 46383- 6493, U.S.A. or email Undergrad.Admission@valpo.edu.

## Credit By Examination

Entering first-year students may become eligible for credit by examination in five ways: 1) through the Advanced Placement Program administered by the College Entrance Examination Board, 2) through the College Level Examination Program administered by the College Entrance Examination Board, 3) through the International Baccalaureate Program administered by International Baccalaureate North America, 4) through the Cambridge International A Levels administered by the Cambridge International Examinations, and 5) through the course credit program administered by individual departments. Credit earned from the above mentioned exams may not be used to fulfill Valparaiso University's General Education requirement of CORE 110 or CORE 115.

## Advanced Placement Program

Students who submit results of Advanced Placement examinations are eligible to receive credit in accordance with the following table. AP examinations must be taken before enrollment as a full-time student at Valparaiso University. For more information, contact the Admissions Office.

Examination		Required Score	
Art Studio: 2D Design	CVA 290	3 Cr.	3
Art Studio: 3D Design	CVA 290	3 Cr.	3
Art History	CVA 101	3 Cr.	3
Art Studio: Drawing	CVA 121	3 Cr.	3
Biology	BIO 171, 172	8 Cr.	4
Chemistry	CHEM 121	4 Cr.	3
(Students intending to continue on to CHEM 122 are encouraged to repeat CHEM 121 if they receive a score of 3 on the AP Chemistry exam.)			
Chemistry	CHEM 121, 122	8 Cr.	4
Chinese Language and Culture	CHIN 102	4 Cr.	4
Chinese Language and Culture	CHIN 102, 203	8 Cr.	5
Computer Science A	CS 115	3 Cr.	4

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Computer Science A	CS 157	3 Cr.	5
Computer Science Principles	CS 156	3 Cr.	4
Economics – Micro	ECON 221	3 Cr.	4
Economics – Macro	ECON 222	3 Cr.	4
English, Language and Composition	ENGL 100	3 Cr.	4
English, Literature and Composition	ENGL 200	3 Cr.	4
Environmental Science	GEO 260	3 Cr.	4
French Language	FREN 102	4 Cr.	4
French Language	FREN 102, 203	8 Cr.	5
German Language	GER 102	4 Cr.	4
German Language	GER 102, 203	8 Cr.	5
Geography, Human	GEO 101	3 Cr.	4
Government and Politics, American	POLS 120	3 Cr.	4
Government and Politics, Comparative	POLS 130	3 Cr.	4
History, American	HIST 120, 121	6 Cr.	4
History, European	HIST 100	3 Cr.	4
History, World	HIST 110	3 Cr.	4
Italian Language	FORL UND	4 Cr.	4
Italian Language	FORL UND	8 Cr.	5
Japanese Language	JAPN 102	4 Cr.	4
Japanese Language	JAPN 102, 203	8 Cr.	5
Latin Language	LAT 102	4 Cr.	4
Latin Language	LAT 102, 203	8 Cr.	5
Math, Calculus AB	MATH 131	4 Cr.	4
Math, Calculus AB	MATH 131, 132	8 Cr.	5
Math, Calculus BC	MATH 131	4 Cr.	3
Math, Calculus BC	MATH 131, 132	8 Cr.	4
Music Theory	MUS 163, MUS 109	5 Cr.	4
Physics 1	PHYS 111, 111L	4 Cr.	3

(Students intending to continue on to PHYS 112 are encouraged to repeat PHYS 111 if they receive a score of 3 on the AP Physics 1 exam.)

Physics 2	PHYS 111, 111L, 112, 8 Cr. 112L	4
Physics C, Mechanics	PHYS 141	3 Cr.
Physics C, Electricity and Magnetism	PHYS 142	3 Cr.
(Students with a score of 4 or higher on either of the AP Physics C exams may also receive credit for PHYS 141L or 142L, depending on their AP lab experience. See the Physics department chair for more information.)		
Psychology	PSY 110	3 Cr.
Spanish Language	SPAN 102	4 Cr.
Spanish Language	SPAN 102, 203	8 Cr.
Spanish Literature	SPAN 102	4 Cr.
Spanish Literature	SPAN 102, 203	8 Cr.
Statistics	STAT 140 or IDS 205	3 Cr.

### **Previous Advanced Placement Examinations**

The following AP examinations are no longer offered and are listed for reference for students who may have taken the older examinations.

<b>Examination</b>		<b>Required Score</b>
Art Studio: General	CVA 290	3
Computer Science AB	CS 115	3
Computer Science AB	CS 157	4
French Literature	FREN 102	4
French Literature	FREN 102, 203	5
Latin Literature	LAT 102	4
Latin Literature	LAT 102, 203	5
Physics B	PHYS 111, 111L	3

## Admission

(Students intending to continue on to PHYS 112 are encouraged to repeat PHYS 111 if they receive a score of 3 on the AP Physics B exam.)

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# International Baccalaureate Program

First-year students who submit results of International Baccalaureate Higher Level examinations (Standard Level examinations are not accepted) with scores of 5, 6 or 7 receive credit for the following subjects:

<b>Examination</b>		<b>Credit Earned</b>
<b>Individuals and Societies</b>		
Economics	Social Science	3 Cr.
English A Language and Literature	ENGL 100	3 Cr.
English A Literature	ENGL 200	3 Cr.
Geography	GEO 101	3 Cr.
History Americas	HIST 120, 121	6 Cr.
History Europe	HIST 100, 110	6 Cr.
Language B	French, German, Spanish 102	4 Cr.
Philosophy	PHIL 125	3 Cr.
Psychology	PSY 110	3 Cr.
Social Anthropology	SOC 290	3 Cr.
<b>Sciences</b>		
Biology	BIO 171	4 Cr.
Chemistry	CHEM 121	4 Cr.
Computer Science	CS 115	3 Cr.
Physics	PHYS 111, 111L	4 Cr.
<b>Mathematics</b>		
Further Mathematics	Mathematics Quantitative	4 Cr.
Further Mathematics & Mathematics HL (Students must take both exams to earn the credit)	MATH 111, 115, 131, 132, 264, 270	16 Cr.
Mathematics HL	Mathematics	4 Cr.
<b>The Arts</b>		
Music	MUS 101	3 Cr.
Theatre Arts	THTR 101	3 Cr.
Visual Arts	CVA 290	3 Cr.
<b>Language Acquisition</b>		
Classical Greek	GRK 102	4 Cr.
Latin	LAT 102	4 Cr.

# Cambridge International Examinations

First-year students who submit results of Cambridge International Examinations A-Levels (AS Levels will not be accepted) will receive credit for the following subjects:

<b>Examination</b>		<b>Credit Earned</b>
<b>Minimum grade of B required</b>		
Biology	BIO 171 and BIO 172	8 Cr.
<b>Minimum grade of C required</b>		
Accounting	ACC 290	3 Cr.
Business Studies	BUS UND	3 Cr.
Chemistry	CHEM 121 and CHEM 122	8 Cr.
Computer Science	CA 157 and CS 158	6 Cr.
Economics	ECON 221 and ECON 222	6 Cr.
English Language	ENGL 100	3 Cr.
English Literature	ENGL 200	3 Cr.
French	FREN 203 and FREN 204	8 Cr.
Geography	GEO 101 and GEO UND	6 Cr.

## Admission

German	GER 203 and GER 204	8 Cr.
History	HIST 110	3 Cr.
Mathematics Exam	MATH 111, MATH 115, and MATH 131	6 Cr.
Mathematics & Further Math Exams	MATH 111, MATH 115, MATH 131, MATH 132, MATH 264, and MATH 270	16 Cr.
Media Studies	CVA UND	3 Cr.
Physics	PHYS 111, PHYS 141L, PHYS 112, and PHYS 112L	8 Cr.
Psychology	PSY 110	3 Cr.
Sociology	SOC 110	3 Cr.
Spanish	SPAN 203 and SPAN 204	8 Cr.

## Course Credit Examination Program

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 world languages, mathematics, and chemistry as explained in the listings for those departments.

In all of the cases, the credit awarded is entered on the student transcript, which is maintained by the Office of the Registrar. This credit can be applied toward required or elective courses.

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.

## 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 General Examinations in English, Humanities, Social Science-History, and Natural Science, subject to the following conditions:

1. The General Examinations must be taken before matriculation at Valparaiso University.
2. Credit for a CLEP General Examination may not be applied to a major nor to any specific course requirement except as listed below in items 4, 5, and 6.
3. Credit for a CLEP General Examination is valid only if no other credit by examination is awarded in courses applicable in the same area of general education.
4. A score of 50 or above on the Humanities General Examination entitles a student to three (3) credits in the area of Fine Arts or Fine Arts-Literature.
5. A score of 50 or above on the Social Science-History General Examination entitles the student to three (3) credits in the area of Social Science.
6. A score of 50 or above on the Natural Science General Examination entitles a student to three (3) credits in the area of Natural Science.

Valparaiso University awards credit for CLEP Subject Area Examinations as indicated below. Credit for Subject Area examinations is awarded only if the examination is taken before the student enrolls in the specific college-level subject for which credit by examination is sought.

Examination		Required Score
American History I	HIST 120	3 Cr. 50
American History II	HIST 121	3 Cr. 50
American Literature	ENGL 311, 312	6 Cr. 50
American Government	POLS 120	3 Cr. 50
Analysis and Interpretation of Literature	ENGL 200	3 Cr. 50
Calculus with Elementary Functions	MATH 131	4 Cr. 50
College Composition	ENGL 100	3 Cr. 50

### Admission

College Composition Modular	ENGL 100	3 Cr.	50
French Language, Level I	FREN 102	4 Cr.	45
French Language, Level II	FREN 102, 203	8 Cr.	50
German Language, Level I	GER 102	4 Cr.	45
German Language, Level II	GER 102, 203	8 Cr.	50
Spanish Language, Level I	SPAN 102	4 Cr.	45
Spanish Language, Level II	SPAN 102, 203	8 Cr.	50
College Mathematics	MATH 120	3 Cr.	50
English Literature	ENGL 200	3 Cr.	50
Financial Accounting	ACC 205	3 Cr.	50
Freshman College Composition	ENGL 100	3 Cr.	50
General Biology	BIO 171, 172	8 Cr.	50
General Chemistry	CHEM 121	4 Cr.	45
(Students intending to continue on to CHEM 122 are encouraged to repeat CHEM 121 if they receive a score of 45 on the CLEP Chemistry exam.)			
General Chemistry	CHEM 121, 122	8 Cr.	50
Human Growth and Development	PSY 330	3 Cr.	50
Information Systems and Computer Applications	IDS 410	3 Cr.	50
Introductory Educational Psychology	ED 220	3 Cr.	50
Introductory Business Law	BLAW 104	3 Cr.	50
Introductory Psychology	PSY 110	3 Cr.	50
Introductory Sociology	SOC 110	3 Cr.	50
Precalculus	MATH 111, 115	2 Cr.	50
Principles of Macroeconomics	ECON 222	3 Cr.	50
Principles of Management	MGT 304	3 Cr.	50
Principles of Marketing	MKT 304	3 Cr.	50
Principles of Microeconomics	ECON 221	3 Cr.	50
Western Civilization I	HIST 100	3 Cr.	50
Western Civilization II	HIST 110	3 Cr.	50

### **Previous CLEP Examinations**

The following CLEP examinations are no longer offered and are listed for reference for students who may have taken the older examinations.

Examination	Required Score
Freshman College Composition	ENGL 100      3 Cr.      50

A score of 50 or above on the English General Examination entitles a student to three (3) credits for English 100.

### **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 start 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. Grades are not transferable; only credit transfers. For students in the College of Business, see page 264. For registered nurses in the degree completion program of the College of Nursing and Health Professions, see page 329.

Credits earned 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 2.000 (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 applied toward a Valparaiso University degree is 94 credits (Colleges of Arts and Sciences, Business or Nursing) or 102 credits (College of Engineering). The remaining advanced standing credits will be applied as elective credit only. See page 389 for residence requirements and restrictions related to majors and minors. 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**

Students will receive a copy of a Transfer Credit Equivalency Report that lists the transfer credits accepted by Valparaiso University and the matching Valpo course equivalent. The Dean of the student's college will review the Transfer Credit Equivalency Report and prepare a Statement of Equivalency 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.

CORE 110 or CORE 115 credit may only be granted by transfer credit for courses taken prior to the student enrolling at Valparaiso University, and will only apply toward transfer students; freshmen will not be awarded CORE 110 or CORE 115 credit. Any credit transferred to Valparaiso University after the student has begun their career at Valparaiso University will not be considered as applicable toward fulfilling CORE 110 or CORE 115.

**Major Requirements**

Statements of equivalence for academic majors, interdisciplinary programs, or professional block schedules are prepared by the colleges or departments concerned.

**Preliminary Mathematics Placement Information**

Upon entry to Valparaiso University, all students who do yet not have college credit for mathematics are given a preliminary placement into appropriate mathematics classes through an evaluation process that includes any or all of ACT or SAT math scores, high school GPA, and math classes taken along with grades earned during senior year. If a student determines the preliminary placement level is suitable, there is no need to continue and take the math placement assessment. If a student wishes to improve the preliminary placement, then he or she should take the math placement assessment. The descriptions of the specific placement levels and the means for the preliminary determination follow.

**Placement Level 3**

Students at this level are eligible for everything listed for Placement Group 2, as well as MATH 131: Calculus I. This is as high as our placement system goes; placement in mathematics to anything higher than Calculus I requires previous college credit for the appropriate pre-requisite classes (for example, students who have received AP credit for Calculus I may start in Calculus II). Any student in this placement group should NOT take the math placement assessment.

Qualified students may also take a Calculus Placement Exam. A student who is placed into Calculus II will receive 4 credits for Calculus I and 4 credits for Calculus II by passing MATH 132: Calculus II with a grade of C or higher.

The minimum standards for preliminary placement at this level are:

- PL 3: ACT MATH 30 – 36 (SAT MATH 690 – 800)
- PL 3: ACT MATH 25 – 29 (SAT MATH 590 – 680), and high school GPA of 3.500 or higher, and having taken a course in Precalculus, Trigonometry, or Calculus during senior year.

**Placement Level 2**

Students at this level are eligible for everything listed for Placement Level 1, as well as MATH 115: Trigonometry and Functions and MATH 124: Finite Mathematics. Any student in this placement group should NOT take the math placement assessment unless direct entry into MATH 131: Calculus is desired.

The minimum standards for preliminary placement at this level are:

- PL 2: ACT MATH 25 – 29 (SAT MATH 590 – 680), and high school GPA of 3.500 or higher, but NOT having taken a course in Precalculus, Trigonometry, or Calculus during senior year.

**Placement Level 1**

Students at this level are eligible to enroll in many quantitative analysis and natural science courses, including BIO 171, CHEM 121, and PSY 201. In mathematics specifically, students are eligible to enroll in MATH 111: College Algebra, MATH 120: Mathematics and Society, and STAT 140: General Statistics. Your choice of whether to take a mathematics/statistics class or a quantitative analysis course in another department should be made in consultation with your academic advisor. A student in this placement group should NOT take the math placement assessment unless direct entry into a course requiring a higher placement level is desired.

The minimum standards for preliminary placement at this level are:

- PL 1: ACT MATH 25 – 29 (SAT MATH 590 – 280) and high school GPA below 3.500
- PL 1: ACT MATH 20 – 24 (SAT MATH 490 – 580) and high school GPA of 3.500 or higher

**Placement Level 0**

Students in this group take MATH 110: Intermediate Algebra before proceeding to further college mathematics and statistics classes. Also, most quantitative analysis and natural science courses require completion of MATH 110 or placement higher than MATH 110 in order to enroll. Any student in this placement group is encouraged to take the math placement assessment.

The minimum standards for preliminary placement at this level are:

- PL 0: ACT MATH 20 – 24 (SAT MATH 490 – 580) and high school GPA below 3.500
- PL 0: ACT MATH 19 (SAT MATH 480) or below

**Placement Level NP (No Placement)**

Students for whom we do not have sufficient information to determine a placement level. Any student in this placement group is must provide the necessary information or take the math placement assessment.

Notes:

- It is very possible your preliminary placement is lower than you think it should be; sometimes we have incomplete information. In that event, you can act to supply the missing information, or take the math placement assessment.
- Any prior college credit for mathematics or statistics courses (including credit achieved through AP exams and transfer credits) overrides everything in this preliminary placement system.
- All placement activity takes place before a student enters the course stream. Once a student begins in the course stream, progression from course to course relies solely on the standard course pre-requisites. For example, someone who places into MATH 115: Trigonometry and Functions cannot get an F in that class but then proceed to Calculus I anyway by (re)taking the math placement assessment.

To take the math placement assessment, visit [valpo.edu/mathematics-statistics/academics/ap-credit-and-math-placement](http://valpo.edu/mathematics-statistics/academics/ap-credit-and-math-placement). Note that more than one attempt at the placement assessment is possible, so a first try does not necessarily give a final placement result.

# Registration

Visit the [Office of the Registrar](#) online.

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.

## Health Requirement

All students entering the University for the first time and all students who have not been registered at this University for a full semester (excluding summer) must submit to the University Health 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 12 semester credit hours. Maximum credit hours allowed per semester without a petition are given in the following table:

Program	Maximum Credit Hours
College of Arts and Sciences	18 Cr.
Education (Elementary, Middle Level)	18 Cr.
Bachelor of Music	18 Cr.
Bachelor of Music Education	19 Cr.
College of Business	18 Cr.
College of Engineering	19 Cr.
College of Nursing and Health Professions (except in approved block schedules)	18 Cr.

Students who maintained a grade point average of 3.000 (B) or better during the previous semester may register for extra hours, provided that their formal petitions for such work are granted. This petition must be approved by the academic advisor and the dean of the appropriate college. Forms are available online through the Office of the Registrar: [valpo.edu/registrar](http://valpo.edu/registrar). Freshmen are not allowed to carry extra hours during the first semester. Extra credit hours above 19 credits per semester will also incur an additional tuition charge (see page 391).

## 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 be approved by the instructor of the course and/or the chair of the department in which the course is offered.

## Change of Schedule

Students may change their registration in courses up to the time of the calendar deadlines published in the **GENERAL CATALOG**. Such changes are matters of serious consideration. Before deciding on such an action, students should obtain the counsel of their course instructor, academic advisor, and the chair of the department in which the course is offered. Forms are available online through the Office of the Registrar: [valpo.edu/registrar](http://valpo.edu/registrar).

Any student-athlete who wishes to drop below 12 semester credit hours (full-time status) must obtain permission of the athletics compliance coordinator or designee.

Deadlines for course addition, course withdrawal, requesting the S/U grading option, 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 must be accompanied by supporting reasons for its presentation. Forms are available online through the Office of the Registrar: [valpo.edu/registrar](http://valpo.edu/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 add/drop period noted on the Academic Calendar (see page 5) without reflection on their permanent record. All requests for adding a course during that timeframe remain at the discretion of the appropriate academic dean or department chair, if the course is full. From the end of the add/drop period 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.**

## Registration

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After the drop/add period and until the tenth week of a semester, the tuition fee is prorated for students withdrawing from the University. The refund schedule can be viewed online through the Student Financial Services: [valpo.edu/student-financial-services](http://valpo.edu/student-financial-services). Courses dropped before the conclusion of the drop/add period will receive a 100% refund.

## 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

Learn more about [Academic Policies](#) online.

## Grading System and Quality Points

For the Graduate School, refer to the **GRADUATE CATALOG**.

The course grades reported and recorded in the Office of the Registrar are as follows. The corresponding number of quality points per credit hour are also indicated.

Grade	Quality Points/Cr.
A Excellent	4.000
A-	3.700
B+	3.300
B Good	3.000
B-	2.700
C+	2.300
C Satisfactory	2.000
C-	1.700
D+ Less than satisfactory, but passing	1.300
D Passing	1.000
D-	0.700
F Failure	0.000
I Incomplete	---
IP In Progress	---
W Authorized withdrawal	---
S Satisfactory	---
U Unsatisfactory	---

**Grade Point Average** is calculated by dividing the total number of quality points by the total number of graded credits. GPA calculations are truncated to three decimal places and never rounded.

**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 2.000 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.
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) grade received in one semester or summer session must be removed by noon on the last day of the classes 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. Students who are not registered in the next term (Fall or Spring) who are finalizing work from an Incomplete grade will need to complete a Campus Affiliation request.

**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- (1.700 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 grading 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.

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**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 to remove a grade of I (incomplete) before the deadline stated above.
3. A student stops attending a course without filing the necessary form and obtaining the necessary approval.
4. A student stops attending the University without giving official notification. F grades are given in all courses for that term.

To withdraw from a course students should use the *Course Withdrawal after Add/Drop* form, available online. After the withdrawal deadline, students may submit the appropriate appeal to the Committee on Academic and Professional Standards. To withdrawal from the University (all classes), students should use the *Change of Enrollment Status / Withdraw from All Classes* form, available online.

### **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 advisors and the dean of their college prior to electing this option.

Certain courses normally result in the S/U grade, as noted in the catalog course descriptions. 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. A repeated course, if not originally taken on the S/U basis;
2. Students in the professional colleges may choose the S/U basis for free electives (if not taken in the major or minor fields) and for courses which fulfill their general education requirements in Core, Humanities, Social Science, Theology, World Language, Diversity, or Kinesiology. For further regulations regarding the S/U option for business students, please see page 265.
3. Students must submit the electronic *Satisfactory/Unsatisfactory Grading* form by the deadline specified in the University Calendar.
4. A decision to elect a course on the S/U basis must be made by the deadline specified by the Office of the Registrar in the Important Dates document for the applicable term. After this deadline, the S/U grading basis may not be changed.

**NOTE:** In selection of the S/U option, students are strongly advised to discuss the implications of that option with their advisor 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. In addition, students enrolled in the College of Business (see page 265) and the College of Nursing and Health Professions (see page 330) have specific criteria for course intensification of their courses. This opportunity is part of the University's course intensification plan. The following regulations pertain to this option for all students regardless of their college:

1. The course must be offered for three or more credits. Variable credit courses cannot be intensified.
2. The initiative and responsibility for developing a satisfactory proposal lie with the student.
3. Student must submit the *Intensify a Course* form, available online through the Office of the Registrar by the deadline specified in the University Calendar. The form will be sent to the student's advisor, the instructor of the course, the chair of the department, and the dean of the student's college for approval.

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 or her advisor and the chair of the department which offers the course. Deadlines to submit the *Audit a Course* form online are published in the calendar at the front of this catalog. 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 up to 19 credit hours. Any credit hour over 19 will be subject to the overload fee as published. Once in a course as an auditor, the student cannot change the status of his or her enrollment to receive a regular 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.

**Academic Standing of a Student**

A student's academic 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 (2.000 quality points per credit hour) throughout the course of 124 semester hours will have 248 quality points, 124 credit hours, and a standing of 2.000. The standing for a semester's work is understood to be the ratio of the number of quality points earned to the number of graded credit hours completed. Standing is also referred to as the grade point average. Both cumulative and semester GPA are factors in determining a student's academic standing. At least a 2.000 GPA is required for good academic standing. Criteria vary by college and program. Please refer to the applicable sections of the **GENERAL CATALOG** for details. Note the above exception regarding repetition of a course. For information regarding satisfactory academic progress, please see page 404 in the Financial Aid section.

**Academic Deficiency**

In the College of Arts and Sciences, College of Business, College of Engineering, and College of Nursing and Health Professions, students whose cumulative resident grade point average falls below the requirements of their college and program (at least 2.000) 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.

The GPA requirement varies by college and program. Please refer to the applicable sections of the **GENERAL CATALOG** for details.

**Dismissal 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 dismissed and will specify the period of time for which they have been dismissed and the conditions which they must satisfy in order to be readmitted.

**Class Standing of a Student**

An undergraduate student must have successfully completed 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.

**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. A leave of absence requires approval of the academic advisor and the academic dean. The *Leave of Absence* form is available online through the [Office of the Registrar](#) under the heading, “Change in Enrollment Status.”

All leaves must be requested before the beginning of the semester in which they are to take effect. An approved leave of absence cannot exceed 180 days in any 12-month period. Leaves are not granted to students who withdraw from the University during a semester.

Students on leave may return to Valparaiso University without formally applying for readmission, provided they resume attendance on or before the 180 days following the start of the leave of absence. Students who are unable to return from a leave may contact the Office of the Registrar for information on returning at a later date. The Office of the Registrar should be contacted for information pertaining to a military leave of absence. In accordance with SEVIS regulations, students attending Valpo on a F1 or F2 visa status should consult the Office of International Programs as there are specific guidelines pertaining to leaving the university.

## **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. The *Readmission* form is available online through the [Office of the Registrar](#) under the heading, “Change in Enrollment Status.” Exceptions are students who took a formal leave of absence under the conditions specified above. The Office of the Registrar will process the readmission by consulting the college in which the student is seeking readmission and notify the students upon completion of the process.

Application for readmission must be made at least one week before the start date of the term in which the student wishes to enroll. Applications will not be accepted after this date. The student being readmitted must sign a payment agreement form and present the necessary information such as records of attendance and grades at other colleges, along with a new medical examination report if the student has been out of school during the previous sixteen month period, before action will be taken on the request to be readmitted.

Credit hours earned more than fifteen years before application for readmission (either at Valparaiso University or at another accredited institution) are subject to reevaluation and, if accepted by the appropriate University standing committee, may be subject to validation by the first year’s work (30 semester credits) completed in residence with a 2.000 grade point average.

Students with outstanding financial obligations to the University are not considered for readmission until these obligations have been paid in full.

## **Advanced Standing—Resident Students**

Any resident student who has taken academic course work at any other accredited educational institution must request the Registrar of that institution to send an official transcript to the Valparaiso University Office of the Registrar, where an evaluation is made for possible acceptance of transfer credits. Courses with grades of C- or above are accepted for transfer credit. Grades are not transferable; only credit transfers.

CORE 110 or CORE 115 credit may only be granted by transfer credit for courses taken prior to the student enrolling at Valparaiso University. Any credit transferred to Valparaiso University after the student has begun their career at Valparaiso University will not be considered as applicable toward fulfilling CORE 110 or CORE 115 requirements.

Credit for workshops, institutes, or travel study ordinarily is granted only for work taken at Valparaiso University. In cases of exception to the preceding restriction, transfer credit for institutes or workshops will not exceed one credit per calendar week of instruction. Transfer credit for travel study programs will usually not exceed two credits per calendar week.

Resident students who wish to take courses at other approved schools concurrently with their Valparaiso work should refer to the appropriate paragraph under Residence Requirements on page 389.

## **Change 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 approval of the advisors and deans concerned. Necessary forms are available through the Office of the Registrar: [valpo.edu/registrar](http://valpo.edu/registrar).

In the case of transfer from one college to another, students should be sure to review the requirements for the degrees of the new college and note any restrictions on credit hours which may be transferred from the former college.

## **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 Office of 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.

## **Absence from Class**

All students are expected to attend every one of their classes unless their absence has been approved by the instructor concerned or the appropriate dean. Absence from class is primarily a matter between the student and the instructor of the class. It is the students' responsibility to discuss with their instructors the reason for their absence and to learn what makeup work may be required.

## **Withdrawal from the University**

A student who wishes to withdraw from the University for the remainder of a semester or session must apply using the *Change in Enrollment Status - Withdrawal From All Classes* form, available online, by the deadline in the University Calendar. Upon approval, tuition and fee adjustments will be in accordance with the published refund schedule (see page 398). 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 stops attending the University without completing the appropriate paperwork 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 Office of the Registrar.

## **Transfer Credit**

### **How Credits Transfer to Valparaiso University**

Valparaiso University will accept transfer credit for coursework successfully completed at regionally accredited institutions of higher education as documented on an official transcript. The applicability of specific transfer credit(s) toward a Valparaiso University degree program depends on the requirements of the department, college, or school in which the student is enrolled at Valparaiso University. A student who feels they have been unjustly denied credit for transfer courses may appeal to the Office of the Registrar.

### **General Standards for Transfer Credits**

- Valparaiso University accepts college-level (not remedial) courses in which the student has earned a grade of "C-" (scale is 4.00 = "A") or better from regionally accredited colleges and universities.
- Maximum number of advanced standing credits that can transfer:

**College of Arts and Sciences:** 94 credits

**College of Business:** 94 credits

**College of Engineering:** 102 credits

**College of Nursing and Health Professions:** 94 credits

- Acceptable academic credits earned at other institutions that are based on a different unit of credit other than the semester system are subject to conversion before being transferred to Valparaiso University. All students must meet graduation requirements in order to earn a bachelor's degree.
- The Valparaiso University college of a student's major determines how transfer courses fulfill the degree requirements. The student should review the degree requirements of the intended degree program and talk with an academic advisor about the transfer credits and how they will apply to that program.

### **Transfer Credit Not Accepted**

Transfer credit is not awarded for the following, except as allowed by the Prior Learning Assessment.

- Courses for which the student earned a final grade that was lower than "C-"
- Not accredited by a regional accrediting agency
- Life experience
- Courses taken at non-collegiate institutions (e.g., governmental agencies, corporations, industrial firms, etc.)

## Graduation

### Responsibility of the Student

**Every candidate for a degree is personally responsible for meeting all requirements for graduation. No University official or advisor can relieve the student of this responsibility.**

Students in an 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. All requirements in one catalog issue must be met. Students must resolve all Incomplete and NR grades prior to graduation. NR grades are used as a temporary grade on transcripts if the final grade has not been reported to the Office of the Registrar.

Valparaiso University has three graduation periods per academic year: May, August, and December. These graduation periods begin on the last day of each academic term and continue for 30 days. Any student with unmet requirements at the close of the graduation period must defer to the next graduation period, regardless of the circumstances. In order to graduate, students must complete the Graduation Application, available through DataVU, for each degree or certificate separately by the deadlines published in the University Calendar.

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 more than fifteen years before reentry are subject to reevaluation and shall not be accepted toward graduation requirements unless approved by the appropriate Faculty Senate standing committee.

After a student has been awarded a degree from Valparaiso University, that degree cannot be altered. Students may not take courses after graduation for the purpose of adding a major, adding a minor, or changing a GPA. Students cannot add a major or minor after graduation, even if their previous coursework corresponds to an additional credential/major/minor/certificate within their catalog. Degrees, diplomas, and transcripts are withheld for a student whose account with the University has not been settled in full.

### 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. This restriction refers to courses within the major or minor field, not to additional courses required from outside of the major or minor field. A student who selects an individualized major or minor for any degree may not use the designated courses to fulfill any other graduation requirement.

Each degree must contain all of the components necessary for each to be a complete program, including those described in the major field requirements (see page 40). Approval of applications for dual degrees must be given by the appropriate advisors and deans. No student may graduate at one commencement with more than one degree of the same notation.

Students in the Graduate School should refer to that division's bulletin for specific information.

### Credit and Quality Point Requirements

Candidates for graduation with an associate's degree or a bachelor's degree must have a grade point average of 2.000 or more in all their work at Valparaiso University. In addition, candidates for a bachelor's degree must have a grade point average of 2.000 or more in all majors, minors, or interdisciplinary programs, based on their work at Valparaiso University. Candidates for the Associate in Science degree must have a grade point average of 2.000 in all of their science courses at Valparaiso University. Candidates for the Associate of Arts degree must have a grade point average of 2.000 in their concentration area. 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 should consult the **GRADUATE CATALOG** for the corresponding requirement.

## 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 all majors, minors, or interdisciplinary programs (a minimum of 15 credit hours in the area of world 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 may be found in the **GRADUATE CATALOG**.

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 advisor, 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 beginning on pages 5 and 18 apply as taken in residence at this University.

Residence requirements for the undergraduate baccalaureate degrees awarded by the College of Business can be found on page 264.

## Application for a Degree

Students initiate the graduation process by discussing their plan of study with their advisor and completing a Graduation Application online through DataVU. A student who wishes to receive a degree at the end of a Fall Semester must formally apply no later than the preceding April 1st. A student who wishes to receive a degree at the end of a Spring Semester or a Summer Session must formally apply no later than the preceding October 1st.

Once this application has been processed, the students' degrees will be audited by the Office of the Registrar, and students will be notified of any requirements they have yet to fulfill after registering for their last semester. Each student will be placed on a mailing list to receive all communications regarding commencement and Grad Finale, an event at which candidates can complete tasks in preparation for graduation related to their cap and gown, verifying their diploma details, and gathering important information from several departments. Being on the mailing list will also allow the student to receive tickets for guests to attend commencement.

Candidates who expect to complete requirements in absentia, must be sure that all course work is completed by the deadline date set for candidates who are registered on campus. Official transcripts for transfer work must be on file in the Office of the Registrar no later than ten days after the close of a semester or session. Further information will be furnished upon request from those candidates completing degree requirements in absentia.

## Commencement Ceremonies

All students are strongly encouraged to participate in the commencement ceremony. The University conducts two commencement ceremonies annually. The May ceremony is conducted in the Athletics-Recreation Center and includes those candidates completing their requirements in either a Spring Semester or a Summer Session. Students who complete their work toward a degree at the end of a Summer Session will be granted the degree at the end of the final Summer Session. The December ceremony is conducted in the Chapel of the Resurrection.

## 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 3.800 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 3.600 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 3.400 in their work at this institution will be graduated Cum Laude.

Please note that Academic Honors for the purposes of the Commencement program are estimated based on the student's cumulative GPA at the end of the semester prior to the term in which they are anticipated to graduate. Actual Academic Honors as posted on a transcript or diploma may differ based on all completed work.

**Semester Honors**

An undergraduate student (freshman through senior) who achieves a grade point average of 3.500 in any semester 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 completed 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 18-28)

Semester Honors are also referred to as the dean's list. Posting and granting of semester honors are at the discretion of each college within the University. Questions should be referred to the dean's office of the appropriate college.

**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. 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. Please visit the Office of General Counsel online ([valpo.edu/general-counsel/policies/academic-and-student-life-policies](http://valpo.edu/general-counsel/policies/academic-and-student-life-policies)) for more information.

Official transcripts of academic records are released only after an online request has been made. Diplomas and transcripts are withheld for students whose account with the University has not been settled in full. The University's transcript policy may be found online at [valpo.edu/registrar/transcript-verification/transcript](http://valpo.edu/registrar/transcript-verification/transcript).

The table below outlines the cost of transcript services through Valparaiso University's approved transcript vendor. Other ordering options, including expedited shipping, are available in the ordering system. All orders are placed through DataVU. These prices are subject to change, but current information will be made available online on the website for the Office of the Registrar.

\$5.00	Official transcript delivered electronically or by mail. An additional fee applies to transcripts that are mailed. Multiple delivery options are available.
\$30.00	Official transcript on paper picked up on campus in the Office of the Registrar

# Tuition and Fees

Learn more about [Tuition and Fees](#) online.

The following information pertains to undergraduate programs. Full- and part-time rates for graduate programs are published in the **GRADUATE CATALOG**. Tuition charges for special programs for registered nurses sponsored by the College of Nursing and Health Professions may be obtained by contacting the dean of the college or the Office of Admission.

## **Undergraduate Tuition and Fees, Full-Time Students**

The academic year is comprised of two semesters (fall and spring), and summer sessions. Tuition and fee charges are based on the number of credit hours and the college in which the student is enrolled. Undergraduate students enrolled in 12 or more credit hours are classified as full-time students. Full-time tuition and general fee rates for the fall and spring semester are as follows:

### **Undergraduate Tuition, Full-Time**

<b>Full Time (12-19 credit hours)</b>	\$21,700 per semester
<b>Above 19 credit hours</b>	\$1,765 per credit hour

### **Undergraduate General Fee, Full-Time**

<b>12 or more credit hours</b>	\$698 per semester
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The general fee is used to defray the costs of Student Senate, co-curricular activities, the Fitness Center, health services, computer equipment, and technology.

## **Undergraduate Tuition and Fees, Part-Time Students**

Undergraduate students enrolled in fewer than 12 credit hours are classified as part-time students. Part-time tuition and general fee rates for the fall and spring semester are as follows:

### **Undergraduate Tuition, Part-Time**

<b>Enrolled in fewer than 12 credit hours</b>	\$1,840 per credit hour
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### **Undergraduate General Fee, Part-Time**

<b>Enrolled in fewer than 12 credit hours</b>	\$140 per semester
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The part-time general fee excludes the use of the Fitness Center and health services.

## **Room and Board Rates**

All rates given are per semester; the academic year is comprised of two semesters.

### **Room Rates**

#### **Alumni, Lankenau, and Scheele**

<b>Double</b>	\$3,978 per semester
<b>Single</b>	\$5,630 per semester

#### **Brandt**

<b>Double</b>	\$4,152 per semester
<b>Single</b>	\$5,780 per semester

#### **Wehrenberg, Guild, and Memorial**

<b>Double</b>	\$4,437 per semester
<b>Single</b>	\$6,324 per semester

#### **Kade-Duesenberg**

<b>Double</b>	\$4,437 per semester
<b>Single</b>	\$6,324 per semester

#### **Beacon**

<b>Double</b>	\$5,346 per semester
<b>Promenade Apartments</b>	\$5,661 per semester

<b>Sorority Housing</b>	\$5,346 per semester
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**Meal Plans**

For additional information concerning Valparaiso University meal plans, please visit [valpo.edu/aux/dining/meal-plan](http://valpo.edu/aux/dining/meal-plan).

<b>Open Access + \$250 (1<sup>st</sup>/2<sup>nd</sup> year students)</b>	\$2,458 per semester
<b>225 Block + \$250 (3<sup>rd</sup> year students)</b>	\$2,224 per semester
<b>160 Block + \$500 (4<sup>th</sup> year students)</b>	\$2,112 per semester
<b>14 Meals weekly (3<sup>rd</sup>/4<sup>th</sup> year students)</b>	\$1,925 per semester
<b>Open Access + \$500 (Open to University Community)</b>	\$2,662 per semester

**Other Fees****First-Year Program-\$165 (Summer/Fall Start Term), \$50 (Spring Start Term)**

This fee helps cover the additional programming and attention given to students as they transition into Valpo. It is required of all new students, both resident and commuter. It is not refundable.

**Enrollment Deposit-\$400**

This fee is required of all new students, both resident and commuter.

**Department of Education Fee for Criminal Background Check (cost varies)**

All students must also undergo an annual criminal background check using the department's designated online background check service. The fee for this service is paid directly by students with a credit card to this service company.

**Performance Music Fees-\$400/\$185**

The University encourages students to continue performance music instruction by charging modest fees for private and class lessons. Students pay a fee of \$400 per semester, per course, for instruction in private lessons. Students enrolled in functional piano lessons pay a fee of \$185 per semester, per course. There is no additional charge for use of an instrument or practice room. Performance music fees are not refundable after the tenth class day of a semester.

**Engineering Fee-\$400 per semester**

The Engineering Fee is assigned to all students enrolled in the College of Engineering, pre-engineering students enrolled in engineering courses, and non-engineering students enrolled in GE 100 or that have received the approval of the dean of Engineering to enroll in more than one engineering course. Engineering students on a co-op semester or study abroad semester that are not enrolled in any other engineering course will not be charged the Engineering Fee for that semester. Exceptions to this fee may be granted by the vice president for Administration and Finance or the dean of Engineering.

**Undergraduate Cooperative Education Programs-\$530 per credit hour****Nursing Liability Insurance-\$40 (MSN-\$110, Family Nurse Practitioner-\$110)**

In connection with the clinical practice component of the nursing program, all students in the Nursing program, beginning with the sophomore year, must secure and provide proof of professional and personal liability insurance.

**Nursing, HCL, HS, PH Examsoft Fee-\$65****Nursing Lab Fee-\$150**

This fee is charged when applicable.

**Nursing Testing Fee-\$1270**

This fee is payable by each nursing student entering the sophomore year.

**Nursing Immunization and Clinical Tracker - \$208****MSPA Program Fee-\$2,200 per term (Fall, Spring, Summer)**

This fee is payable by each student in the Physician Assistant program each term.

**Social Work Lab Fee-\$350 (juniors and seniors), \$90 (sophomores/first-year students)**

This annual fee is required of social work majors. It covers field fees as well as the costs of multiple expected events. This fee is billed at the beginning of the fall semester.

**Study Abroad, Cambridge, England- \$5,000**

Each participant pays this fee.

**Study Abroad, Reutlingen, Germany-\$5,000**

Each participant pays this fee.

**Study Abroad, San José, Costa Rica-\$4,000**

Each participant pays this fee.

## **Study Abroad, Hangzhou, China-\$5,000**

Each participant pays this fee.

## **Transcript-\$5 per official transcript**

There is a \$5.00 fee for each official transcript ordered online through Valparaiso University's approved transcript vendor. An additional fee applies for shipping. A pickup option is also available for \$30. No transcript of a student's record is released until the student has met in full all obligations, financial or otherwise, to the University.

## **Returned Check Fees-\$30**

A \$30 fee will be charged for each check returned by the bank due to insufficient funds, closed accounts, etc. This applies to checks submitted directly to Valparaiso University offices. Checks submitted to the University through Nelnet (Student Account Payment portal) are subject to Nelnet returned check fees and policies.

## **Vehicle Registration**

All vehicles (including motorcycles and mopeds) parking on Valparaiso University property must be registered with the Parking and Transportation office and must display a valid registration permit. Students may only park in designated parking lots corresponding to the colored permit affixed to their vehicle. Valparaiso University has three types of parking lots for student use: Long Term, Resident, and Commuter. All permits (except Red Permits) will have access to Long Term parking lots (Green), in addition to the specific lots as granted by the permit. Resident parking is granted by either a Red or Blue Permit and Commuter parking is granted by an Orange Permit. Additional details including regulations, fines, and maps are available at: [valpo.edu/aux/parking](http://valpo.edu/aux/parking).

## **Freshmen**

Freshmen residential students are not permitted to park on campus without an approved waiver (available on the parking website) and a completed permit application. Once approved, Freshmen may purchase a Red Permit. A Red Permit is \$150 per semester, or \$250 per academic year. The Red Permit does not include the Long Term lots (Green).

## **Non-Freshmen**

Residential Sophomores, Juniors, Seniors, and Graduate students may purchase either a Green or Blue Permit. A Green permit is \$100 per semester, or \$150 per academic year. A Blue Permit is \$150 per semester, or \$250 per academic year.

## **Commuter Students**

Commuter students may purchase an Orange Permit. An Orange Permit is \$150 per semester, or \$250 per academic year.

## **Summer Permits**

A summer permit is \$55 for the summer academic term.

## **Permit Replacement Fee-\$15**

This fee will be charged for a replacement Registration Permit.

## **Late Fee-\$100**

A late fee in the amount of \$100 will be charged to a student's account, per semester, for those students with a balance on their account in excess of the registration threshold after the payment due date. The exception to this rule is for those students enrolled and current on a university payment plan, those receiving payment through the Veteran's Administration (GI Bill®), or Embassy payments.

- Valparaiso University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33.
- If a student is not 100%, Section 103 states:

*the restriction on penalties would not apply in cases where the student owes additional payment to the school beyond the amount of the tuition and fee payment from VA to the school. VA would have to make payments to schools no later than 60 days after receiving the tuition and fee certification from the school, and they would have to report semiannually to Congress any cases in which VA fails to make such payments within 60 days of certification.*

## Payment Terms

**Fall and Spring amounts are due to the University before classes begin.**

### Semester Payment Due Dates

<b>Full Summer/ Summer I</b>	June 10
<b>Summer II</b>	July 20
<b>Fall</b>	August 15
<b>Spring</b>	January 5

Students will be able to view their statements on the Student Account Center. These statements can be accessed through DataVU/Student Accounts/Student Account Center Access - New Nelnet. Charges for the summer session post to the account after the add/drop period. Students will be able to view charges for the fall and spring semester prior to classes beginning to aid students and families in setting up university payment plans. You can view the payment plan options and set up payment plans at [mycollegepaymentplan.com/valparaiso](http://mycollegepaymentplan.com/valparaiso).

Each student registering at Valparaiso University assumes responsibility to pay all University-related expenses not covered by financial aid. Students who do not have sufficient financial aid, are not already enrolled in a monthly payment plan, and have not paid their initial semester charges (tuition, general fee, room and board) by the semester due date will automatically be charged a \$100 late payment fee. An account restriction will also be placed on the students' accounts that will suspend student services.

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, parking violations, 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 has not been settled in full.

Loans such as 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.

## Delinquent Accounts

Each student registering at Valparaiso University assumes responsibility to pay all University-related expenses not covered by financial aid. Students who have not secured sufficient financial aid, who have a delinquent or insufficient monthly payment plan, and/or have not paid posted account charges after 30 days will be considered delinquent.

If a satisfactory plan is not arranged, or if payments are not made in accordance with the payment plan and due dates, the entire balance shall be immediately due and payable, and the University has the right to take steps to collect the balance, including, but not limited to, the following:

- **excluding the student from classes and other campus services;**
- **withholding course grades, academic transcripts, and diploma until the balance is paid;**
- **turning the student's account over to a collection agency; or**
- **taking legal action to collect the balance due.**

The student authorizes the University to release financial information about his/her account and other information useful in verifying the charges on the account to those concerned with collecting the balance due. In the event of collection efforts, procedures, or a suit to collect unpaid balances on the student's account and/or institutional loans, the student agrees to be charged and pay all of the University's fees for collections, including legal fees, not to exceed 50% of the entire outstanding balance. Delinquent accounts may be reported to credit bureaus and bear interest at 6% per annum.

## Educational Expense Payment Plan

Valparaiso University partners with a third party provider to offer a deferred payment plan for the convenience of those students and parents who may wish to spread payment over the semester. Under the plan, monthly payments may be arranged for the payment of tuition, fees, room and board. The payment plan provider offers a plan for each fall and spring semester. The enrollment fee is \$30 for the semester plan.

Payment plan accounts with delinquent or past due payments will receive a \$100 late payment fee charged to the student's account.

# Housing Regulations

Learn more about [Housing Regulations](#) online.

Valparaiso University is residential by design. Living on campus represents an integral component of the mission of the institution by providing living and learning experiences which lead to a student's growth and development, and an enhancement of one's total education at Valpo. Because the residential experience is such an important aspect of the overall Valpo experience, Valparaiso University has a six-semester residency requirement. All undergraduate students are expected to reside in campus housing for six (6) semesters. Exceptions are made for veterans, those who will be 22 before September 1 of the academic year in question, those living with parents, spouse, or legal guardian (commuter students), and sophomore and junior fraternity men who live in recognized 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.

Graduate students may apply to live in University residence halls, however, first priority is given to undergraduate students. The University reserves the right to deny housing to individuals who are not full-time undergraduate students.

The Office of Residential Life 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.

## Commuter Students

Although students are normally required to live in University residence halls, an exception is made for commuter students. A commuter student is defined as a full-time, undergraduate student who lives exclusively in the permanent or primary residence of a parent or legal guardian within approved commuting counties. For 2020-2021 the approved commuting counties are: Lake, Porter, LaPorte, Newton, Jasper, Starke, and Pulaski in Indiana; Berrien and Cass in Michigan. These counties are subject to review during the 2020-2021 school year for future eligibility. Students who otherwise would be required to live on campus may not reside at another off-campus address after registering as a commuter student. Questions related to this policy should be directed to the Office of Residential Life.

## Application

New Students will complete an Online Housing Agreement application during their summer orientation program (FOCUS). At this time they will have the opportunity to preference residence halls and submit roommate requests. All returning students who are required to live in University residence halls according to University housing regulations must complete an Upper class Housing Agreement form each year.

## Assignment Policy

New freshman and transfer student assignments are made by the Office of Residential Life in the order in which their New Student Enrollment Agreements and deposits are received according to space availability.

Returning upper class student assignments are made according to the guidelines established by the Office of Residential Life. Assignments are made with the goal of establishing and developing positive residence hall communities. All upper class housing agreements received before the deadline indicated by the Office of Residential Life will be given equal consideration as outlined in the instructions 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 Office of Residential Life.

Residential Life adheres to the Valparaiso University non-discrimination policy in all of its programs, practices, and policies. Room assignments and changes are made without regard to race, color, or national origin.

The University reserves the right to make changes in residence hall assignments if necessary for the most effective accommodation of the student body.

## **Occupancy**

The University Housing Agreement is binding on the student for the fall and spring semesters of the designated academic year. Students who breach the residency requirement of the Housing Agreement, without prior written approval, will be responsible for the entire amount of the Agreement.

Students may cancel the Housing Agreement only for the following reasons: graduation, authorized off-campus academic programs, withdrawal, marriage, or circumstances that are determined by the University, in the University's sole discretion, to be an "Authorized Reason." The Housing Agreement cannot be terminated solely for the purpose of living off-campus, because they match one of the exemption criteria mid-year, or to commute from home. Documentary evidence is required to demonstrate cause for cancellation. Depending on the reason for cancellation, students may be subject to a cancellation fee of up to \$400. Students shall remain liable for room charges until written notice is received and cancellation approval is given by the Assistant Dean of Students for Residential Life or their designee.

## **Vacation Periods**

The residence halls close 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 Office of Residential Life for more information.

## **Roommate**

Preferences should be listed on the housing application. All roommate requests must be mutually indicated by both students. 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. Washers and dryers are also provided within each residence hall. Draperies are provided. Further information is available from the Office of Residential Life.

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, furnishings, 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 Locations and Dining Plans**

### **Dining Locations**

The primary venues for undergraduate dining are located in the Harre Union which features two dining locations, the Founders Table and the Campus Café. In addition, Grinders coffee shop is located in the Christopher Center.

Founders Table is located on the east side of the Harre Union and is open for breakfast, lunch, and dinner Monday through Friday, as well as for brunch and dinner on Saturday and Sunday. Founders Table features a wide variety of offerings, which include four display cooking stations that offer ethnic, vegetarian, and home-style favorites. A Grab and Go area provides a variety of items including desserts, sandwiches, wraps, sushi, salads, and fresh fruit.

The Campus Café is located near the book store in the Harre Union and is open for lunch, dinner, and late night snacks, along with a wide selection of groceries and convenience items. The Campus Café offers Grab and Go ready-made selections, Perks Coffee shop featuring specialty coffee drinks from Starbucks, salads, crepes, rice bowls, and smoothies. The Pizzazz area offers selections such as pizza, grilled items, and appetizers.

Grinders coffee shop is located on the lower level of the Christopher Center for Library and Information Resources. Grinders is open late most evenings and serves a wide variety of specialty coffee drinks from Starbucks, a deli sandwich bar, and a variety of grab and go items, including pastries, salads, and wraps.

## Dining Plans

Dining Plans are all à la carte, which means all items are purchased on a declining balance and are priced on an individual basis. Students begin each semester with a set amount of dollars for purchasing à la carte items and are not limited to a fixed number of meals. À la carte plans provide flexibility when making meal purchases, as students only pay for what they choose to eat, when they choose to eat. All students living in residence halls, who are freshman, sophomore, or junior classification, other than sorority members living in Scheele Hall, are required to purchase the Dining Plan associated with the student's classification. Students are required to purchase a meal plan until they have reached senior classification.

The mandatory rates are posted on page 392. The dollars remaining, after the reduction of a \$100 administrative fee, may be used to make purchases in the University's dining facilities. Student ID cards have the Dining Plan encoded and are used for purchases at University dining locations.

All Dining Plans require two semesters of buy-in. Unused balances will be rolled over from the fall semester only and added to the spring semester buy-in as long as the student has purchased a plan for the spring semester. The rollover amount is automatically added to the student's account. If a student does not sign up for a spring plan, then they forfeit the remaining dollars. Unused balances at the end of the spring semester are not refunded or carried over. Dining plans are non-refundable.

If a student has special dietary needs such as medical restrictions or vegetarian/vegan diets, they can be accommodated by contacting the Dining Services online at [valpo.edu/dining](http://valpo.edu/dining), by email at [dining@valpo.edu](mailto:dining@valpo.edu), or in the dining office located in the Harre Union, room 170.

# Refund Policy

## Dropping One or More Courses

Students may drop one or more courses during the drop/add period. Tuition charges will be reassessed at the end of that period. There will be no adjustments to tuition for courses dropped after the drop/add period. There will also be no refund of the special, laboratory, or general fees. The financial aid award, if any, will be reviewed at the end of the drop/add period. If needed, the award will be adjusted to reflect enrollment at that time.

## University Withdrawal

If, for whatever reason, a student needs to withdraw from Valparaiso University during the fall or spring semester, they may be eligible for a prorated refund of their tuition and room charges according to the appropriate schedule below.

The date of withdrawal and basis for calculating all refunds will be the date on which the student submits the request using the "Change in Enrollment Status – Withdraw From All Classes" link on DataVU.

During the add/drop period	100%
During the second week of classes	90%
During the third week of classes	80%
During the fourth week of classes	70%
During the fifth week of classes	60%
During the sixth week of classes	50%
During the seventh week of classes	40%
During the eighth week of classes	30%
During the ninth week of classes	20%
During the tenth week of classes	10%
After tenth week of classes	None

\*Because MBA courses are shorter in duration, there is a separate refund schedule for them.

## Other Refunds

There will be no refund of general, special, and laboratory fees. There will be no refund for summer tuition charges.

## Adjustment of Financial Aid Due to Complete Withdrawal

The University and/or the student may be required to return some of the federal financial aid, if any, awarded to the student. If the student received financial aid from state, University, or private funds (other than family), a portion of the refund may also be returned to the grant, scholarship, or loan source from which it was received. The above refund schedule will be used to adjust institutional aid. The federal "Return of Title IV Funds" formula dictates the amount of Federal Title IV aid, other than Federal Work Study, that must be returned to the federal government by the school and the student. For students receiving Indiana State grants, if full time status is not maintained through the end of the fourth week of the semester, the University must return 100% of those funds to the state.

**Federal "Return of Title IV Funds" Formula:** If a student withdraws on or before the 60% point of the semester, the percentage of funds that must be returned to the federal government is equal to the number of calendar days remaining in the semester, divided by the number of calendar days in the semester. Scheduled breaks of more than four consecutive days are excluded. The calculation of the return of these funds may result in the student owing a balance to the University and/or the federal government.

**Note:** If funds are released to a student because of a credit balance on the student's account, then the student may be required to repay some of the federal grants if the student withdraws.

Students considering withdrawing from all classes should consult with the staff in the Student Accounts and/or Financial Aid Offices if they are concerned about the financial impact of withdrawing.

## Unofficial Withdrawals

If a student does not successfully complete any courses during a given semester, their federal aid may need to be adjusted. The Financial Aid Office will be in contact with each professor to determine the last date of attendance or last date of academic related participation in the course. If the University cannot document that a student attended at least one course past the 60% point of the semester, federal aid will be adjusted according to the Return of Title IV Funds policy above. The date used in that calculation will be the mid-point of the given semester unless a later date can be documented.

## **Post-Withdrawal Disbursements**

If a student was eligible for a federal grant disbursement at the time of their withdrawal, the University will disburse the grant(s) to assist with outstanding charges for current tuition, fees, room and board within 30 days of determining that the student withdrew. If all charges are paid and the student is due a refund, the refund will be processed within 45 days of determining that the student withdrew.

If the student was eligible for a federal student/parent loan disbursement at the time of their withdrawal, the University will notify the student/parent of the pending disbursement via email within 30 days of determining that the student withdrew. The student/ parent must respond within 14 days indicating if they would like the loan disbursed. If no response, the loan(s) will be cancelled.

## **Student Obligations**

The calculation of the return of financial aid funds may result in the student owing a balance to the University and/or the federal government. If funds have already been released to a student because of a credit balance on the student's account, then the student may be required to repay some of these funds. Students considering withdrawing from all classes should consult with the staff in the Student Accounts and/or Financial Aid Offices if they are concerned about the financial impact of withdrawing.

# Financial Aid

Visit the [Office of Financial Aid](#) online.

The Office of Financial Aid at Valparaiso University is committed to providing resources necessary to help students complete their education. As such, we place primary emphasis on the student's academic achievement 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 Admission. No student will be considered for assistance until they are admitted to the University.
2. Submit the Free Application for Federal Student Aid (FAFSA). The FAFSA requires no fee and can be completed online at [studentaid.gov](https://studentaid.gov). All students should file the FAFSA before March 1 for priority consideration. (For Indiana residents, the FAFSA must be received by the federal processor by April 15 to be eligible for Indiana awards.) The filing of the FAFSA may be completed after October 1.

## Renewal

All need-based financial assistance requires the annual filing of the Free Application for Federal Student Aid (FAFSA). Students should file by March 1 for priority consideration. Renewal depends on continued need, the availability of funds, and eligibility as described below, including meeting the requirements for satisfactory academic progress. The policy can be found on page 404.

## Financial Aid Programs

Financial aid awards 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 program with at least twelve credits per semester; maintain satisfactory academic progress; demonstrate financial need as determined by filing the FAFSA; be a U.S. citizen or an eligible noncitizen; not be in default on a federal loan or owe a refund or repayment on any federal or state program.

Graduate students also must meet the above requirements. However, they must be enrolled in a degree program with at least four and one half credits per semester.

Initial 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 aid, enrollment status is determined when the aid 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 awards is determined by the University Scholarship Committee whose decision is final. Scholarships and awards are offered in good faith by the University with the intent they will be renewed under the conditions specified. Specific renewal requirements for scholarships and awards are stated in the scholarship letter sent to each recipient upon admission. Annual scholarships awarded for four years are to be evenly divided each year between fall and spring semesters. If a student recipient graduates after only seven semesters of enrollment, the eighth semester of the scholarship is no longer available. Some exceptions are possible for students who enroll in summer terms with the express purpose of graduating early. Students should contact the Office of Financial Aid as soon as they begin to consider graduating in less than four years to review how their financial aid awards will be affected. 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. Some scholarships and awards may not be offered in combination with each other. Please refer to our website at [valpo.edu/student-financial-services/planning](https://valpo.edu/student-financial-services/planning) for a list of scholarships and for more information.

## Need-Based Aid Grant Programs

**Valpo Fund Alumni Awards** are institutional awards that are not repaid. All students who file the FAFSA will be considered. These awards are funded, in large part, by the endowed and donated scholarships listed on page 406.

**Federal Pell Grants** are available to all students who have demonstrated financial need according to a federal formula. The FAFSA is required. Award amounts vary based on federal guidelines; 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 with first preference to Federal Pell Grant recipients. Although by regulation the awards can range from \$200 to \$4,000, the actual awards determined by Valparaiso University are dependent upon the amount of funding provided by the federal government and the number of Pell Grant recipients. Recipients may be enrolled either full-time or part-time.

**State Grants** (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. The FAFSA must be received by the federal processor by April 15 to be eligible for Indiana Awards. Awards are based on need, and are determined annually by state formula. Students must be enrolled full-time for the standard grant programs.

## Loan Programs

Need-based student loans feature subsidized interest and deferred payments. Students must be enrolled at least half-time. Repayment of these loans does not begin until six months after graduation or after dropping below half-time status. Payments may 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-based plans are also offered. There is no penalty 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.

The following federal need-based educational loans are available through Valparaiso University. To be eligible, you must complete and submit the FAFSA. Valparaiso University notifies the student of eligibility via an Award Notification.

### Federal Direct Subsidized Student Loans

Undergraduate 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. Students should complete and submit the FAFSA to apply, and all first-time borrowers must complete entrance counseling, sign a promissory note, and complete an Annual Student Loan Acknowledgement online at [studentaid.gov](http://studentaid.gov).

### Federal Direct Unsubsidized Loans

These loans are available to students who are enrolled at least half-time and who are not eligible for or were partially eligible for the Federal Direct Subsidized Loan. Terms and limits are the same as Federal Direct Subsidized Loans, except the student is charged interest on the loan from the date funds are disbursed.

### Federal Direct Loan Limits

- Freshmen = \$5,500 (\$3,500 max in a subsidized loan)
- Sophomore = \$6,500 (\$4,500 max in a subsidized loan)
- Junior = \$7,500 (\$5,500 max in a subsidized loan)
- Senior = \$7,500 (\$5,500 max in a subsidized loan)

For independent undergraduates, the loan limits are higher than the Federal Direct Loan maximums. Freshmen/sophomore independent students may receive up to \$6,000 in additional unsubsidized loans and juniors/seniors up to \$7,000 more per academic year.

### 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 loan limits are up to the cost of education, less other aid, per student. Repayment of the principal and interest may begin 60 days after the loan is fully disbursed or the parent may request deferred repayment.

The filing of the FAFSA is required. Parents may apply for the Parent PLUS at [studentaid.gov](http://studentaid.gov).

### Alternative Loans

Available from a variety of private lenders. Principal and interest may be deferred while in school, and a co-signer is usually required.

## **Valparaiso University Loans**

Limited, low interest loans are administered by Valparaiso University. The amounts vary. Contact the Office of Financial Aid for details.

- **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.
- **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.
- **Schell Loan**  
This loan is funded by the Schell Foundation and is available to undergraduate students from select states.
- **Henry Strong Educational Foundation**  
Provides loans to qualified full-time upper class students under thirty years of age.

## **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 funds under these loan programs.

## **Loan Repayment Information**

Sensible borrowing cannot 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, go to [studentaid.gov](http://studentaid.gov) and use their repayment calculators. For example, monthly payment on \$20,000 in Direct Loans at 6.8% interest will be \$230.16 per month for ten years.

Federal Direct Loan borrowers will be notified by their loan servicer about repayment of loans. There are a variety of repayment options and options for deferring repayment.

## **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.

## **Vocational Rehabilitation**

Under the provision of Public Law 565, 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.

## **Veterans' Programs**

In addition to working with the Veterans' Administration (VA), military veterans should consult with the Office of Financial Aid as soon as possible when preparing to enroll at Valparaiso University. The University does participate in the Yellow Ribbon Program under the Post 9/11 GI Bill®, otherwise known as Chapter 33. The University awards the Patriot Award which in conjunction with the base Chapter 33 benefit and the additional Yellow Ribbon benefit will cover 100% of tuition and general fee for undergraduate students. Graduate students should refer to their schools' respective policies. The University does limit the number of Yellow Ribbon recipients it funds and priority goes to returning students already in the program and then on a first come, first-served basis for new students. Veterans are asked to meet with Office of Financial Aid staff to discuss their options before enrolling.

## **ROTC Programs**

Students who participate in the Air Force or Army ROTC programs may receive scholarship assistance through ROTC. Army or Air Force ROTC students who receive full tuition scholarships along with ROTC living and book stipends will also be guaranteed additional scholarships/grants from the University such that the total of all aid will equal at least the tuition, general fees, on campus room and meal plans appropriate for the students' academic grade levels, and books. Air Force ROTC students who receive partial tuition scholarships through ROTC will also receive University scholarship/grants at least in the amount of on campus room and meal plans appropriate for the students' academic grade levels. A student must live in University-owned or controlled housing and be enrolled in a full-time meal plan in order to receive the additional University funding. If University scholarships/grants are part of the ROTC student's award, then total resources including ROTC scholarships and stipends may not exceed the student's cost of attendance as determined by the Office of Financial Aid. ROTC students may elect to decline University scholarship/grant aid in order to utilize federal student loan assistance which allows the students to receive aid in excess of the cost of attendance. ROTC students are asked to meet with the Office of Financial Aid staff to discuss their options before enrolling.

## **Valparaiso University Lilly Community Award**

Indiana students selected by their local Lilly Community Foundation to receive its full tuition and fees scholarship will also be guaranteed University scholarship/grant aid such that the total of all aid will cover tuition, general fee, on-campus room and meal plan appropriate to the student's grade level, and books. A student must live in University-owned or controlled housing and be enrolled in a full-time meal plan in order to receive the additional University funding.

## **Campus Employment**

Students are employed in a variety of positions on campus. Open positions are posted on Valparaiso University's "Handshake" web site at [valpo.joinhandshake.com/login](http://valpo.joinhandshake.com/login). 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.

## **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 and reviewed by 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 refund from the Office of Student Accounts. It is each student's responsibility to verify semester charges, financial aid credits, and refunds 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 the University's refund policy. Specific information may be found in the Refund Policy section of this catalog (beginning on page 398).

## **Off-Campus Study**

Students enrolled in an off-campus program, including study abroad programs, which are approved for credit by Valparaiso University, are eligible to apply for financial aid. University grants and scholarships are available only for selected Valparaiso University programs.

## **Exit Interviews**

Prior to graduation, leaves of absence, or withdrawal from the University, students who have accepted loans must complete separate exit interviews for Federal Direct 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 an appeal may be presented to the vice president for Enrollment Management. 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 398). 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, the full scholarship will be applied to one semester. 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. See page 398.

## 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 an active 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. Graduate students should refer to the **GRADUATE CATALOG** 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)	1.650
Sophomores (24 to 55 hours completed)	1.750
Junior and above (56 or more hours completed)	2.000

## Incompletes, 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 add to total hours attempted and hours completed. 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 noncredit 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 based on 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 semester to attain grade point average and completed credit hour standards specified by the appeals committee. 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 timeframe limits, and different grade point average requirements. Recipients of Valparaiso University Scholarships and other merit awards should refer to their scholarship award letter for the terms and conditions for renewal. In addition, federal loan programs have cumulative limits that may be reached 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 place.
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 they 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 know 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 typical repayment schedules.
8. To appeal any decisions relating to the determination of financial aid eligibility.

# Scholarships

Learn more about [Scholarships](#) at Valpo online.

Scholarships are funded by Valparaiso University alumni, parents, friends, corporations, foundations, churches, and organizations. Donors may establish Endowed Scholarships where the earnings from the funds are used to provide assistance to students.

## Application Required

Students should contact the indicated department or the Office of Financial Aid for further information about the following scholarships.

- **Oliver W. and Emma W. Allen Scholarship Fund**

Provides annual awards to students, selected through a special process, who are preparing for rostered church professions within the Lutheran Church (ordained ministries, commissioned ministries, associates in ministry, or lay teachers). Students of other church bodies, preparing for rostered ministries in their respective denominations, would also be eligible as funds permit. Contact the Office of Undergraduate Admission for more information.

- **Caterpillar Endowed Scholarship**

Funded by the Caterpillar Foundation, this scholarship will be awarded to freshman engineering students. Selected students will be invited to apply for this scholarship based on merit. The students nominated to receive this scholarship will be selected through a competitive, one-time application process based on merit which may include an interview with the College of Engineering Recruiting Committee. A service learning component will be required of the recipients in order for the scholarship to be renewed for up to four years.

- **Hesse Scholarship**

Funded by former College of Engineering Dean Herman Hesse and his wife, Helen, this scholarship will be awarded to 12 freshman engineering students each year. This is a renewable scholarship for a total of four years when criteria is met. Scholarship applications will be mailed to invited students in December.

- **Shirley Ayers Jud Memorial Endowed Guild Scholarship**

Funded by memorials to Shirley Jud and gifts by Dr. Henry G. Jud, matched in part by Unisys matching gifts in 1989, 1990, 1991, this scholarship will be awarded to a freshman student with academic ability. The scholarship may be renewed if the recipient maintains a 3.000 or better grade point average. This scholarship recipients shall be sons or daughters of Guild members. Application forms are available from the Office of Undergraduate Admission or the Guild Office.

- **James S. Kemper Foundation Scholarship**

To be awarded to Christ College students. Candidates must have substantial academic potential and ability, and the maturity, perspective, and motivation to undertake summer work experience in a rigorous business environment each of their undergraduate summers. A Kemper Foundation officer selects the recipient from three finalists identified by the Christ College deans.

- **The Donna Spanopoulos Memorial Scholarship**

Annual award. Preference to senior student(s) enrolled in the Nursing program at Valparaiso University, who express an interest in specializing in pediatric care and have demonstrated clinical and academic ability. Financial need not a criterion.

- **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 3.000 or better grade point average. The scholarship recipients shall be sons or daughters of Guild members. Application forms are available from the Office of Undergraduate Admission or the Guild Office.

- **Valparaiso University Guild Past National Officer'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 3.000 grade point average at the University. These scholarships are awarded to sons or daughters of University Guild members. It may be renewed if the student maintains a 3.000 or better grade point average. Application must be made for this scholarship. Application forms are available from the Office of Undergraduate Admissions or from the Guild Office.

- **William Randolph Hearst Endowed Scholarship**

The William Randolph Hearst Endowment was funded by the Hearst Foundation to establish scholarships for returning full-time undergraduate African-American and Hispanic/Latino America students attending Valparaiso University. To be eligible, a student must have and maintain a 2.500 GPA for renewal purposes, demonstrate financial need, exhibit leadership qualities, and agree to participate in multicultural activities. Applications are available in the Office of Multicultural Programs.

- **Reimer Family Endowed Scholarship for Servant Leadership**

Funded by Ronald and Janet Reimer, the Reimer Family Endowed Scholarship for Servant Leadership provides awards to seniors who, during their college career, have demonstrated significant servant leadership, and who will continue to provide servant leadership in a Christian church and community in the future. The selection committee will review the depth and scope of the applicant's servant leadership, not only the number of hours or the number of involvements reported. Application forms are available in the Chapel of the Resurrection.

- **Indiana Minority Teacher and Special Education Services Scholarship Program**

Administered by the Indiana Commission for Higher Education. Eligible students agree in writing to pursue their teaching career in an Indiana accredited school or vocational rehabilitation or other developmental disability center for three out of the first five years following completion of program. Eligible students must be Indiana residents, United States citizens, and a minority student seeking teacher certification to teach in an accredited school in Indiana, and have a minimum grade point average of 2.000/4.000. Renewable for total of four annual scholarships. Students must reapply each year. Financial need may be considered. Applications available at [www.in.gov/che](http://www.in.gov/che).

### No Application Required

There are a number of Endowed scholarships that are awarded annually by Valparaiso University. They are used to fund the "Valpo Fund Alumni Award" listed in financial aid offers. Students need not make a separate application or request to be considered for these awards.

The amount and number of awards given in endowed scholarships varies depending on the earnings of the established fund.

# **University Personnel**

## **Faculty**

### **Full-Time Faculty, 2020-2021**

- Ossama Abdelgawwad, Ph.D., Assistant Professor of Theology; Indiana University (M.A., 2018; Ph.D., 2018)
- Michelle M. Abraham, Ph.D., Lecturer in Psychology; Kent State University (B.A., 2002; M.A., 2005; Ph.D., 2008)
- Giosuè Alagna, M.A., Lecturer in World Languages and Cultures; Texas Christian University (B.A., 2004); University of Wisconsin (M.A., 2011)
- Zuhdi Y. Aljobeh, P.E., Ph.D., Associate Professor of Civil Engineering; The University of Toledo (BSCE, 1986; MSCE, 1987; Ph.D., 1994)
- Karen Allen, Ph.D., Professor of Nursing; Dean, College of Nursing and Health Professions; Andrews University (B.S., 1979; M.S., 1983); University of Illinois at Chicago (Ph.D., 1992)
- Debra Collins Ames<sup>17</sup>, Ph.D., Associate Professor of Foreign Languages and Literatures; Holy Cross College (A.B., 1980); University of Virginia (M.A., 1982; Ph.D., 1987)
- Harold Ames, B.A., Lecturer in English in the Dalian Jiaotong University program; Anderson University (B.A., 2001)
- Richard A. AmRhein, J.D., Professor of Library Services; Eastern Illinois University (B.M., 1978; M.A., 1981); Baylor University (M.M., 1980); Rutgers University (MLS, 1990); Valparaiso University (J.D., 2012)
- Charles M. Anderson, III, MFA, Associate Professor of Communication; Ball State University (B.S., 1997); Boston University (MFA, 2010)
- Salena A. Sampson Anderson, Ph.D., Associate Professor of English; University of Georgia (B.A., 2003; M.A., 2005); The Ohio State University (Ph.D., 2010)
- Amy L. Atchison, Ph.D., Associate Professor of Political Science and International Relations; Jacksonville State University (B.A., 1995); Florida State University (M.A., 1996); University of Tennessee (Ph.D., 2010)
- Larry Robert Baas, Ph.D., Senior Research Professor; University of Wisconsin–Whitewater (B.Ed., 1968); Kent State University (M.A., 1969; Ph.D., 1976)
- Teresa Marie Bals–Elsholz, Ph.D., Professor of Geography and Meteorology; University of Nebraska–Lincoln (B.S., 1987); Texas Tech University (M.S., 1990); State University of New York at Albany (Ph.D., 2002)
- Caroline C. Ban, MSW, Clinical Assistant Professor of Social Work; Carleton College (B.A., 2005); Washington University (MSW, 2009)
- Selina L. Bartels, Ph.D., Assistant Professor of Education; Northern Illinois University (B.S., 2000); Illinois Institute of Technology (M.Ed., Ph.D., 2016)
- Dawn R. Jeglum Bartusch, Ph.D., Professor of Sociology and Criminology; Valparaiso University (B.A., 1987); University of Wisconsin–Madison (M.S., 1989; Ph.D., 1998)
- Mark Walter Bartusch, Ph.D., Associate Professor of Theology; Valparaiso University (B.A., 1986); Lutheran School of Theology (M.Div., 1990; Th.M., 1996; Ph.D., 2000)
- Jonathan E. Beagley<sup>18</sup>, Ph.D., Associate Professor of Mathematics and Statistics; Illinois Institute of Technology (B.S., 2008); George Mason University (M.S., 2012; Ph.D., 2013)
- Sedefka V. Beck<sup>19</sup>, Ph.D., Associate Professor of Economics; University of Illinois at Chicago (B.A., 1998; M.A., 2000; Ph.D., 2013)
- Matthew Lee Becker Ph.D., Professor of Theology; Concordia University Portland (B.A., 1984); Concordia Seminary, St. Louis (M.Div., 1988); The University of Chicago (M.A., 1990; Ph.D., 2001)
- Kelly R. Belanger, Ph.D., Professor of English; Michigan State University (B.A., 1986); The Ohio State University (M.A., 1988; Ph.D., 1992)
- Tiffany Bell, Ph.D., Assistant Professor in Communication; Indiana University (B.A., 2004); Howard University (M.A., 2006; Ph.D., 2013)
- Nora F. Belzowski, MLS, Associate Professor of Library Services; Saint Mary's College (B.A., 2000); Indiana University South Bend (M.A., 2010); Indiana University-Purdue University Indianapolis (MLS, 2012)

<sup>17</sup> Retired June 30, 2021

<sup>18</sup> On Sabbatical Leave, Spring Semester

<sup>19</sup> On Sabbatical Leave, Fall and Spring Semesters

Faculty

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- Michael A. Berberoglu, Ph.D., Assistant Professor of Biology; University of Nevada, Reno (B.S., 2006); University of California, San Francisco (Ph.D., 2012)
- Antoine Bernard, M.E., Instructor in Engineering in the Dalian Jiaotong University Program (DJTU); Arts & Métiers ParisTech (M.E., 2015); Shanghai Jiao Tong University (M.S., 2015)
- Karen S. Berrier, Ph.D., Lecturer in Foreign Languages and Literatures; Miami University (B.A., 1971); Indiana University (M.A., 1973; Ph.D., 1980)
- Angela Blagojevski, M.S., PA-C, Clinical Assistant Professor of Physician Assistant Studies in the College of Nursing and Health Professions; Gannon University (B.S., 2009; MPA, 2009)
- Mary Kate Blake, Ph.D., Assistant Professor of Sociology and Criminology; Marquette University (B.A., 2004); Virginia Polytechnic Institute (M.A. Ed., 2006); University of Notre Dame (M.A., 2013; Ph.D., 2018)
- Daniel Blood<sup>20</sup>, Ph.D., Associate Professor of Mechanical Engineering; Valparaiso University (B.S., 2010); University of Florida (M.S., 2012); University of Florida (Ph.D., 2014)
- Benjamin A. Boche, Ph.D., Assistant Professor of Education; Concordia University (B.S., 2005; M.S., 2008); Purdue University (Ph.D., 2014)
- Joseph Andrew Bognar, DMA, Associate Professor of Music; Valparaiso University (B.M., 1994); University of Illinois at Urbana-Champaign (M.M., 1996; DMA, 2000)
- Patrice G. Bouyer, Ph.D., Associate Professor of Biology; University of Poitiers, France (DEUG, 1990); René Descartes University of Paris V (DEA, 1994; Ph.D., 1998)
- Julie Marie Brandy, R.N., Ph.D., F.N.P.-B.C., Associate Professor of Nursing in the College of Nursing and Health Professions; University of Evansville (BSN, 1991); Valparaiso University (MSN, 1995); Loyola University (Ph.D., 2011)
- Lydia Katherine Brauer, Ph.D., Associate Professor of Education; Valparaiso University (B.A., 1988); Bowling Green State University (M.A., 1998); The Ohio State University (Ph.D., 2006)
- Amanda J. Brobst-Renaud, Ph.D., Assistant Professor of Theology; Augsburg College (B.S., 2004); Luther Theological Seminary (M.Div., 2013); Baylor University (Ph.D., 2018)
- James D. Brodzinski, Ph.D., Professor of Management in the College of Business; Dean, College of Business; Ohio University (BFA, 1973; M.A., 1978; Ph.D., 1983)
- Lorraine S. Brugh, Ph.D., Senior Research Professor; Northwestern University (B.M., 1973; M.M., 1974; Ph.D., 1998); Garrett-Evangelical Theological Seminary (MTS, 1994)
- Randy J. Brush, M.S. PA-C, Clinical Assistant Professor of Physician Assistant Studies in the College of Nursing and Health Professions; University of Detroit Mercy (B.S., 2012; M.S. PA-C, 2012)
- Jessica L. Bruskoski, M.S. PA-C, Clinical Assistant Professor of Physician Assistant Studies in the College of Nursing and Health Professions; University of Saint Francis (M.S. PA-C, 2011)
- Amy Carol Buckenmeyer, Ph.D., Associate Professor of Nursing in the College of Nursing and Health Professions; Indiana University (BSN, 1994); Marquette University (MSN, 1999); University of Illinois at Chicago (Ph.D., 2007)
- Holly L. Buckman, Ph.D., Lecturer in Psychology; Valparaiso University (B.S., 2014); Palo Alto University (M.S., 2017; Ph.D., 2020)
- Mark Budnik, Ph.D., Professor of Electrical and Computer Engineering; the Paul H. Brandt Professor of Engineering; University of Illinois at Urbana-Champaign (B.S., 1990); Purdue University (M.S., 1999; Ph.D., 2006)
- Kristi N. Bugajski, Ph.D., Associate Professor of Biology; Saint Joseph's College (B.S., 2005); Michigan State University (M.S., 2008); Purdue University (Ph.D., 2011)
- Gretchen Townsend Buggeln, Ph.D., Professor of Art History and Humanities in Christ College; the Phyllis and Richard Duesenberg Chair in Christianity and the Arts; Dartmouth College (B.A., 1985); University of Delaware (M.A., 1987); Yale University (Ph.D., 1995)
- Martin Thomson Buinicki, Ph.D., Professor of English; the Walter G. Friedrich Professor of American Literature; University of Northern Colorado (B.A., 1995; M.A., 1997); The University of Iowa (Ph.D., 2003)
- Jonathan Karl Bull, MLS, Associate Professor of Library Services; Valparaiso University (B.A., 2006); Indiana University (MLS, 2009)
- Elizabeth Ann Burow-Flak, Ph.D., Associate Professor of English; Augsburg College (B.A., 1986); The University of Texas at Austin (Ph.D., 1997)
- Antoine D'Wayne Busby, Ph.D., Assistant Professor of Management in the College of Business; Louisiana State University (B.S., 2000; MBA, 2007); The University of Texas at San Antonio (Ph.D., 2018)
- Andrew J. Butler, Ph.D., Assistant Professor of Psychology; Butler University (B.A., 2006); Indiana University (Ph.D., 2011)
- Edward J. Byrne, Ph.D., Professor of English; Brooklyn College (B.A., 1974; MFA, 1976); University of Utah (Ph.D., 1983)

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<sup>20</sup> On Sabbatical Leave, Spring Semester

Faculty

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- Alexander J. Capaldi, Ph.D., Associate Professor of Mathematics and Statistics; Ferris State University (B.A., 2004; B.S., 2004); North Carolina State University (MOR, 2006; M.S., 2008; Ph.D., 2010)
- Mindy B. Capaldi, Ph.D., Associate Professor of Mathematics and Statistics; Georgetown College (B.A., 2006; B.S., 2006); North Carolina State University (M.S., 2008; Ph.D., 2010)
- Kieth Alton Carlson, Ph.D., Professor of Psychology; Gustavus Adolphus College (B.A., 1991); University of Nebraska–Lincoln (M.A., 1994; Ph.D., 1997)
- Christina Marie Cavinder, DNP, Assistant-Professor of Nursing in the College of Nursing and Health Professions; Indiana University (B.S., 1988; MSN, 1999); Valparaiso University (DNP, 2014)
- Jiun-Lin Chen, Ph.D., Assistant Professor of Finance; National Taiwan University (B.B.A., 1994; M.B.A., 1996); Louisiana State University (Ph.D., 2010)
- Lin Chen, MBA, Instructor in Accounting; Pittsburg State University (MBA, 2010)
- Michael C. Chikeleze, Ph.D., the Richard C. and Francelia A. Gozon University Chair and Associate Professor of Communication; Enugu State University of Science and Technology, Nigeria (B.S., 1990); Washington University School of Law (J.D., 1998; MBA, 2001); Benedictine University (Ph.D., 2014)
- Craig Andrew Clark<sup>21</sup>, Ph.D., Professor of Geography and Meteorology; Valparaiso University (B.A., 1991); University of Kansas (M.S., 1994); Iowa State University (Ph.D., 2007)
- Robert W. Clark, Ph.D., Associate Professor of Chemistry; Central Michigan University (B.S., 1999); University of Wisconsin–Madison (M.S., 2001; Ph.D., 2005)
- David R. Cleveland, J.D., Professor of Law; Dean, Law School; Western Michigan University (B.A., 1998); Georgetown University Law Center (J.D., 2002)
- Christopher M. Cock, DMA, Professor of Music, the Phyllis and Richard Duesenberg Chair in Lutheran Music; Pacific Lutheran University (B.M., BME, 1982); The University of Arizona (M.M., 1984; DMA, 1987)
- Ruth Sara Connell, M.S., Professor of Library Services; Muskingum College (B.A., 1998); University of Illinois at Urbana- Champaign (M.S., 2000)
- Addison Gilbert Cook, Ph.D., Senior Research Professor; Wheaton College (B.S., 1955); University of Illinois (Ph.D., 1959)
- Nina Maria Corazzo, Ph.D., Associate Professor of Art; the Walter E. Bauer Professor of Art History; Indiana University (B.A., 1969; M.A., 1977; Ph.D., 1981); University of Strasbourg
- Barbara Louise Crumpacker Niedner, MSW, Clinical Associate Professor in Social Work; Valparaiso University (BSW, 1983); Indiana University (MSW, 1985)
- Sara Running Danger, Ph.D., Associate Professor of English; Concordia College, Moorhead (B.A., 1992); South Dakota State University (M.A., 1994); University of Kansas (Ph.D., 2004)
- Angela Dautartas, Ph.D., Visiting Assistant Professor of Biology; Radford University (B.S., 2005); University of Tennessee (M.A., 2009; Ph.D., 2018)
- Milivoje Davidovic, M.A., Visiting Assistant Professor of Economics; University of Novi Sad, Serbia (B.S., 2006; M.S., 2009; Ph.D., 2015); Northern Illinois University (M.A., 2018)
- Brian Davis, M.S., Lecturer in Mathematics and Statistics; Purdue University Northwest (B.S., 2011; M.S., 2015)
- Richard Edwin DeMaris, Ph.D., Senior Research Professor; University of Illinois at Urbana–Champaign (B.A., 1976); Princeton Seminary (M.Div., 1980); Columbia University (M.Phil., 1986; Ph.D., 1990)
- Sarah Glenn DeMaris, Ph.D., Senior Research Professor; University of Illinois (B.A., 1977); Princeton University (M.A., 1980; Ph.D., 1983)
- Nicholas E. Denysenko, Ph.D., Emil & Elfrieda Jochum University Chair; Associate Professor of Theology; University of Minnesota (B.S., 1994); Catholic University of America (Ph.D., 2008)
- Melissa Anne Desjarlais, Ph.D., Associate Professor of Mathematics and Statistics; Alma College (B.S., 2000); University of Nebraska– Lincoln (M.S., 2002; Ph.D., 2009)
- Nirupama Devaraj, Ph.D., Associate Professor of Economics; Stella Maris College (B.A., 1994); Clark University (M.A., 2001; Ph.D., 2005)
- Sara S. Dick<sup>22</sup>, Ph.D., Associate Professor of Biology; Purdue University (B.S., 1997; Ph.D., 2009); University of Wisconsin, Madison (M.S., 2005)
- Jeffrey Scott Doebler, Ph.D., Professor of Music; Luther College (B.A., 1982); Valparaiso University (M.M., 1987); University of Minnesota, Twin Cities Campus (Ph.D., 1994)

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<sup>21</sup> On Sabbatical Leave, Spring Semester

<sup>22</sup> On Sabbatical Leave, Fall Semester

Faculty

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- Meichen Dong, Ph.D., Assistant Professor of Marketing in the College of Business; The University of Texas at Arlington (Ph.D., 2020)
- Alison Lynn Downey, MLS, Assistant Professor of Library Services; Indiana University Northwest (B.A., 2011); Indiana University-Purdue University Indianapolis (MLS, 2016)
- Christopher Weston Drapeau, Ph.D., Assistant Professor of Education; Indiana University South Bend (BGS, 2010); Ball State University (M.A., 2012; Ph.D., 2016)
- Lisa Maugans Driver, Ph.D., Professor of Theology; Ball State University (B.A., 1988); University of Toronto (M.A., 1989; Ph.D., 1996)
- Paul Harlan Drube, Ph.D., Associate Professor of Mathematics and Statistics; University of St. Thomas (B.A. [Mathematics], 2005; B.A. [Physics], 2005); The University of Iowa (Ph.D., 2011)
- Maryann Dudzinski<sup>23</sup>, Ed.D., Associate Professor of Education; Northern Illinois University (BSEd, 1974; MSEd, 1979; Ed.D., 1989)
- Gregory Scott Duncan, Ph.D., Professor of Mechanical Engineering; Purdue University (B.S., 1990); University of Florida (Ph.D., 2006)
- Randa Jane Duvick, Ph.D., Professor of Foreign Languages and Literatures; Luther College, (B.A., 1978); The University of Chicago (M.A., 1980; Ph.D., 1988)
- Laurie Susan Eberhardt, Ph.D., Professor of Biology; Earlham College (B.A., 1985); University of Florida (M.S., 1990; Ph.D., 1994)
- Jamie El Harit Bump, DNP, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 1995; DNP, 2015)
- Georges El-Howayak<sup>24</sup>, Ph.D.; Associate Professor of Electrical and Computer Engineering; Lebanese American University (B.E., 2008); University of New Mexico (M.S., 2010; Ph.D., 2014)
- Niclas L. Erhardt, Ph.D., Professor of Management; Dean, College of Business; Cornell University (B.S., 1999); Iowa State University (M.S., 2001); Rutgers University (M.S., 2005; Ph.D., 2008)
- Roberto Fadda, M.D., D.D., Clinical Associate Professor of Physician Assistant Studies in the College of Nursing and Health Professions; University of Ferrara, Italy (M.D., D.D.)
- John P. Fantuzzo, Ph.D., Assistant Professor of Education; Gordon College (B.A., 2006); American University (M.A., 2009); Columbia University (M.Phil., 2014; Ph.D., 2016)
- Cynthia Louise Felton, MSN, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 1979); Indiana University-Purdue University, Indianapolis (MSN, 1979)
- Dennis Friesen-Carper, DMA, Senior Research Professor; Bethel College (B.A., 1979); Rice University (M.M., 1985; DMA, 1996)
- Katrin Fuchs, Ph.D., Assistant Professor of Foreign Languages and Literatures; Heidelberg University (M.Ed., 2012); University of Texas at Austin (Ph.D., 2017)
- Bharath Ganesh Babu, Ph.D., Associate Professor of Geography and Meteorology; Presidency College (B.Sc., 1995); University of Madras (M.Sc., 1997); Indiana State University (Ph.D., 2009)
- Kevin Gary, Ph.D., Professor of Education; the Richard P. Baeppler Distinguished Professor in the Humanities; University of Notre Dame (B.A., 1992; M.A., 1997); Loyola University of Chicago (M.Ed., 2000; Ph.D., 2005)
- Shodhin K. Geiman, Ph.D., Associate Professor of Philosophy; Xavier University (A.B., 1983); Washington University (A.M., 1987; Ph.D., 1988); Goethe University
- Suzanne Kim Genovese<sup>25</sup>, Ph.D., Associate Professor of Nursing in the College of Nursing and Health Professions; Indiana University Northwest (BSN); University of Notre Dame (M.S.); Indiana University-Purdue University Indianapolis (MSN); Indiana State University (Ph.D., 2009)
- Adam Paul Gibson-Even, Ph.D., Associate Professor of Physics and Astronomy; Valparaiso University (B.A., 2000; B.S., 2000); University of California, Berkeley (M.A., 2002, Ph.D., 2006)
- Richard Alan Gillman<sup>26</sup>, D.A., Professor of Mathematics and Statistics; Associate Provost for Faculty Affairs; Ball State University (B.S., 1979; M.A., 1981); Idaho State University (D.A., 1986)
- Elizabeth Gingerich, J.D., Professor of Business Law in the College of Business; the Louis S. and Mary L. Morgal Chair in Christian Business Ethics; Indiana University (B.A., 1981; J.D., 1985)
- Michael S. Glass, Ph.D., Associate Professor of Computing and Information Sciences; Illinois Institute of Technology (M.S., 1986; Ph.D., 1998)
- Kevin H. Goebbert, Ph.D., Associate Professor of Geography and Meteorology; Valparaiso University (B.S., 2003); The University of Oklahoma (M.S., 2006; Ph.D., 2009)

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<sup>23</sup> Retired June 30, 2021

<sup>24</sup> On Sabbatical Leave, Fall and Spring Semesters

<sup>25</sup> On Sabbatical Leave, Fall Semester

<sup>26</sup> Retired February 12, 2021

Faculty

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- Craig M. Goehler, Ph.D., Associate Professor of Mechanical Engineering; the Frederick F. Jenny Professor of Emerging Technology; University of Notre Dame (BSME, 2002; MSME, 2004; Ph.D., 2007)
- Sara R. Golomb, Ph.D., Associate Professor of Education; University of Pennsylvania (B.A., 1995); Hamline University (J.D., 1998); Loyola University (MEd, 2005; Ph.D., 2010)
- Hui Gong, Ph.D., Associate Professor of Mathematics and Statistics; Tongji University (B.E., 2001); Villanova University (M.S., 2004); Temple University (Ph.D., 2010)
- Thomas Evan Goyne, Ph.D., Associate Professor of Chemistry; Union College (B.S., 1978); University of California, Los Angeles (Ph.D., 1983)
- Samuel J. Graber, Ph.D., Associate Professor of Humanities and Literature in Christ College; St. Olaf College (B.A., 1997); Yale University (MAR, 2000); The University of Iowa (M.A., 2003; Ph.D., 2008)
- Ericka Shay Tyner Grodrian, D.M., Associate Professor in Music; Converse College (B.A., 2002); University of Alabama (M.M., 2004); Indiana University (D.M., 2011)
- Jay Grossman, Ph.D., Assistant Professor of Civil Engineering; Purdue University (BSCE, 1993; MSCE 1998; Ph.D., 2017)
- Sara J. Gundersen, Ph.D., Associate Professor of Economics; University of Wisconsin (B.A., 2005); Clark University (M.A., 2008; Ph.D., 2011)
- Andrew S. Gutshall, MFA, Assistant Professor of Theatre; Illinois State University (B.S., 1995); University of Nebraska-Lincoln (MFA, 2003)
- Joseph A. Haines, M.A., Lecturer in Mathematics and Statistics; West Virginia University (B.A., 2003; M.A., 2003)
- Carter Fredric Hanson, Ph.D., Professor of English; Luther College (B.A., 1992); The University of Iowa (M.A., 1996; Ph.D., 1998)
- Daniel W. Hart, P.E., Ph.D., Senior Research Professor; Valparaiso University (BSEE, 1970); Purdue University (MSE, 1975; Ph.D., 1985)
- Haiying He, Ph.D., Associate Professor of Physics and Astronomy; Lanzhou University, China (B.S., 1997; M.S., 2000); Michigan Technological University (Ph.D., 2009)
- Mark Alan Heckler, Ph.D., President of the University; Professor of Theatre; Elizabethtown College (B.A., 1977); Catholic University (MFA, 1979); University of Colorado (Ph.D., 2011)
- George Charles Heider, Ph.D., Senior Research Professor; Concordia Senior College (B.A., 1975); Concordia Seminary, St. Louis (M.Div., 1979); Yale University (M.A., 1980; M.Phil., 1982; Ph.D., 1984)
- Kelly Dianne Helm, Ph.D., Associate Professor of Kinesiology; Brigham Young University (B.S., 1981); University of Montana (M.S., 1998); Purdue University (Ph.D., 2009)
- James P. Henderson, Ph.D., Senior Research Professor; Beloit College (B.A., 1960); Northern Illinois University (M.A., 1967; Ph.D., 1977)
- Karen R. Hernes, MSN, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Huntington University (B.A., 1997); Johns Hopkins (BSN, 2001); Valparaiso University (MSN, 2014)
- Todd Christopher Hillwig<sup>27</sup>, Ph.D., Professor of Physics and Astronomy; Anderson University (B.A., 1993); Ball State University (M.Sc., 1995); Indiana University (M.A., 1998; Ph.D., 2001)
- Patricia Marie Hogan-Vidal, MLS, Assistant Professor of Library Services; Saint Mary's College (B.A., 1980); Indiana University (MLS, 1985)
- Susan Ruth Holman, Ph.D., John R. Eckrich University Chair in Religion and the Healing Arts; Professor of Humanities in Christ College; Valparaiso University (B.A, B.S., 1979); Tufts University (M.S., 1983); Harvard Divinity School (MTS, 1991); Brown University (Ph.D., 1998)
- Jennifer Suzanne Holt, Ph.D., Associate Professor of Chemistry; Miami University (B.S., 1996); University of Michigan (Ph.D., 2002)
- Jennifer Jill Hora, Ph.D., Professor of Political Science and International Relations; University of Wisconsin at Eau Claire (B.A., 1997); University of North Carolina at Chapel Hill (M.A., 2001; Ph.D., 2004)
- Stacy Ellen Hoult-Saros, Ph.D., Professor of Foreign Languages and Literatures; Millikin University (B.A., 1989); University of Missouri (M.A., 1991); The University of Chicago (Ph.D., 1999)
- Thomas Albert Howard, Ph.D., the Phyllis and Richard Duesenberg Chair in Christian Ethics; University of Alabama (B.A., 1990); University of Virginia (M.A., 1992; Ph.D., 1996)
- Bruce J. Hrvnak, Ph.D., Senior Research Professor; University of Pennsylvania (B.A., 1971; Ph.D., 1980)
- Mike Yuwei Hsu, Ph.D., Assistant Professor of Economics; University of Southern California (B.S., 2009); California State University (M.A., 2011); University of Houston (Ph.D., 2016)

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<sup>27</sup> On Sabbatical Leave, Fall and Spring Semesters

Faculty

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- David Malcom Hull, Ph.D., Senior Research Professor; Wheaton College (B.S., 1960); Illinois Institute of Technology (M.S., 1972); University of Illinois at Chicago (Ph.D., 1982)
- Christopher R. Iceman, Ph.D., Associate Professor of Chemistry; University of Utah (B.S., 2000; Ph.D., 2008)
- Slavica Jakelić, Ph.D., Associate Professor of Humanities and Social Thought and Richard P. Baepler Distinguished Professor in the Humanities in Christ College; University of Zagreb, Croatia (B.A., 1994); Boston University (M.Th., 1997; Ph.D., 2004)
- Kevin Ladean Jantzi, Ph.D., Associate Professor of Chemistry; Goshen College (B.A., 1998); University of Wisconsin–Madison (Ph.D., 2004)
- Sarah Lynn Jantzi, MFA, Associate Professor of Art; Indiana University (B.A., 1998); American University (MFA, 2002)
- Lisa M. Jennings, Ph.D., Clinical Assistant Professor of Foreign Languages and Literatures; St. Olaf College (B.A., 1989); University of Wisconsin (M.A., 1993); University of Minnesota (Ph.D., 2004)
- Sanjeev Jha, Ph.D., Associate Professor of Information and Decision Sciences in the College of Business; College of Engineering Bhagalpur (B.S., 1993); International Management Institute (MBA, 1998); University of Illinois at Chicago (Ph.D., 2009)
- Yamini Jha, Ph.D., Lecturer in Information and Decision Sciences in the College of Business; Delhi University (B.A., 1998; M.A., 2000; MCRP, 2002); University of Illinois at Chicago (Ph.D., 2013)
- Zhenhu Jin, Ph.D., Professor of Finance in the College of Business; Shanghai Teachers' University (B.A., 1982); University of Houston (M.A., 1989; MBA, 1991; Ph.D., 1994)
- Eric W. Johnson, Ph.D., Professor of Electrical and Computer Engineering; Dean, College of Engineering; Interim Provost and Executive Vice President for Academic Affairs; Valparaiso University (BSEE, 1987); University of Notre Dame (MSCSE, 1994; Ph.D., 1997)
- Gregg Johnson, Ph.D., Associate Professor of Political Science and International Relations; University of Michigan (A.B., 1993); The University of Arizona (M.A., 1999; Ph.D., 2003)
- Lauren E. Johnson, MOT, Academic Fieldwork Coordinator and Clinical Instructor in Occupational Therapy; Concordia University (B.S., 2010; MOT, 2012)
- Peter Eric Johnson, Ph.D., Associate Professor of Mechanical Engineering; Gustavus Adolphus College (B.A., 1998); Iowa State University of Science and Technology (M.S., 2001; Ph.D., 2003)
- Reva E. Johnson, Ph.D., Assistant Professor of Mechanical Engineering; the Dale F. Kempf Professor for Emerging Technology; Valparaiso University (B.A., 2009); Northwestern University (M.S., 2013; Ph.D., 2015)
- Gregory Augustus Jones, D.Min., Lecturer in Theology; Blackburn University (B.A., 1997); Chicago Theological Seminary (M.Div., 1980; D.Min., 2000)
- Renu Juneja<sup>28</sup>, Ph.D., Professor of English; Delhi University (B.A., 1964; M.A., 1966); The Pennsylvania State University (Ph.D., 1974)
- Sean Kamperman, Ph.D., Assistant Professor of English; The University of Texas at Austin (B.A., 2011); The Ohio State University (M.A., 2015; Ph.D., 2019)
- Gokhan Karaatli, Ph.D., Visiting Assistant Professor of Marketing in the College of Business; Fairleigh Dickinson University (M.B.A., 1996); Uludag University (B.A., 1992; Ph.D., 2002)
- Allannah Karas, Ph.D., Assistant Professor of Foreign Languages and Literatures; Magdelen College (B.A., 2007); University of Dallas (M.A., 2009); The City University of New York (Ph.D., 2017)
- Frederick Graham Kavanagh, Ph.D., Assistant Professor of Foreign Languages and Literatures; Middlebury College (B.A., 1966); Princeton University; University of Virginia (M.A., [Russian], 1970); University of Hawaii (M.A., [Japanese], 1977; Ph.D., 1985)
- Jane P. Kenney-Hunt, Ph.D., Assistant Professor of Biology; Washington University in Saint Louis (Ph.D., 2017); Alma College (B.S.)
- Ann Michele Kessler, MFA, Professor of Theatre; University of Michigan–Flint (B.A., 1988); University of Michigan (MFA, 1993)
- Theresa A. Kessler, Ph.D., R.N., A.C.N.S.–B.C., Professor of Nursing in the College of Nursing and Health Professions; the Kreft Endowed Chair for the Advancement of Nursing Science; Purdue University (B.S., 1979); Indiana University (MSN, 1981); University of Kentucky (Ph.D., 1993)
- Sami Khorbotly, Ph.D., Associate Professor of Electrical and Computer Engineering; Beirut Arab University, Lebanon (B.S., 2001); University of Akron (M.S., 2003; Ph.D., 2007)
- Jon Thomas Kilpinen, Ph.D., Professor of Geography and Meteorology; Dean, College of Arts and Sciences; Valparaiso University (B.A., 1988); The University of Texas at Austin (M.A., 1990; Ph.D., 1994)
- Sunghee Kim, D. Mus., Assistant Professor of Music; University Organist; Ewha Women's University (B.M., 2002); University of North Texas (M.M., 2006); Indiana University (D. Mus., 2015)

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<sup>28</sup> Retired June 30, 2021

Faculty

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- Julia Ann Koch, DNP, Associate Professor of Nursing in the College of Nursing and Health Professions; Assistant Dean of Graduate Nursing Programs; Purdue University Calumet (BSN, 1989); Valparaiso University (MSN, 1998; DNP, 2011)
- Donald Dale Koetke, Ph.D., Senior Research Professor; Concordia College, River Forest (BSEd, 1959); Northwestern University (M.A., 1963; Ph.D., 1968)
- Tiffany N. Kolba, Ph.D., Associate Professor of Mathematics and Statistics; The Johns Hopkins University (B.A., 2006; M.A., 2006); Duke University (M.A., 2007; Ph.D., 2012)
- Gail C. Kost, MSN, Clinical Associate Professor of Nursing in the College of Nursing and Health Professions; University of Indianapolis (BSN, 1978); University of Pennsylvania (MSN, 1982)
- Peter Thomas Krenzke, Assistant Professor of Mechanical Engineering & Bioengineering; Valparaiso University (BSME, 2008); University of Minnesota (MSME, 2013; Ph.D., 2016)
- Laura Krepp, MFA., Assistant Professor of Art; University of Iowa (B.A., 2009); The School of the Art Institute of Chicago (M.F.A., 2009)
- Sanjay Kumar<sup>29</sup>, Ph.D., Associate Professor of Information and Decision Sciences in the College of Business; the Richard E. Meier Professor of Management; Indiana Institute of Technology (B.S., 1997; M.T., 2000); The University of Texas (M.S., 2005; Ph.D., 2009)
- Christine P. Kurtz, DNP, Associate Professor of Nursing in the College of Nursing and Health Professions; Purdue University (B.S., 1986); Rush University (M.S., 1991); Valparaiso University (DNP, 2011)
- Danielle Lavin-Loucks, Ph.D., Associate Professor of Sociology and Criminology; University of Wisconsin-Madison (B.A., 1996); Indiana University (M.A., 1998; Ph.D., 2002)
- Nicole Lee, M.M., Clinical Assistant Professor of Music; University of Southern California (B.M., 1994; M.M., 1996)
- Lukas Ross Leisman, Ph.D., Assistant Professor of Physics and Astronomy; Calvin College (B.S., 2011); Cornell University (M.S., 2014; Ph.D., 2017)
- Anton Lewis, Ph.D., Associate Professor of Accounting; University of Wales (B.A., 1998); Leeds Metropolitan University (Ph.D., 2010)
- Zheng Li, Ph.D., Assistant Professor of Health Science in the College of Nursing and Health Professions; Capital Medical University (M.B., 2007); University of Nevada, Reno (MPH, 2010); University of Florida (Ph.D., 2014)
- Fontaine Lien, Ph.D., Assistant Professor of Foreign Languages and Literatures; University of California, Los Angeles (B.A., 2003); University of California, Riverside (M.A., 2009; Ph.D., 2014)
- Yueh-Jaw Lin, Ph.D., Lecturer in Engineering in the Dalian Jiaogong University Program; National Tsing-Hua University, Taiwan (B.S., 1978); University of Illinois at Chicago (MSME, 1984; Ph.D., 1988)
- Zhimin Lin, Ph.D., Professor of Political Science and International Relations; Fudan University, China (B.Law, 1982); Princeton University (MPA, 1985); University of Washington (Ph.D., 1993)
- Jiangxia Liu<sup>30</sup>, Ph.D., Associate Professor of Accounting in the College of Business; Chongquig University (B.S., 1998); The University of Texas (M.S., 2005; Ph.D., 2006)
- Michael William Longan, Ph.D., Professor of Geography and Meteorology; The University of Arizona (M.A., 1995); University of Colorado at Boulder (B.A., 1993; Ph.D., 2000)
- Alberto López Martin, Ph.D., Assistant Professor of Foreign Languages and Literatures; Universidad Carlos III de Madrid (B.A., 2006); Universidad Complutense de Madrid (M.A., 2009; B.A., 2011); Universidad de Castilla-La Mancha (MAT, 2011); Florida State University (Ph.D., 2016)
- Bethany S. Luke, Ph.D., Assistant Professor of Mechanical Engineering and Bioengineering; Valparaiso University (B.S., 2013); Northwestern University (M.S., 2016); Ph.D. (Northwestern University, 2019)
- Matthew T. Luth, Ph.D., Associate Professor of Management in the College of Business; University of Nebraska (B.S., 1999); University of Kansas (Ph.D., 2012)
- Kenneth Harold Luther, Ph.D., Associate Professor of Mathematics and Statistics; Mount Union College (B.S., 1978); University of Delaware (M.S., 1991); Indiana University (Ph.D., 1998)
- Peter C. Lutze, Ph.D., Senior Research Professor; Valparaiso University (B.A., 1968); Brandeis University (MFA, 1974); University of Wisconsin (J.D., 1977; Ph.D., 1991)
- Sky S. Macklay, DMA, Assistant Professor of Music; Luther College (B.A., 2010); University of Memphis (M.M., 2012); Columbia University (DMA, 2018)
- Timothy Bruce Malchow, Ph.D., Associate Professor of Foreign Languages and Literatures; Macalester College (B.A., 1988); University of Wisconsin-Madison (M.A., 1992); University of Minnesota, Twin Cities Campus (Ph.D., 2003)

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<sup>29</sup> On Sabbatical Leave, Spring Semester

<sup>30</sup> On Sabbatical Leave, Spring Semester

Faculty

- Daniel Joseph Maguire, Ph.D., Assistant Professor of Electrical and Computer Engineering; Purdue (B.S., 1989; M.S., 1991; Ph.D., 1998)
- Jennifer Marley, Ph.D., Assistant Professor of Electrical and Computer Engineering; North Carolina State University (B.S., 2012); University of Michigan (M.S., 2014; Ph.D., 2017)
- Stacy E. Maugans, D. Mus., Associate Professor of Music; Indiana University (B.A., 1992; B. M., 1992; D. Mus. 2000); Arizona State University (M.M., 1993)
- Daniel Maxin, Ph.D., Associate Professor in Mathematics and Statistics; Dunarea de Jos University (B.S., 1997); Purdue University (M.S., 2005; Ph.D., 2007)
- Alesha McClanahan, DNP, Clinical Assistant Professor of Nursing; Valparaiso University (BSN, 2014; DNP, 2019)
- Jon-Paul McCool, M.A., Assistant Professor of Geography; University of Evansville (B.A., 2007); University of Cincinnati (M.A., 2012)
- Gilbert C. Meilaender, Ph.D., Senior Research Professor; Concordia Senior College (B.A., 1968); Concordia Seminary, St. Louis (M.Div., 1972); Princeton University (Ph.D., 1976)
- Kelly Ann Migler, R.N., MSN, Clinical Assistant Professor of Nursing; Indiana University (BSN, 2000); Valparaiso University (MSN, 2011)
- Carlos Miguel–Pueyo<sup>31</sup>, Ph.D., Professor of Foreign Languages and Literatures; University Research Professor; Universidad de Zaragoza (B.A., 1998); University of Illinois at Chicago (Ph.D., 2006)
- Patricia Jean Mileham, M.A., Associate Professor of Library Services; Dean of the Library; Acting Dean of the Graduate School and Continuing Education; University of Wisconsin–Stevens Point (B.A., 1995); The University of Iowa (M.A., 1998)
- Judith Elaine Kimbrough Miller, MLS, Assistant Professor of Library Services; Valparaiso University (B.A., 1970); North Texas State University (MLS, 1976)
- James Fraser Moore, Ph.D., Professor of Theology; Park College (B.A., 1968); Luther Theological Seminary (M.Div., 1972); The University of Chicago (Ph.D., 1982)
- Mandy M. Morrill–Richards, Ed.D., Associate Professor of Psychology; SUNY Binghampton (B.A., 1997); The College of New Jersey (M.A., 2005); University of Memphis (Ed.D., 2009)
- Lindsay Munden, DNP, Assistant Professor of Nursing in the College of Nursing and Health Professions; Purdue University North Central (A.S., 2005; B.S., 2006); Valparaiso University (M.S., 2008; DNP, 2013)
- Rami W. Musleh, B.S., PA-C, Clinical Instructor in Physician Assistant Studies in the College of Nursing and Health Professions; Indiana University (B.A., 2001); Midwestern University (B.S., 2004)
- Rachel Michelle Murray, MSW, Clinical Assistant Professor of Social Work; Valparaiso University (B.S.); Indiana University (MSW, 2014)
- Rachael L. Muszkiewicz, MLIS, Associate Professor of Library Services; Michigan State University (B.S., 1999); University of Bristol (M.A., 2004); Wayne State University (MLIS, 2010)
- Masaru Nakamoto, Ph.D., Assistant Professor of Biology; Kobe University School of Medicine (M.D., 1986); Kagoshima University Graduate School of Medical Science (Ph.D., 1993)
- James Melvin Nelson, Ph.D., Professor of Psychology; Eastern Washington University (B.A., 1976); Fuller Theological Seminary (M.Div., 1981); Washington State University (Ph.D., 1987)
- Frederick Arthur Niedner, Jr., Th.D., Senior Research Professor; Concordia Senior College (B.A., 1967); Concordia Seminary, St. Louis (M.Div., 1971; STM, 1973); Christ Seminary–Seminex (Th.D., 1979)
- James Paul Old, Ph.D., Assistant Professor of Political Science and International Relations; Hillsdale College (B.A., 1992); University of Notre Dame (M.A., 1996; Ph.D., 1999)
- Robert O’Leary, M.S., Lecturer in English in the Dalian Jiaotong University program; Hamilton College (B.A., 1992); Lehman College (M.S., 2007)
- Lee F. Orchard, Ph.D., Professor of Theatre; Concordia University River Forest (B.A., 1975; BSEd, 1975); Northwestern University (M.A., 1979); University of Oregon (Ph.D., 1988)
- Danielle Orozco-Nunnally, Ph.D., Assistant Professor of Biology; Valparaiso University (B.S., 2007); University of Illinois at Chicago (Ph.D., 2015)
- Kevin Robert Ostoyich, Ph.D., Professor of History; University of Pennsylvania (B.A., 1997); Harvard University (A.M., 1998; Ph.D., 2006)
- Lauren Ostrowski-Winkler, DNP, Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (B.S., 2010; DNP, 2014)

<sup>31</sup> On Sabbatical Leave, Fall Semester

Faculty

---

- David Michael Owens, Ph.D., Senior Research Professor; United States Military Academy (B.S., 1977); University of Georgia, Athens (M.A., 1994); Purdue University (Ph.D., 2001)
- Ceyhun Ozgur, CPIM, Ph.D., Senior Research Professor; University of Akron (B.S., 1982; M.S., 1984); Kent State University (Ph.D., 1990)
- George Pati<sup>32</sup>, Ph.D., Associate Professor of Theology; the Surjit S. Patheja, M.D. Chair in World Religions and Ethics; Sambalpur University (B.Sc., 1991); Serampore College (B.D., 1996); Garhwal University (M.A., 1998); Southern Methodist University (MTS, 2000); Boston University (Ph.D., 2006)
- Julie Peller<sup>33</sup>, Ph.D., Professor of Chemistry; Indiana University (B.S., 1986); University of Notre Dame (M.S., 1999; Ph.D., 2003)
- Diego Piedra, DMus, Assistant Professor of Music; Baylor University (B.S., 2003); University of Michigan (M.M., 2006; DMus., 2018)
- Melvin Willis Piehl, Ph.D., Senior Research Professor; Valparaiso University (B.A., 1968); Stanford University (M.A., 1970; Ph.D., 1980)
- Musa Pinar, Ph.D., Professor of Marketing in the College of Business; the Paul H. Brandt Professor of Business; Ege University (B.S., 1975); Mississippi State University (MBA, 1979; Ph.D., 1983)
- Pamela Pinchok, M.S., Clinical Assistant Professor of Physician Assistant Studies in the College of Nursing and Health Professions; Director of Clinical Education in the College of Nursing and Health Professions; Indiana University (B.S., 1986); Chicago Medical School (M.S., 1996)
- Carmine Paul Polito, P.E., Ph.D., Professor of Civil Engineering; the Alfred W. Sieving Chair of Engineering; California Polytechnic State University, San Luis Obispo (B.S., 1986); Virginia Polytechnic Institute and State University (M.S., 1989; Ph.D., 1999)
- Saso Poposki, MMF, Lecturer in Computing and Information Sciences; University of St. Cyril and Methodius (B.S., 1997); Illinois Institute of Technology (MMF, 2009)
- George Potter, Ph.D., Associate Professor of English; Indiana State University (B.A., 2002; M.A., 2005); University of Cincinnati (Ph.D., 2011)
- Aaron M. Preston, Ph.D., Professor of Philosophy; University of Southern California (B.A. 1995; Ph.D., 2002); University of Edinburgh (M.Th. 1997)
- Jennifer Sally Prough, Ph.D., Associate Professor of Humanities and East Asian Studies in Christ College; Valparaiso University (B.A., 1991); The University of Chicago (M.A., 1994); New School for Social Research (M.A., 1996); Duke University (Ph.D., 2006)
- Jeff Pruet, Ph.D., Assistant Professor of Chemistry; Louisiana State University at Baton Rouge (B.S., 2006); University of Texas at Austin (Ph.D., 2012)
- Lara Kristin Pudwell, Ph.D., Associate Professor of Mathematics and Statistics; Valparaiso University (B.A., 2003; B.S., 2003); Rutgers University (Ph.D., 2008)
- Matthew W. Puffer, Ph.D., Assistant Professor of Humanities and Ethics in Christ College; North Carolina State University (B.S., 1999); Princeton Theological Seminary (M.Div., 2009); University of Virginia (M.A., 2014; Ph.D., 2014)
- Anne Marie Raich, Ph.D., Associate Professor of Civil Engineering; West Virginia University (BSCE, 1988); Carnegie Mellon University (M.S., 1989); University of Illinois At Urbana-Champaign (Ph.D., 1999)
- Timothy Rakitan, Ph.D., Visiting Assistant Professor of Economics; University of Puget Sound (B.A., 2007); University of California Davis (M.S., 2009); Iowa State University (Ph.D., 2017)
- Andrew Raridon, Ph.D., Assistant Professor of Sociology and Criminology; Knox College (B.A., 2009); Oklahoma State University (M.S., 2013); Purdue University (Ph.D., 2017)
- Lynette May Rayman, MSN, Assistant Professor of Nursing and Assistant Dean of Undergraduate Nursing Programs in the College of Nursing and Health Professions; Valparaiso University (BSN, 1983); Purdue University (MSN, 1988)
- Andrew George Richter, Ph.D., Professor of Physics and Astronomy; Valparaiso University (B.S., 1990); Marquette University (M.S., 1992); Northwestern University (Ph.D., 2000)
- Ronald Kent Rittgers, Ph.D., Professor of History; the Erich Markel Chair in German Reformation Studies; Wheaton College (B.A., 1987); Regent College (MTS, 1992); Harvard University (Ph.D., 1998)
- David Mark Rolling, Ph.D., Associate Professor of Kinesiology; Bemidji State University (B.A., 1998; M.S., 2002); University of Kansas– Lawrence (Ph.D., 2010)
- Nicholas S. Rosasco<sup>34</sup>, D.Sc., Associate Professor of Computing and Information Sciences; University of Virginia (B.S., 2002); Loyola University (M.S., 2006); Towson University (D.Sc., 2014)
- Laura A. Rowe, Ph.D., Associate Professor of Chemistry; University of Kentucky (B.A., 2002; Ph.D., 2008)

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<sup>32</sup> On Sabbatical Leave, Spring Semester

<sup>33</sup> On Sabbatical Leave, Fall and Spring Semesters

<sup>34</sup> On Sabbatical Leave, Spring Semester

Faculty

- David L. Rowland, Ph.D., Senior Research Professor; Southern Illinois University (B.A., 1972); The University of Chicago (M.A., 1975; Ph.D., 1977)
- John Robert Ruff, Ph.D., Professor of English and the Walter G. Friedrich Professor of American Literature; St. John's University (B.A., 1973); College of St. Thomas (MAT, 1975); University of Washington (M.A., 1985; Ph.D., 1991)
- Shahin Sabokdast Nudehi, Ph.D., Associate Professor of Mechanical Engineering; the Frederick F. Jenny Professor of Emerging Technology; Sharif University of Technology (B.S., 1996; M.S., 1998); Michigan State University (M.S., 2004; Ph.D., 2005)
- Phrosini P. Samis-Smith, D.H.Ed., Assistant Professor of Health Care Leadership in the College of Nursing and Health Professions; Indiana University (B.S., M.S.); Valparaiso University (M.S., 2006); A.T. Still University (D.H.Ed., 2015)
- Ana Marcie Sariol, Ph.D., Assistant Professor of Management in the College of Business; The University of Texas (B.B.A., 2009; MBA, 2012; Ph.D., 2016)
- Daniel Earl Saros, Ph.D., Professor of Economics; Bowling Green State University (B.S., 1999); University of Notre Dame (M.A., 2001; Ph.D., 2004)
- Beth Scaglione-Sewell, Ph.D., Professor of Biology; Simpson College (B.A., 1985); Kansas State University (Ph.D., 1992)
- Charles George Herbert Schaefer, Ph.D., Professor of History; Pacific Lutheran University (B.A., 1981); The University of Chicago (M.A., 1982; Ph.D., 1990)
- Nola Ann Schmidt<sup>35</sup>, Ph.D., R.N., C.N.E., Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 1983); University of Illinois (MSN, 1990); Wayne State University (Ph.D., 2003)
- Karl R. Schmitt, Ph.D., Associate Professor of Mathematics and Statistics; Wittenberg University (B.S., 2006; B.A., 2006); University of Maryland (Ph.D., 2013)
- Dean Manning Schroeder, Ph.D., Senior Research Professor; University of Minnesota, Twin Cities Campus (BSME, 1974; Ph.D., 1985); University of Montana (MBA, 1980)
- Allison Schuette<sup>36</sup>, MFA, Associate Professor of English; Valparaiso University (B.A., 1993); The Pennsylvania State University (MFA, 2005)
- Mark R. Schwehn, Ph.D., Senior Research Professor; Valparaiso University (B.A., 1967); Stanford University (M.A., 1969; Ph.D., 1978)
- Amanda Leigh Scott, OTD, Assistant Professor of Occupational Therapy in the College of Nursing and Health Professions; Program Director of Occupational Therapy; University of Southern Indiana (B.S., 2000); Rocky Mountain University of Health Professions (OTD, 2013)
- Colleen Marie Seguin, Ph.D., Associate Professor of History; Mount Holyoke College (B.A., 1986); Duke University (M.A., 1989; Ph.D., 1997)
- Richard Sévère, Ph.D., Associate Professor of English; Florida A&M University (B.A., 2002; M.S., 2004); Purdue University (Ph.D., 2010)
- Constance S. Sheets, DNP, GCNS-BC, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 2001; MSN, 2004; DNP, 2013)
- Cheryl D. Slack, DNP, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 1978; DNP, 2015); Rush University (M.S., 1983)
- Julien C. H. Smith, Ph.D., Associate Professor of Humanities and Theology in Christ College; University of California-Berkeley (B.A., 1993); Fuller Theological Seminary (M.A., 2003); Baylor University (Ph.D., 2010)
- Paul Smith; Ph.D., Assistant Professor of Chemistry; Gettysburg College (B.S., 2010); Rutgers, the State University of New Jersey (Ph.D., 2015);
- Jillian M. Snyder, Ph.D., Lilly Fellow and Lecturer in Christ College; Trinity Western University (B.A., 2008); Simon Fraser University (M.A., 2013); University of Notre Dame (Ph.D., 2019)
- Scarlet Rae Spain, D.N.P., Assistant Professor of Nursing in the College of Nursing and Health Professions; Valparaiso University (BSN, 2006; MSN, 2008; DNP 2015)
- Jamie L. Stangel, Ph.D., Assistant Professor of Kinesiology; Valparaiso University (B.A., 2006; M.S., 2007); Concordia University (Ph.D., 2018)
- T. D. Shirvel Stanislaus, Ph.D., Professor of Physics and Astronomy; University of Sri Lanka (B.Sc., 1976); University of British Columbia (M.Sc., 1983; Ph.D., 1988)
- Brooke E. Starkoff, Ph.D., Assistant Professor of Kinesiology; College of Wooster (B.A., 2001); Cleveland State University (M.Ed., 2008); The Ohio State University (Ph.D., 2013)

<sup>35</sup> On Sabbatical Leave, Fall Semester

<sup>36</sup> On Sabbatical Leave, Fall Semester

Faculty

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- James Dill Startt, Ph.D., Senior Research Professor; University of Maryland (B.A., 1957; M.A., 1961; Ph.D., 1965)
- John R. Steele, MBA, Lecturer in Finance in the College of Business; Indiana University (B.A., 1977; MBA, 1980)
- Marlane C. Steinwart, D.M., Associate Professor of Communication; Valparaiso University (B.A., 1988; MALS, 1991); University of Phoenix Online School of Advanced Studies (D.M., 2009)
- Adam J. Stepanek, Ph.D., Assistant Professor of Geography and Meteorology; Valparaiso University (B.S., 2001); Naval Post Graduate School (M.S., 2006); Purdue University (Ph.D., 2017)
- Sonja Streuber, M.S., Lecturer in Computing and Information Sciences; Johannes-Gutenberg University (LMA, 1993); University of California (M.A., 2000); The George Washington University (M.S., 2009)
- Anthony L. Suarez, Ph.D., Assistant Professor of Psychology; Florida State University (B.S., 2004); University of Central Florida (M.A., 2011); University of Arkansas (Ph.D., 2018)
- Patrick John Sullivan<sup>37</sup>, Ph.D., Associate Professor of Mathematics and Statistics; University of Notre Dame (B.S., 1980); University of Michigan (M.S., 1985; Ph.D., 1986)
- Sangeeta N. Swamy, Ph.D., Director of Music Therapy Program; Assistant Professor of Music; Oberlin College (BM, 1991); The Cleveland Institute of Music (MM, 1993); Naropa University (MA, 2001); Lesley University (Ph.D., 2001)
- Robert John Swanson, Ph.D., Professor of Biology; Purdue University (B.S., 1995); The University of Chicago (Ph.D., 2001)
- Zsuzsanna Szaniszlo, Ph.D., Professor of Mathematics and Statistics; Kossuth University (B.S., 1990); McMaster University (M.S., 1992); University of Nebraska–Lincoln (Ph.D., 1996)
- Abbie Thompson, Ph.D., Assistant Professor of Psychology; University of California, Davis (B.S., 2013); University of Notre Dame (M.A., 2016; Ph.D., 2019)
- Aimee B. Tomasek, MFA, Associate Professor of Art; University of Wisconsin–Green Bay (B.A., 1989); University of Kentucky, Lexington (MFA, 1993)
- Timothy Joseph Tomasik, Ph.D., Professor of Foreign Languages and Literatures; DePaul University (B.A., 1992); University of Minnesota (M.A., 1995); Harvard University (A.M., 1998; Ph.D., 2003)
- Paul Douglas Tougaw, P.E., Ph.D., Professor of Electrical and Computer Engineering; Interim Dean, College of Engineering; the Leitha and Willard Richardson Professor of Engineering; Rose–Hulman Institute of Technology (BSEE, 1991); University of Notre Dame (Ph.D., 1995)
- Joseph D. Trendowski, Ph.D., Assistant Professor of Management in the College of Business; Alfred University (B.S., 2004; MBA, 2005); Old Dominion University (Ph.D., 2012)
- Barbara A. Tyree, Ph.D., Associate Professor of Kinesiology; Lamar University (B.S., 1976); Washington State University (M.S., 1993); University of Idaho (Ph.D., 1996)
- Katharina B. Uhde, Ph.D., Associate Professor of Music; University of Music (B.M., 2006); University of Michigan (M.M., 2005; DMS, 2009); Duke University (M.A., 2011; Ph.D., 2013)
- Edward C. Upton, Ph.D., Associate Professor of Humanities in Christ College; Harvard University (B.A., 1995); The University of Chicago Divinity School (M.A., 2001; Ph.D., 2010)
- Michelle van Solt, Ph.D., Assistant Professor of Marketing in the College of Business; Florida State University (B.A.S., 2011); Florida International University (M.I.B., 2015; Ph.D., 2019)
- Susan E. VanZanten, Ph.D., Professor of Humanities and Literature in Christ College; Dean, Christ College; Westmont College (B.A., 1978); Emory University (M.A., 1981; Ph.D., 1982)
- Luke L. Venstrom, Ph.D., Associate Professor of Mechanical Engineering; Valparaiso University (B.S., 2007); University of Minnesota (M.S., 2010; Ph.D., 2012)
- Angela S. Vernon, Ph.D., Associate Professor of Psychology; Muskingum College (B.A., 1991); Kent State University (M.A., 1994; Ph.D., 1998)
- Mark G. Wagenaar, Ph.D., Assistant Professor of English; Graceland University (B.A., 2003); University of Northern Iowa (M.A., 2007); University of Virginia (MFA, 2010); University of North Texas (Ph.D., 2016)
- Polly F. Wainwright, M.S., Lecturer in Computing and Information Sciences; Purdue University (B.S. 1996); Indiana University South Bend (M.S., 2007)
- Walter Wangerin, Jr., M.A., Litt.D. [Hon.], Senior Research Professor; Concordia Senior College (B.A., 1966); Miami University (M.A., 1968); Christ Seminary–Seminex (M.Div., 1976); Valparaiso University (Litt.D. [Hon.], 1986)
- John D. Ward, MBA, Lecturer in Management in the College of Business; Indiana University (BSBA, 1982); Indiana University Northwest (MBA, 1993)
- Michael K. Watters, Ph.D., Professor of Biology; Washington University (B.A., 1986); University of Washington (Ph.D., 1993)

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<sup>37</sup> On Sabbatical Leave, Spring Semester

Faculty

- Peter Thomas Weiss<sup>38</sup>, P.E., Ph.D., Professor of Civil Engineering; Michigan Technological University (B.S., 1989; M.S., 1990); University of Minnesota (Ph.D., 1996)
- Ruth E. Wertz<sup>39</sup>, Ph.D., Assistant Professor of General Engineering; Trine University (B.S., 2002); Purdue University (M.S., 2010; Ph.D., 2014)
- Jan Marie Westrick<sup>40</sup>, Ed.D., Professor of Education; Concordia College, River Forest (B.A., 1977); Northwestern University (M.A., 1978); National– Louis University (CAS, 1990); University of Minnesota, Twin Cities Campus (Ed.D., 2002)
- Kimberly J. Whalen, MLIS, Associate Professor of Library Services; Illinois Institute of Technology (BBA, 1990); University of Pittsburgh (MLIS, 2002)
- Daniel J. White<sup>41</sup>, Ph.D., Associate Professor of Electrical and Computer Engineering; University of Nebraska – Lincoln (B.S., 2005; M.S., 2006; Ph.D., 2014)
- Robert Andrew White, MFA, Professor of Theatre; Valparaiso University (B.A., 1990); Carnegie Mellon University/Moscow Art Theatre School (MFA, 1996)
- Robert J. Wichlinski, MALS, Lecturer in Computing and Information Sciences; Valparaiso University (B.A., 1982; MALS, 2013)
- Coleen R. Wilder, Ph.D., Associate Professor of Management in the College of Business; Indiana University Northwest (B.S., 1978); The University of Chicago (MBA, 1995); Illinois Institute of Technology (Ph.D., 2010)
- Jeffrey Dale Will, Ph.D., Professor of Electrical and Computer Engineering; University of Illinois at Urbana–Champaign (B.S., 1995; M.S., 1997; Ph.D., 2001)
- Jennifer Rae Winquist<sup>42</sup>, Ph.D., Professor of Psychology; Purdue University (B.A., 1994); University of Illinois at Chicago (M.A., 1997; Ph.D., 2000)
- Suzanna M. Wise, Ph.S., Assistant Professor of Psychology; The George Washington University (B.A., 2003; M.A., 2011; Ed.S., 2012); Northern Illinois University (Ph.D., 2020)
- Bart Joseph Wolf, Ph.D., Professor of Geography and Meteorology; University of Wisconsin–Madison (B.S. 1983; M.S., 1986; Ph.D., 1991)
- Richard Wolff, Ph.D., Associate Professor of Communication; Valparaiso University (B.A., 1987); Lutheran School of Theology at Chicago (M.A., 1989); Ohio University (Ph.D., 1992); Lutheran Theological Seminary (STM, 2017)
- Stephanie Marie Wong, Ph.D., Assistant Professor of Theology; Washington University in St. Louis (B.A., 2010); Yale University Divinity School (M.Div., 2013); Georgetown University (Ph.D., 2018)
- Philip Woodward, Ph.D., Assistant Professor of Philosophy; Seattle Pacific University (B.A., 2005); Indiana University (M.A., 2009; Ph.D., 2015)
- Elizabeth Thelma Wuerffel, MFA, Associate Professor of Art; Valparaiso University (B.A., 2000); Columbia College – Chicago (MFA, 2006)
- Aysegul Yayimli, Ph.D., Associate Professor of Computing and Information Sciences; Istanbul Technical University (B.S., 1993; M.S., 1995; Ph.D., 2003)
- Lissa J. Yogan, Ph.D., Professor of Sociology and Criminology; Assistant Provost for Faculty Affairs; Valparaiso University (B.A., 1982); The Ohio State University (M.A., 1984); Notre Dame University (Ph.D., 1994)
- Hilma–Nelly Zamora–Breckenridge, Ph.D., Associate Professor of Foreign Languages and Literatures; Universidad Distrital Francisco Jose de Caldas (B.A., 1988); Instituto Caro y Cuervo (M.A., 1992); Instituto de Cooperacion Iberoamericana (Dip. de Leng. y Lit. española, 1993); University of Colorado at Boulder (Ph.D., 1998)
- Joseph A. Zart, MSN, Clinical Assistant Professor of Nursing in the College of Nursing and Health Professions; Indiana Wesleyan (BSN, 2009; MSN, 2015)
- Joseph E. Zaweski, MSPAS, Associate Professor of Physician Assistant Studies; Assistant Dean for Physician Assistant Program in the College of Nursing and Health Professions; Louisiana State University (BGS, 1991); Hahnemann University (B.S., 2000); University of Nebraska (MSPAS, 2007)
- Amanda Dovidio Zelechoski, Ph.D., Associate Professor of Psychology; Kapfer University Research Professor; University of Notre Dame (B.A., 2002); Villanova University School of Law (J.D., 2007); Drexel University (M.S., 2007; Ph.D., 2009)
- Suzanne Elizabeth Zentz, DNP, Associate Professor of Nursing in the College of Nursing and Health Professions; Assistant Dean of Undergraduate Nursing Programs; Indiana University (BSN, 1982); The University of Texas Medical Branch at Galveston (MSN, 1988); Valparaiso University (DNP, 2010)

<sup>38</sup> On Sabbatical Leave, Spring Semester

<sup>39</sup> On Sabbatical Leave, Spring Semester

<sup>40</sup> Retired June 30, 2021

<sup>41</sup> On Sabbatical Leave, Fall Semester

<sup>42</sup> On Sabbatical Leave, Fall and Spring Semesters

Faculty

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Di Zhang, Ph.D., Assistant Professor of Mechanical Engineering; Lamar University Beaumont (M.S., 2010); Villanova University (Ph.D., 2016)

Yue Zhang, Ph.D., Associate Professor of International Studies; Liaoning Normal University (B.A., 2004); Beijing Normal University (M.A., 2007); University of Toronto (Ph.D., 2013)

Stanislaus A. Zygmunt, Ph.D., Professor of Physics and Astronomy; Massachusetts Institute of Technology (S.B. [Physics], 1984; S.B. [Mat. Sc./ Eng.], 1984; Ph.D., 1988)

## **Adjunct Faculty, 2020-2021**

Vangeliya Adams, M.A., Adjunct Instructor in Economics

Zubaidah Albaro, M.A., Adjunct Instructor in Valpo CORE

Maribel Alvarado, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Sue Zelus AmRhein, M.S., Adjunct Instructor in Biology

Kelly M. Anthony, J.D., Adjunct Instructor in General Studies

Matthew J. Arnold, J.D., Adjunct Instructor in Communication

Sarah J. Baran, M.S., Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Karl William Berner, B.A., Adjunct Instructor in the Graduate School

Anne Marie Bice, M.M., Adjunct Instructor in Music

Angela Bien, M.S., Adjunct Instructor in Education

Kristen Jean Blood, BSME, Adjunct Instructor in Mechanical Engineering

Abbey Bodine, B.S., Adjunct Instructor in Communication

Cristina Borsilli, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Jeanne A. Brown, Ph.D., Adjunct Assistant Professor of Psychology

Jeffrey C. Brown, M.M., Adjunct Assistant Professor of Music

Kathy C. Brown, M.A., Adjunct Instructor in the Graduate School; Adjunct Instructor in General Studies

Lorraine Brugh, MTS, Ph.D., Adjunct Professor of CORE and Theology

Jonathan Nicolas Busarow, M.M., Adjunct Instructor in Music

Renee A. Buell, M.Ed., Adjunct Instructor in Education

Michelle R. Bulington, MSW, Adjunct Instructor in Education

Ryan Bye, M.Ed., Adjunct Instructor in General Studies

Brett M. Calland, M.A., Adjunct Instructor in General Studies

Sarah Beth Camel, Adjunct Instructor in Education

Samantha Anne Camp, B.S., Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Christina J. Castillo, M.S., Adjunct Instructor in Education

Amanda J. Chambers, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Mary Pat Champeau, M.A., Adjunct Assistant Professor in the Graduate School

Frances Clark, DNP, Adjunct Assistant Professor of Nursing in the College of Nursing and Health Professions

Gina Coffee, Ph.D., Adjunct Instructor in Education

Stewart E. Cooper, Ph.D., Adjunct Professor in the Graduate School

Elizabeth Copeland, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Michele E. Corazzo, MFA, Adjunct Assistant Professor of Art

Elizabeth Corcoran, M.A., Adjunct Instructor in Psychology

Susan Coryell, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Jeffrey Allen Coto, DNP, Adjunct Assistant Professor of Nursing in the College of Nursing and Health Professions

Morgan Cullings, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

James C. Daugherty, M.S., Adjunct Instructor in Kinesiology

Christina Marie Davis, Ph.D., Adjunct Assistant Professor of Chemistry

Erica Lynn Deenihan, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Archana Dharanipragada, M.S.E.E., Adjunct Instructor in Electrical and Computer Engineering

Adam DeSorgo, M.M., Adjunct Instructor in Music

Elizabeth A. Douglas, J.D.; Adjunct Assistant Professor of Communication

Paula N. Dranger, MSW, Adjunct Assistant Professor in the Graduate School; Adjunct Instructor in Health Professions in the College of Nursing and Health Professions

Zaklina Duleva, M.S.E.E, Adjunct Instructor in Electrical and Computer Engineering

Jennifer Easthope, M.S., Adjunct Instructor in General Studies

Natalie J. Eddy, DNP, Adjunct Professor of Nursing in the College of Nursing and Health Professions

Faculty

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Salena Elish, B.A., Adjunct Instructor in Theatre

Rachel Etebari Goharizzi, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Natalie Evans, Ph.D., Adjunct Assistant Professor in the Graduate School

Andrea L. Farmer, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Rachel J. Fischer, DNP, Adjunct Assistant Professor of Nursing in the College of Nursing and Health Professions

Rose Flinchum, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Donna Dianne Foran, M.S., Adjunct Instructor in the College of Business

Erik V. Froelich, MBA, Adjunct Instructor in the Graduate School

Cynthia Lee Fudala, M.M., Adjunct Instructor in Music

Erica Gibson-Even, M.Div., Adjunct Instructor of Theology

Wyndham Galbraith, M.A., Adjunct Instructor in Mathematics and Statistics

Erica Gibson-Even, M.Div., Adjunct Instructor in Theology

Michele Gillman, M.S., Adjunct Instructor in Education

Jacob M. Goering, DEd., Adjunct Assistant Professor in the Graduate School

Craig Golbesky, M.A., Adjunct Instructor in the Graduate School

Morgan E. Goldsmith, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Chitra Golestani, Ph.D., Adjunct Assistant Professor in the Graduate School

Carol Ediger Goss, M.A., Adjunct Instructor in Foreign Languages and Literatures

Joseph S. Goss, M.A., Adjunct Instructor in CORE

David Govertsen, M.M., Adjunct Instructor in Music

Lynn Grantz, M.A., Adjunct Instructor in CORE

Melissa Grcich, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

John Grodrian, Adjunct Instructor in Music

Amy L. Hammoud, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Julie Marie Hamrick, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Claire Happel Ashe, M.Mus., Adjunct Instructor in Music

Dianna Lynn Harris, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Roger Lee Harris, B.M., Adjunct Instructor in Music

Scott Harrison, J.D., Adjunct Instructor in Health Professions in the College of Nursing and Health Professions

Lisa Marie Hartline, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Christina Hearne, MPA, Adjunct Instructor in Social Work

Lauren Heffernan, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

David R. Henreckson, Ph.D., Adjunct Assistant Professor of Humanities in Christ College; Adjunct Assistant Professor in CORE

Gregg Allen Hertzlieb, MFA, Adjunct Assistant Professor of Art

Nicole Holland, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Agnes Rose Howard, Ph.D., Adjunct Instructor in Humanities in Christ College

Norman Hudson, Ph.D., Adjunct Assistant Professor of Biology

Lindsay Humpfer, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Lindsay Hunt, M.S., Adjunct Instructor in Geography and Meteorology

Callie A. Hutton, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Jennet Noble Ingle, B.M., Adjunct Instructor in Music

Steven V. Ingle, M.M., Adjunct Instructor in Music

Kari-Anne Innes, MALS, Adjunct Assistant Professor of Music and Theology

Steven Janowiak, M.Ed., Adjunct Instructor in the Graduate School

Ryan K. Kamphuis, M.S., Adjunct Instructor in Education

Kaitlin Kendys, DNP, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Daniel Edward Michael Kenning, B.S., Adjunct Instructor in Physics and Astronomy

Denise Chigas Kirkland, M.M., Adjunct Instructor in Music

Faculty

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Andrew Knox, M.S., Adjunct Instructor in General Studies

Ashley N. Kohler, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Christia Kolasa, MSW, Adjunct Instructor in CORE

James Alan Konsbruck, M.M., Adjunct Instructor in Music

Carla Koshy, DPT, Adjunct Assistant Professor of Occupational Therapy

Paul R. Lapsansky, M.S., Adjunct Instructor in Computing and Information Sciences

Stephanie Lee, Ph.D., Adjunct Assistant Professor of Health Professions in the College of Nursing and Health Professions

BettyAnn Leeseberg-Lange, M.F.A., Adjunct Instructor in Theatre

Tristan William Leonhard, M.S., Adjunct Instructor in Kinesiology

Kristin Janne Lewis, M.A., Adjunct Instructor in Theology

Michelle L. Lipton-Carroll, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Peter C. Lutze, Ph.D., Adjunct Professor of Communication

David Machavariani, M.A., Adjunct Instructor in Music

Karl D. Madsen, MBA, Adjunct Assistant Professor in the College of Business

Shane L. Malecha, DOT, Adjunct Assistant Professor of Occupational Therapy

Byron R. Martin, M.Ed., Adjunct Instructor in General Studies

Patricia Lee Maule, R.N., MSN, AOCNP, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Dana McPhall, J.D., Adjunct Instructor in the Graduate School

Christopher Alan McQuillin, J.D., Adjunct Associate Professor in the Graduate School; Adjunct Assistant Professor in Health Professions in the College of Nursing and Health Professions

Richard A. McSparin, MSBA, Adjunct Assistant Professor in the College of Business

David Clay Mettens, M.A., Adjunct Instructor in Music

Lauren Parker Meyers, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Mohammadreza Mirzahosseini,, Ph.D., Adjunct Instructor in Civil and Environmental Engineering

Natalie Mitchell, MDS, Adjunct Instructor in Education

James Fraser Moore, Ph.D., Adjunct Professor of Theology

Sarah Lynn Nabors, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Nicole Margaret Niemi, M.S., Adjunct Instructor in Communication

Michael J. Olenik, Pharm.D., Adjunct Assistant Professor of Nursing in the College of Nursing and Health Professions

Tiffany C. Orange, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Ali K. Oskouie, Ph.D., Adjunct Instructor in Civil and Environmental Engineering

Laurie G. Parpart, DNP., Adjunct Assistant Professor of Nursing in the College of Nursing and Health Professions

Kajal B. Patel, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Carole Ann Pepa, Ph.D., Adjunct Professor of Nursing in the College of Nursing and Health Professions

Ashleigh Y. Peterson, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Erica Louise Plotner, B.S., Adjunct Instructor in Theatre

Cynthia K. Pluta, J.D., Adjunct Instructor in the Graduate School and CORE

Megan E. Pugh, M.S., Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Greg Quartucci, M.S., Adjunct Instructor in Geography and Meteorology

Mark Rafalski, MBA, Adjunct Instructor in Health Professions in the College of Nursing and Health Professions

Rebekah Reichard, M.S., Adjunct Instructor in Kinesiology

Mary Lee Siedentop Riley, MALS, Adjunct Instructor in Music

Christine Roberts, M.A., Adjunct Instructor in Mathematics and Statistics

Hope R. Robinson, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

Adam S. Rosenblatt, M.M., Adjunct Instructor in Music

Stefan Roseen, B.S., Adjunct Instructor in Theatre

Claudine E. Ruzga, PA-C, Clinical Instructor in Physician Assistant Studies in the College of Nursing and Health Professions

Jennifer Sabuda, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions

## Faculty

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Ruben Sanchez, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Sandra M. Sanchez, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Nancy Scannell, M.S., Adjunct Instructor in General Studies  
Scott J. Schenone, MBA, Adjunct Instructor in the Graduate School  
Robert Schickel, B.S., Adjunct Instructor in Civil and Environmental Engineering  
Stephen J. Schnurr, DMA, Adjunct Instructor in Music  
Joanna Schulz, M.M., Adjunct Instructor in Music  
Peter M. Sedrak, MBA, Adjunct Assistant Professor in Computing and Information Sciences  
Rin C. Seibert<sup>43</sup>, M.S., Adjunct Instructor in Kinesiology  
Phillip Serna, D.M., Adjunct Instructor in Music  
Aco Sikoski, MSE, Adjunct Instructor in Civil Engineering  
Jeri Lynn Simms, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Jacob Sitati, J.D., Adjunct Instructor in Communication and Political Science  
Charles Scott Steck, M.M., Adjunct Instructor in Music  
Kevin M. Steele, Ed.S., Adjunct Instructor in General Studies  
Courtenay C. Stewart-Reiner, M.S., Adjunct Instructor in Psychology  
Heather Strickler, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Laura Sutton, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Kari Ann Torma, Ph.D., Adjunct Assistant Professor of Physician Assistant Studies in the College of Nursing and Health Professions  
Ryan Torma, Ph.D., Adjunct Assistant Professor of Communication  
Cynthia Trapanese, M.Ed., Adjunct Instructor in the Graduate School  
Neha S. Tripathi, DOT, Adjunct Assistant Professor of Occupational Therapy in the College of Nursing and Health Professions  
Melanie Kathryn Trowbridge, MBA, Adjunct Instructor in the Graduate School  
Kristine Cecilia Tucker, M.A., Adjunct Instructor in the Graduate School  
Amy Turner LaDow, B.S., Adjunct Instructor in Mathematics and Statistics  
Dawn Marie VanderMeer, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Goeffrey VanderPal, Ph.D., Adjunct Assistant Professor in the College of Business  
Rocio Vargas, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Juli L. Verkler, MSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Kent J. Warren, Ph.D., Adjunct Instructor in General Engineering  
Richard E. Watson, M.M., Adjunct Instructor in Music  
Janelle E. White M.A., Adjunct Instructor in General Studies  
Carolyn Elizabeth Whittier, Ph.D., Adjunct Assistant Professor of General Studies  
E. Louise Williams, D.D., Adjunct Instructor in Theology  
Jessica L. Wilson, MBA, Adjunct Instructor in General Studies  
Stacey Wiszowaty, B.S., Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Jill Yarosz, BSN, Adjunct Instructor in Nursing in the College of Nursing and Health Professions  
Emily L. Yiannias, M.M., Adjunct Instructor in Music  
XiaoYue Zhang, Ph.D., Adjunct Professor of Chinese Studies

## Faculty Emeriti, 2020-2021

Kurt Douglas Acton, Ph.D., Associate Professor Emeritus of Education; Central Michigan University (B.S., 1968; MBA, 1972); University of Illinois at Urbana-Champaign (Ph.D., 1983)

Rhea Ann Adgate, MALS, Assistant Professor Emerita of Home Economics; Michigan State University (B.S., 1949); Valparaiso University (MALS, 1973)

Mohamed Faisal Ahmedkutty, LL.M., Associate Professor Emeritus of Law; University of Ottawa (LL.B., 1994); York University, Osgoode Hall Law School (LL.M., 2006)

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<sup>43</sup> Deceased, August 21, 2020

Faculty

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- James William Albers, Th.D., Professor Emeritus of Theology; Concordia Senior College (B.A., 1959); Concordia Seminary, St. Louis (M.Div., 1963; STM, 1964; Th.D., 1972)
- Elise Marta Alverson, DNP, R.N., FNP-BC, CNE, Clinical Associate Professor Emerita of Nursing; St. Louis University (B.S., 1972); Ball State University (MSN); Valparaiso University (DNP, 2011)
- Norman Robert Amundsen, M.S., Associate Professor Emeritus of Physical Education; University of Wisconsin (B.S., 1955; M.S., 1967)
- Katharine Antommaria (Ingham), Ph.D., Associate Professor Emerita in the Valpo Core; Lake Erie College (B.A., 1958); Massachusetts General Hospital (R.D., 1959); University of Pittsburgh (M.S., 1961; Ph.D., 1980)
- Daniel Lee Arkkelin, Ph.D., Professor Emeritus of Psychology; Bowling Green State University (B.S., 1974; M.A., 1976; Ph.D., 1978)
- Richard Paul Baeppler<sup>44</sup>, Ph.D., Professor Emeritus of Theology and Law; Concordia Seminary, St. Louis (B.A., 1952, M.Div., 1954); Theologische Hochschule, Hamburg; University of Erlangen; The University of Chicago (Ph.D., 1964)
- Richard Lawrence Balkema, Ph.D., Professor Emeritus of Political Science; Western Michigan University (B.A., 1962; M.A., 1963); Southern Illinois University (Ph.D., 1971)
- 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
- Michael W. Becker, CPA, Ph.D., Assistant Professor Emeritus in the College of Business; Wayne State University (B.S., 1962); University of Connecticut (MBA, 1975); University of Bridgeport (M.A., 1982); University of Illinois at Chicago (Ph.D., 1994)
- James A. Bernard, Jr., Ph.D., Associate Professor Emeritus of Economics; Manhattan College (BBA, 1965); University of Notre Dame (Ph.D., 1972)
- Bruce Gilbert Berner, LL.M., Professor Emeritus of Law; the Louis and Anna Seegers Professor Emeritus in Law; Valparaiso University (B.A., 1965; LL.B., 1967); Yale University (LL.M., 1978)
- John Paul Bernthal, DMA, Associate Professor Emeritus of Music; Valparaiso University (B.M., 1970); University of Rochester (M.M., 1972); University of Illinois (DMA, 1982)
- Robert Frank Blomquist, J.D., Professor Emeritus of Law; University of Pennsylvania (B.S., 1973); Cornell University (J.D., 1977)
- Ivan Edward Bodensteiner, J.D., Professor Emeritus of Law; Loras College (B.A., 1965); University of Notre Dame (J.D., 1968)
- Thomas E. Boyt, DVM, Ph.D., Professor Emeritus of Marketing in the College of Business; United States Air Force Academy (B.S., 1973); Colorado State University (DVM, 1980); The University of Oklahoma (Ph.D., 1994)
- Allan Robert Brandhorst, Ph.D., Professor Emeritus of Education; University of Missouri-Columbia (BSEd, 1963; M.Ed., 1970; Ph.D., 1973)
- Richard H. W. Brauer, M.S., Associate Professor Emeritus of Art; Institute of Design of Illinois Institute of Technology (B.S., 1951; M.S., 1960)
- Philip L. Brockington, Jr., J.D., Associate Professor Emeritus of Law; Amherst College (B.A., 1962); Harvard University Law School (J.D., 1965)
- Janet Marie Brown, R.N., Ph.D., Professor Emerita of Nursing; Indiana University (BSN, 1969); St. Xavier College (MSN, 1983); University of Wisconsin-Milwaukee (Ph.D., 1995)
- Jeffrey C. Brown, M.M., Clinical Assistant Professor Emeritus of Music; Calumet College (B.A., 1978); Valparaiso University (M.M., 1981)
- Michael J. Bushbaum, J.D., M.Lib., Associate Professor Emeritus of Law Librarianship; University of Nevada (B.S., 1990); Northwestern School of Law Lewis & Clark College (J.D., 1993); University of Washington (M. Lib., 1994)
- Derrick A. Carter, J.D., Associate Professor Emeritus of Law; Eastern Michigan University (B.S., 1972); Valparaiso University (J.D., 1975)
- Curtis W. Cichowski, J.D., Professor Emeritus of Law; Carroll College (B.A., 1978); Valparaiso University (J.D., 1981)
- Rex Cunningham, MFA, Associate Professor Emeritus of English; Rutgers University (A.B., 1953); State University of Iowa (MFA, 1959)
- Grayson S. Davis, Ph.D., Professor Emeritus of Biology; George Washington University (B.S. 1970); University of Virginia (Ph.D., 1981)
- Debra L. Denslaw, MSLIS, Associate Professor Emerita of Law Librarianship; Franklin College (B.A., 1979); Valparaiso University (J.D., 1989); University of Illinois at Urbana-Champaign (MSLIS, 2003)
- Laura Gaston Dooley, J.D., Professor Emeritus of Law; University of Arkansas (B.A., 1982); Washington University (J.D., 1986)
- Michael Louis Doria, Ph.D., Associate Professor Emeritus of Mechanical Engineering; Case Institute of Technology (B.S., 1961; M.S., 1963); The Johns Hopkins University (Ph.D., 1968)

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<sup>44</sup> Deceased, November 19, 2020

Faculty

- Charles A. Ehren, Jr., J.D., Professor Emeritus of Law; Columbia College, New York (A.B., 1954); Columbia University School of Law (J.D., 1956); University of Pennsylvania Law School
- Gail McGrew Eifrig, Ph.D., Professor Emerita of English; Valparaiso University (B.A., 1962); Bryn Mawr College (M.A., 1963; Ph.D., 1982)
- William Frederick Eifrig, Jr., DMA, Professor Emeritus of Music; Valparaiso University (B.A., 1955); University of Michigan (M.M., 1957; DMA, 1962)
- Steven Carl Engerer, Ph.D., Associate Professor Emeritus of Chemistry; Michigan State University (B.S., 1975); The University of Chicago (Ph.D., 1982)
- Gene R. Evans, Ph.D., Associate Professor Emerita of Biology; Valparaiso University (B.S. in H.E., 1963); The University of Iowa (M.S., 1966); Purdue University (Ph.D., 1986)
- John William Feaster, Ph.D., Walter G. Friedrich Professor Emeritus of American Literature; Professor Emeritus of English; Valparaiso University (B.A., 1963); Northern Illinois University (M.A., 1966); Purdue University (Ph.D., 1970)
- Linda Carol Ferguson, DMA, Professor Emerita of Music; University of Missouri – Kansas City (B.M., 1968; M.M., 1970; DMA, 1978)
- Louis Ashley Foster, Ph.D., Professor Emeritus of Mathematics and Computer Science; Monmouth College (B.S., 1951); McCormick Theological Seminary (B.D., 1954); Purdue University (M.S., 1959; Ph.D., 1964)
- Frederick Lawrence Frey, MFA, Associate Professor Emeritus of Art; University of Wisconsin (B.S., 1962; MFA, 1965)
- Carl Frederick Galow, Ed.D., Associate Professor Emeritus of Communication; Valparaiso University (B.A., 1957); University of Wisconsin (M.S., 1958); Oklahoma State University (Ed.D., 1973)
- Philip Klepfer Gehring, Ph.D., Frederick A. and Mazie N. Reddel Professor Emeritus of Music; Professor Emeritus of Music; Oberlin College (A.B., 1950; Mus.B., 1950); Syracuse University (M.M., 1955; Ph.D., 1963)
- Demosthenes P. Gelopoulos, Ph.D., Leitha and Willard Richardson Professor Emeritus of Engineering; Professor Emeritus of Electrical and Computer Engineering; Valparaiso University (BSEE, 1960); University of Notre Dame (MSEE, 1962); The University of Arizona (Ph.D., 1967)
- Marcia Lou Gienapp, J.D., Professor Emerita of Law; Valparaiso University (B.A., 1973; J.D., 1977)
- Delphina Hopkins Gillispie, Ph.D., Associate Professor Emerita of Education; Berea College (B.A., 1973); Eastern Kentucky University (M.S., 1975); Purdue University (Ph.D., 2008)
- Naomi Joy Goodman, Dip. L., Technical Services Librarian Emerita with rank of Associate Professor Emerita in the School of Law; University of Queensland (B.A., 1968); University of New South Wales (Library Science Diploma, 1969)
- Christoffer–Hinrich Grundmann, Prof. Dr.theol. habil., John R. Eckrich University Chair Emeritus in Religion and the Healing Arts; University of Hamburg (Mag.theol., 1977; Dr.theol., 1992; Dr.theol.habil., 1996; Prof., 2001)
- Alan F. Harre, Ph.D., President Emeritus; Concordia Senior College (B.A., 1962); Concordia Seminary, St. Louis (M.Div., 1966); Presbyterian School of Christian Education (M.A., 1967); Wayne State University (Ph.D., 1976)
- Geoffrey J. Heeren, LL.M., Professor Emeritus of Law; The University of Chicago (B.A., 1996); New York University School of Law (J.D., 2000); Georgetown Law (LL.M., 2012)
- Johannes Helms, Ph.D., Professor Emeritus of Foreign Languages and Literatures; Valparaiso University (B.A., 1953); University of Michigan (M.A., 1954; Ph.D., 1963)
- Garland Fisher Hicks, Jr., Ph.D., Associate Professor Emeritus of Biology; St. Lawrence University (B.S., 1967); Michigan State University (Ph.D., 1975)
- Jack Merle Hires<sup>45</sup>, J.D., Assistant Professor Emeritus in the College of Business; Indiana University, South Bend (BGS, 1980); Valparaiso University (J.D., 1983)
- Sarah Holterhoff, MALS, Associate Professor Emerita of Law Librarianship; The Ohio State University (BSEd, 1970); University of Wisconsin–Milwaukee (MALS, 1975)
- Derrick Howard, J.D., Associate Professor Emeritus of Law; Associate Dean for Experiential Education and Administration; University of Pittsburgh (B.A., 1987; J.D., 1990)
- Norman LeRoy Hughes, M.S., Associate Professor Emeritus of Mathematics and Computer Science; Ohio Northern University (B.S., 1953); University of Wisconsin (M.S., 1958)
- Stanley Leake Hughes<sup>46</sup>, Ph.D., Assistant Professor Emeritus of Psychology; University of Virginia (B.A., 1967; M.Ed., 1971); University of Rhode Island (M.A., 1988; Ph.D., 1991); University of California, San Francisco

<sup>45</sup> Deceased March 17, 2020

<sup>46</sup> Deceased March 30, 2020

Faculty

- Gregory D. Hume<sup>47</sup>, Ph.D., Associate Professor Emeritus of Mathematics and Computer Science; University of Montana (B.A., 1978; M.S., 1986); Illinois Institute of Technology (Ph.D., 1995)
- Rebecca Jean Huss, LL.M., Professor Emerita of Law; University of Northern Iowa (B.A., 1989); University of Richmond (J.D., 1992); The University of Iowa (LL.M., 1995)
- Ronald Arthur Janke, Ph.D., Professor Emeritus of Geography and Meteorology; Marquette University (B.A., 1965); University of Wisconsin-Milwaukee (M.A., 1967); University of Minnesota, Twin Cities Campus (Ph.D., 1976)
- David Henry Johnson, Ph.D., Professor Emeritus of Mathematics and Computer Science; Augustana College, Illinois (A.B., 1962); The University of Illinois (M.S., 1964; Ph.D., 1971)
- Kimberly Rae Kass, J.D., Associate Professor Emerita of Law; Valparaiso University (B.A., 1998; J.D., 2001)
- Kenneth Henry Klein, Ph.D., Professor Emeritus of Philosophy; Washington University (A.B., 1952); The University of Chicago, Divinity School (B.D., 1955); Lutheran Theological Seminary, Chicago; Mansfield College, Oxford University; Harvard University (Ph.D., 1963)
- Claire Louise Boyd Knaub, R.N., M.N., Associate Professor Emerita of Nursing; Elizabethtown College (BSN, 1958); University of Pittsburgh (M.N., 1971)
- William Ronald Koch, M.S., Associate Professor Emeritus of Physical Education; Valparaiso University (B.A., 1951); Indiana University (M.S., 1956)
- Douglas J. Kocher, Ph.D., Associate Professor Emeritus of Communication; Valparaiso University (B.A., 1973); University of Tennessee (M.S., 1976; Ph.D., 1979)
- Paul Martin Kohlhoff, J.D., Professor Emeritus of Law; Purdue University (B.S., 1981); Valparaiso University (J.D., 1986)
- Warren Melvin Kosman, Ph.D., Professor Emeritus of Chemistry; Valparaiso University (B.S., 1967); The University of Chicago (M.S., 1969; Ph.D., 1974)
- Michael Martin Kumpf, Ph.D., Professor Emeritus of Foreign Languages and Literatures; Luther College (B.A., 1968); The Ohio State University (M.A., 1972; Ph.D., 1974)
- Frederick W. Langrehr, Ph.D., Professor Emeritus of Marketing in the College of Business; Paul H. Brandt Professor Emeritus of Business; Valparaiso University (B.A., 1965); Northern Illinois University (M.S., 1968); University of Alabama (Ph.D., 1978)
- Carolyn Sue Leeb, Ph.D., Lecturer Emerita in Theology; Massachusetts Institute of Technology (B.S., 1969); San Francisco Theological Seminary (M.Div., 1993); Lutheran School of Theology at Chicago (M.Th., 1996; Ph.D., 1998)
- Gilbert Mark Lehmann, Ph.D., Professor Emeritus of Mechanical Engineering; Valparaiso University (BSME, 1955); Illinois Institute of Technology (MSME, 1957); Purdue University (Ph.D., 1966)
- Joel Phillip Lehmann, Ph.D., Associate Professor Emeritus of Mathematics and Computer Science; Valparaiso University (B.S., 1968); North Carolina State University (MAM, 1971; Ph.D., 1978); DePaul University (M.S., 1984)
- Bethany R. Lesniewski, J.D., Associate Professor Emerita of Law; Miami University of Ohio (B.A., 2001); Florida Coastal School of Law (J.D., 2004)
- Rosalie Berger Levinson, J.D., Professor Emerita of Law; Indiana University (B.A., 1969; M.A., 1970); Valparaiso University (J.D., 1973)
- Marcia Ann Lewis, DMA, Associate Professor Emerita of Music; University of Wisconsin (B.M., 1963; M.M., 1965); Northwestern University (DMA, 1978)
- JoEllen Lind Satterlee, J.D., Professor Emerita of Law; Stanford University (A.B., 1972); University of California, Los Angeles (J.D., 1975); University of Utah
- Mary Lou Logothetis, R.N., DNS, Professor Emerita of Nursing; DePaul University (BSN, 1966; MSN, 1976); Indiana University (DNS, 1988)
- Theodore Mark Ludwig, Th.D., Ph.D., Surjit Patheja Professor Emeritus of World Religions and Ethics; Professor Emeritus of Theology; Concordia Seminary, St. Louis (B.A., 1958; M.Div., 1961; STM, 1962; Th.D., 1963); The University of Chicago (Ph.D., 1975)
- Edgar Jacob Luecke, Ph.D., Professor Emeritus of Electrical and Computer Engineering; Valparaiso University (BSEE, 1955); University of Notre Dame (MSEE, 1957); Purdue University (Ph.D., 1968)
- Andrea D. Lyon, J.D., Professor Emerita of Law; Rutgers University (B.A., 1973); Antioch School of Law (J.D., 1976)
- Larry E. Mainstone, Ph.D., Richard E. Meier Professor Emeritus of Management; Professor Emeritus of Management in the College of Business; Western Michigan University (BSEE, 1969); Michigan State University (MBA, 1972; Ph.D., 1976)
- Robert Wayne Manweiler, Ph.D., Professor Emeritus of Physics and Astronomy; University of Kansas, Lawrence (B.S., 1967); Cornell University (M.S., 1969; Ph.D., 1972); Westminster Theological Seminary (M.Div., 1977)
- May Elizabeth McCoy, R.N., MSN, Associate Professor Emerita of Nursing; Vanderbilt University (BSN, 1950; MSN, 1962)

<sup>47</sup> Deceased May 26, 2020

Faculty

- Michael K. McCuddy, Ph.D., Louis S. and Mary L. Morgal Chair Emeritus of Christian Business Ethics; Professor Emeritus of Management in the College of Business; Indiana University South Bend (B.S., 1971; MSBA, 1973); Purdue University (Ph.D., 1977)
- Ellen Ruth Bierwagen Meyer, M.A., Librarian Emerita with rank of Assistant Professor Emerita; Valparaiso University (B.A., 1962); Indiana University (M.A., 1965)
- Frederick Richard Meyer, Ph.D., Professor Emeritus of Biology; Valparaiso University (B.S., 1960); Indiana University (M.A., 1962; Ph.D., 1966)
- Sandra Sue Michelsen, Ph.D., Associate Professor Emerita of Education; The University of Toledo (B.Ed., 1964); Michigan State University (M.A., 1970; Ph.D., 1985)
- John A. Miller, DBA, Professor Emeritus of Marketing in the College of Business; Concordia Senior College (B.A., 1960); Indiana University (MBA, 1969; DBA, 1972)
- Seymour Moskowitz, J.D., Professor Emeritus of Law; Columbia University (B.A., 1963); Harvard University (J.D., 1966)
- Kathleen Ruth Mullen, Ph.D., Associate Professor Emerita of English; Notre Dame College (B.A., 1964); The University of Texas (M.A., 1972; Ph.D., 1977)
- David Allan Myers<sup>48</sup>, J.D., Professor Emeritus of Law; Drake University (B.A., 1973); University of Illinois at Urbana–Champaign (J.D., 1976)
- Bonita Dostal Neff, Ph.D., Associate Professor Emerita of Communication; University of Northern Iowa (B.A., 1964; M.A., 1966); University of Michigan (Ph.D., 1973)
- Clare Kraegel Nuechterlein, J.D., Distinguished Practitioner Emerita of Law; Valparaiso University (B.A., 1972; M.A., 1975; J.D., 1978)
- William Roys Olmsted, Ph.D., Professor Emeritus of Humanities in Christ College; University of Michigan (B.A., 1965); University of Paris; The University of Chicago (M.A., 1970; Ph.D., 1975)
- Irving S. Olsen, M.S., Assistant Professor Emeritus; Northwestern University (B.S., 1954; M.S., 1955); Indiana University
- Carole Anne Pepa, R.N., Ph.D., Professor Emerita of Nursing; Indiana University (BSN, 1967; MSN, 1982); University of Illinois at Chicago (Ph.D., 1992)
- Margaret Perry, MLS, University Librarian Emerita with rank of Associate Professor Emerita; Western Michigan University (A.B., 1954); City College, New York; Catholic University of America (MSLS, 1959)
- Mary Geraldine Persyn, MLS, J.D., Associate Professor Emerita of Law; Creighton University (A.B., 1967); University of Oregon (MLS, 1969); University of Notre Dame (J.D., 1982)
- Howard Nevin Peters<sup>49</sup>, Ph.D., Professor Emeritus of Foreign Languages and Literatures; Gettysburg College (B.A., 1960); Universidad Nacional Autónoma de México; University of Colorado (Ph.D., 1968)
- Judith Griessel Peters, Ph.D., Professor Emerita of Foreign Languages and Literatures; Valparaiso University (B.A., 1961); University of Colorado (Ph.D., 1968)
- Richard William Pick, MFA, Associate Professor Emeritus of Theatre and Television Arts; Valparaiso University (B.A., 1957); Northwestern University (M.A., 1962); The University of Iowa (MFA, 1968)
- John Joseph Potts, CPA, J.D., Professor of Law—Retired; University of New Mexico (B.A., 1969); Boston College (J.D., 1974); Northeastern University (M.S., 1975)
- Steven Robert Probst, J.D., MLIS, Associate Professor Emeritus of Law Librarianship; Valparaiso University (B.A., 1990; J.D., 2002); Dominican University (MLIS, 2005)
- Karl Edward Reichardt, CMA, Ph.D., Associate Professor Emeritus of Accounting in the College of Business; University of Wisconsin (BBA, 1966); University of Denver (MSBA, 1967); University of Missouri (Ph.D., 1971)
- Donna R. R. Resetar, M.A., Associate Professor Emerita of Library Services; Michigan State University (B.A., 1974); The University of Chicago (M.A., 1977)
- Malcolm Walter Reynolds, M.S., Associate Professor Emeritus of Mathematics and Computer Science; University of Michigan (B.S., 1951; M.S., 1952)
- Perry W. Riffel, Ed.D., Associate Professor Emeritus of Education; Concordia College, Seward (B.S., 1969); Southern Illinois University (MSEd, 1974); Oklahoma State University (Ed.D., 1990)
- Marian Jean Rubchak, Ph.D., Professor Emerita of History; Douglass College (B.A., 1971); Rutgers University (M.A., 1973); University of Illinois at Chicago (Ph.D., 1988)

<sup>48</sup> Deceased, August 28, 2019

<sup>49</sup> Deceased May 28, 2020

Faculty

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- Warren Gunther Rubel, Ph.D., Walter G. Friedrich Professor Emeritus of American Literature; Professor Emeritus of Humanities in Christ College; Concordia Seminary, St. Louis (B.A., 1950; M.Div., 1952); Washington University (M.A., 1961); University of Arkansas (Ph.D., 1964)
- Dolores Mary Ruosch, M.S., Dean of Women with rank of Associate Professor Emerita; Valparaiso University (B.A., 1951); University of Southern California (M.S., 1957)
- Mollie A. Sandock, Ph.D., Associate Professor Emerita of English; Brown University (A.B., 1972); The University of Chicago (M.A. [Library School], 1976; M.A. [English Literature], 1979; Ph.D., 1985)
- Verne Robert Sanford, Ph.D., Professor Emeritus of Mathematics and Computer Science; University of North Dakota (Ph.B., 1957; M.S., 1949); University of Michigan (MPH, 1962; Ph.D., 1970)
- William E. Schlender, Ph.D., Richard E. Meier Professor Emeritus of Management in the College of Business; Professor Emeritus of Management in the College of Business; Valparaiso University (B.A., 1941); University of Denver (MBA, 1947); The Ohio State University (Ph.D., 1955)
- Barbara J. Schmidt, J.D., Professor Emerita of Law; Valparaiso University (B.A., 1970; J.D., 1973)
- William Joseph Schoech, P.E., Ph.D., Professor Emeritus of Mechanical Engineering; Valparaiso University (BSEE, 1966); The Pennsylvania State University (MSIE, 1969); Purdue University (Ph.D., 1971)
- James Edward Schueler, P.E., M.S., Professor Emeritus of Civil Engineering; Valparaiso University (BSCE, 1959); Northwestern University (M.S., 1960)
- David William Scupham, Ph.D., Associate Professor Emeritus of Biology; The University of Chicago (A.B., 1975); Indiana University (Ph.D., 1985)
- Edgar Paul Senne, M.A., Associate Professor Emeritus of Theology; Concordia Seminary, St. Louis (B.A., 1954; M.Div., 1958); Washington University (M.Ed., 1958); The University of Chicago (M.A., 1969)
- Dorothy Paulsen Smith, R.N., J.D., Ph.D., LL.D. (Hon.); Professor Emerita; Whitworth College (B.S., 1955; LL.D. [Hon.], 1997); Western Reserve University (M.S., 1960); Yale University (Ph.D., 1967); Valparaiso University (J.D., 1987)
- Lewis Oliver Smith, Jr., Ph.D., Professor Emeritus of Chemistry; Grove City College (B.S., 1944); University of Rochester (Ph.D., 1947)
- Ronald John Sommer, Ph.D., Professor Emeritus of English; Wabash College (A.B., 1960); Yale School of Drama; Brown University (M.A., 1963); Indiana University (Ph.D., 1975)
- Gerald Paul Speckhard, Ed.D., Professor Emeritus of Education; Valparaiso University (B.A., 1952); University of Wisconsin (M.S., 1959); University of Colorado (Ed.D., 1966)
- Bradford Hall Spring, Ph.D., Professor Emeritus of Civil Engineering; Cornell University (BCE, 1959; M.S., 1961); University of Wisconsin (Ph.D., 1973)
- John Rudolph Steffen, P.E., Ph.D., Alfred W. Sieving Chair Emeritus of Engineering; Professor Emeritus of Mechanical Engineering; Valparaiso University (BSME, 1966); University of Notre Dame (MSME, 1968); Rutgers University (Ph.D., 1974)
- William Leroy Steinbrecher, Ed.D., Professor Emeritus of Physical Education; Valparaiso University (B.A., 1957; B.S. in P.E., 1959); Indiana University (M.S. in P.E., 1963); Florida State University (Ed.D., 1969)
- Jerome J. Stieger, Ph.D., Associate Professor Emeritus of Physical Education; Florida State University (B.S., 1964; M.S., 1969; Ph.D., 1978)
- Richard Taylor Stith, III, J.D., Ph.D., Professor Emeritus of Law; Harvard University (B.A., 1965); Universidad de la Republica, Uruguay; University of California, Berkeley (M.A., 1967); Yale University (M.Phil., 1971; J.D., 1973; Ph.D., 1973)
- Sandra Ellen Strasser, Ph.D., Professor Emerita of Information and Decision Sciences in the College of Business; University of California, Riverside (B.A., 1971); California State University, Fresno (MBA, 1986); University of Colorado at Boulder (Ph.D., 1990)
- Michael Stevens Straubel, LL.M., Professor Emeritus of Law; Western Michigan University (B.S., 1979); Marquette University (J.D., 1982); McGill University (LL.M., 1989)
- Susan P. Stuart, J.D., Professor Emerita of Law; the Seegers Distinguished Chair of Law; DePauw University (B.A., 1973); Valparaiso University (M.Ed., 1976); Indiana University (J.D., 1982)
- James Chien-Hua Tan, Ph.D., Professor Emeritus of Biology; Chung Sing University, China (B.S., 1957); Montana State University (M.S., 1961); North Carolina State University (Ph.D., 1968)
- D.A. Jeremy Telman, Ph.D., Professor Emeritus of Law; Columbia University (B.A., 1985); Cornell University (M.A., 1989; Ph.D., 1993); New York University (J.D., 1999)
- Paul Stephen Trapp, Ph.D., Associate Professor Emeritus of Marketing in the College of Business; University of Colorado (BSBA, 1979); Indiana University (MBA, 1981); University of Illinois at Urbana Champaign (Ph.D., 1991)

Faculty

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- Mary T. Treanor, Ph.D., Associate Professor Emerita Mathematics and Computer Science; College of Mt. St. Vincent (B.A., 1964); University of Notre Dame (M.S., 1968; Ph.D., 1984)
- Albert Raymond Trost, Jr., Ph.D., Professor Emeritus of Political Science; Valparaiso University (B.A., 1962); Washington University (M.A., 1963; Ph.D., 1971)
- Bernard Roberts Trujillo, J.D., Professor Emeritus of Law; Princeton University (A.B., 1988); Yale University (J.D., 1992)
- Edward Martin Uehling, Ph.D., Professor Emeritus of English; Hastings College (B.A., 1967); The Pennsylvania State University (M.A., 1973; Ph.D., 1980)
- Ruth Casey Vance, J.D., Professor Emerita of Law; Olivet College (B.A., 1979); Valparaiso University (J.D., 1982)
- David Eugene Vandercoy, LL.M., Professor Emeritus of Law; The Pennsylvania State University (B.A., 1971); Dickinson School of Law (J.D., 1974); New York University (LL.M., 1980)
- Peter J. Venturelli, Ph.D., Associate Professor Emeritus of Sociology and Criminology; Illinois State University (B.A., 1972); The University of Chicago (M.A., 1978; Ph.D., 1981)
- Merlyn Clarence Vocke, P.E., Ph.D., Professor Emeritus of Electrical and Computer Engineering; Valparaiso University (BSEE, 1955); University of Notre Dame (MSEE, 1957); The University of Iowa (Ph.D., 1971)
- Jerry M. Wagenblast, M.S., Associate Professor Emeritus of Mathematics and Computer Science; Illinois Institute of Technology (B.S., 1962; M.S., 1968); Purdue University
- Stuart G. Walesh, P.E., Ph.D., Professor Emeritus of Civil Engineering; Valparaiso University (BSCE, 1963); The Johns Hopkins University (MSE, 1965); University of Wisconsin–Madison (Ph.D., 1969)
- LouJeanne Bray Walton, M.A., Associate Professor Emerita of Social Work; Valparaiso University (B.A., 1960); The University of Chicago (M.A., 1969)
- David K. Weber, Ph.D., Lecturer Emeritus in Theology; Concordia College, River Forest (B.A., 1978); Concordia Theological Seminary (M.Div., 1982); Montana State University (M.A., 1993); University of Durham (Ph.D., 2000)
- Nola Jean Wegman, Ph.D., Professor Emerita of English; Northwestern University (B.S., 1953; M.A., 1954; Ph.D., 1967)
- Linda S. Whitton, J.D., Seegers Distinguished Chair Emeritus of Law; Professor of Law Retired; Valparaiso University (B.A., 1979; J.D., 1986)
- Geri Judith Yonover, J.D., Professor Emerita of Law; The University of Chicago (B.A., 1964); Illinois Institute of Technology (J.D., 1983)
- Leslie M. Zoss, P.E., Ph.D., Professor Emeritus of Mechanical Engineering; Purdue University (BSME, 1949; MSME, 1950; Ph.D., 1952)

# Administration

2021-2022

## Office of the President

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Chief of Staff & Board Liaison	Rebekah Arevalo, M.S.
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Director of University Events	Cassandra J. Hopkins, MALS

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Benefits Manager	Laura G. Childers, B.A.
Executive Director of Facilities	Jason Kutch, B.S.
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## Office of the Provost and Executive Vice President for Academic Affairs

Provost and Executive Vice President for Academic Affairs	Eric W. Johnson, Ph.D.
Executive Assistant and Budget Officer	Allison Kroft, Ph.D.
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Assistant Vice President for Student Life	Carolyn Whittier, Ph.D.
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Director of Counseling Services	Stewart E. Cooper, Ph.D.
Assistant Provost for Faculty Affairs	Lissa Yogan, Ph.D.
University Registrar	Allison M. Urbanczyk, MBA
Director of Faculty Development	Cynthia Rutz, Ph.D.
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Interim Executive Director for Retention and Student Services	Jennifer Easthope, M.S.
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Dean, College of Arts and Sciences	Jon T. Kilpinen, Ph.D.
Assistant Dean	Adrian Lee, M.A.
Interim Assistant Dean	Elizabeth A. Douglas, J.D.
Director of Brauer Museum of Art	Gregg A. Hertzlieb, MFA
Dean, College of Business	Niclas L. Erhardt, Ph.D.
Assistant Dean and Director of Graduate Programs in Management	Mary H. Bandstra, M.A.
Interim Dean, College of Engineering	Paul Douglas Tougaw, P.E., Ph.D.
Assistant Dean for Student Success	Laura Sanders, M.S.
Dean, College of Nursing and Health Professions	Karen Allen, Ph.D.
Assistant Dean of Undergraduate Nursing Programs	Lynette Rayman, DNP
Assistant Dean of Graduate Nursing Programs	Julie Koch, DNP
Assistant Dean for the Physician Assistant Program	Joseph Zaweski, MPAS
Interim Dean, Christ College	Jennifer Prough, Ph.D.
Assistant Dean	Anna Stewart, Ph.D.
Associate Provost of Graduate and Online Education	J. Michael Tyler, Ph.D.
Dean, Library	Patricia J. Mileham, MALIS
Executive Director of Institutional Effectiveness	Greg Stinson, M.A.
Associate Director	Melizza Zygmunt, S.B.

## Administration

University Pastor	James A. Wetzstein, M.Div.
University Pastor II	Katherine Museus Dabay
Director of Church Relations	Debra Albers, BSEd
Editor, <i>The Cresset</i>	Heather Gary

### Division of Enrollment Management

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Executive Director of Undergraduate Admission	Bart Harvey, M.S.
Director of VAN and Admission Programs	Barb Lieske, B.A.
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Chief Communication Officer	Nicole Niemi, M.S.
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### Office of Finance

Senior Vice President for Finance and Treasurer of the Board	Susan D. Scroggins, MBA, CPA
Executive Assistant	Louise Poracky
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### Office of the General Counsel

Vice President and General Counsel	Darron C. Farha, J.D.
Executive Assistant to General Counsel	Lisa Tam
Title IX Coordinator	Deondra Devitt, MBA

### Advancement and Strategic Initiatives

Vice President	Lisa Hollander, B.A.
Associate Vice President	Jason Petrovich, B.A.
Executive Director of Alumni Relations and University Guild	Linda Roettger, M.S.

## Administration

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## Course Abbreviations

Below is an alphabetized list of course prefixes that are currently used on student records followed by the department or program referenced. Course descriptions may be found in the department or program text. See the Index or Graduate Catalog for further reference.

<b>AAA</b>	Off-Campus Study
<b>ACC</b>	Accounting
<b>ACRS</b>	Actuarial Science
<b>AE</b>	Arts and Entertainment Administration (graduate only)
<b>AMOD</b>	Analytics and Modeling (graduate only)
<b>AMST</b>	American Studies
<b>ART</b>	Art
<b>AS</b>	Aerospace Studies (ROTC)
<b>ASTR</b>	Astronomy
<b>AVN</b>	Aviation
<b>BE</b>	Bioengineering
<b>BIO</b>	Biology
<b>BLAW</b>	Business Law
<b>BUS</b>	General Business
<b>CC</b>	Christ College (Honors College)
<b>CE</b>	Civil Engineering
<b>CHEM</b>	Chemistry
<b>CHST</b>	Chinese Studies (graduate only)
<b>CORE</b>	The Valpo Core
<b>COUN</b>	Counseling (graduate only)
<b>CPED</b>	Cooperative Education (Arts and Sciences)
<b>CS</b>	Computer Science
<b>CVA</b>	Communication and Visual Arts
<b>CYB</b>	Cyber Security (graduate only)
<b>DATA</b>	Data Science
<b>EAST</b>	Chinese and Japanese Studies
<b>ECE</b>	Electrical and Computer Engineering
<b>ECON</b>	Economics
<b>ED</b>	Education
<b>ENE</b>	Environmental Engineering
<b>ENGL</b>	English
<b>ENT</b>	Entrepreneurship
<b>ENVS</b>	Environmental Studies
<b>ERP</b>	Enterprise Resource Planning (graduate only)
<b>FIN</b>	Finance
<b>CHIN</b>	Chinese
<b>FREN</b>	French
<b>GRK</b>	Greek
<b>GER</b>	German
<b>HEB</b>	Hebrew
<b>JAPN</b>	Japanese
<b>LAT</b>	Latin
<b>SPAN</b>	Spanish
<b>GE</b>	General Engineering
<b>GEO</b>	Geography
<b>GKRO</b>	Greek and Roman Studies
<b>GNST</b>	Gender Studies
<b>GRD</b>	Graduate School Course (graduate only)
<b>GS</b>	General Studies
<b>HADM</b>	Health Administration (graduate only)
<b>HCL</b>	Health Care Leadership
<b>HIST</b>	History
<b>HS</b>	Health Science
<b>HUED</b>	Humane Education (graduate only)
<b>ICP</b>	International Commerce and Policy (graduate only)

<b>IDS</b>	Information and Decision Sciences
<b>IECA</b>	International Economics and Cultural Affairs
<b>INTL</b>	International Studies
<b>IPE</b>	Interprofessional Education
<b>IT</b>	Information Technology (graduate only)
<b>KIN</b>	Kinesiology
<b>LAW</b>	Law (graduate only)
<b>LS</b>	Liberal Studies
<b>MATH</b>	Mathematics
<b>ME</b>	Mechanical Engineering
<b>MEM</b>	Master of Engineering Management (graduate only)
<b>MET</b>	Meteorology
<b>MGT</b>	Management
<b>MKT</b>	Marketing
<b>MS</b>	Military Science (Army ROTC)
<b>MUS</b>	Music
<b>MUTH</b>	Music Therapy
<b>MUAP</b>	Applied Music
<b>MUEN</b>	Music Ensemble
<b>NS</b>	Natural Science
<b>NSCI</b>	Neuroscience
<b>NUR</b>	Nursing
<b>OCTH</b>	Occupational Therapy (graduate only)
<b>PA</b>	Physician Assistant (graduate only)
<b>PHIL</b>	Philosophy
<b>PHS</b>	Public Health
<b>PHYS</b>	Physics
<b>POLS</b>	Political Science and International Relations
<b>PSJ</b>	Peace and Social Justice
<b>PSY</b>	Psychology
<b>SOC</b>	Sociology
<b>SOCW</b>	Social Work
<b>SPED</b>	Special Education
<b>SPSY</b>	School Psychology (graduate only)
<b>STAT</b>	Statistics
<b>THEO</b>	Theology
<b>THTR</b>	Theatre
<b>UST</b>	Urban Studies

# Courses for General Education Requirements

## Cultural Diversity

+ AAA 900-949	International Study Semesters Abroad (Off Campus Program only)
+ AAA 950, 960, 965	National Study Semesters Off Campus (Off Campus Program only)
CC 300	Seminar (as designated)
CC 325	Seminar (as designated)
CHIN 200	Contemporary Chinese Culture
CHIN 291	Topics in World Cinema
CVA 291	Topics in World Cinema
EAST 140	Introduction to East Asian Culture
EAST 340	East Asian Humanities Topics
EAST 363	Religions of China and Japan
ECON 136	The Economics of Health, Education, and Welfare
ECON 233	The Economics of Race and Gender
ECON 336	Economics of Developing Nations
ED 470	Diversity, Equity, and Education
ENGL 260	Cross-Cultural Narratives
ENGL 344	Sociolinguistics: Language Across Cultures
ENGL 360	Cross-Cultural Engagement in English Studies
ENGL 365	Studies in American Literature
ENGL 368	Teaching of English to Speakers of Other Languages: Theory and Methods
ENGL 369	Teaching of English to Speakers of Other Languages: Methods and Practices
FREN 291	Topics in World Cinema
FREN 300	Topics in French and Francophone Cultures
GEO 102	Globalization and Development
GEO 200	American Ethnic Geography
GEO 274	North American Indian on Film
GEO 301	Regional Geography: Latin America/Africa/Asia
GER 291	Topics in World Cinema
GKRO 202	Greek and Latin Roots of English
GKRO 290	Topics in Greek and/ or Roman Studies
GKRO 291	Topics in World Cinema
GS 200	Study Circle on Race Relations
GS 201	Facilitator Training for Study Circles
GS 202	Study Circles: Civic Engagement
HIST 140	Introduction to East Asian Culture
HIST 225	Alternative Perspectives U.S. History
HIST 232	Latin American History and Society
HIST 235	Modern Mexico: Competing Visions of the Nation
HIST 250	African History and Society
HIST 304	European Imperialism and Colonial Experience
HIST 329	Revolution! Insurgence in Latin America
HIST 333	Latin America in the Cold War Era
HIST 341	Revolution and Its Roots: The Making of Modern China
HIST 342	Tragedy and Triumph: The Making of Modern Japan
HIST 350	Colonialism and Independence: Understanding Modern Africa
HIST 355	Modern Middle Eastern History
IPE 318	Global Health Issues
MGT 440	Cross-Cultural Management
MUS 204	Popular Music in America
MUS 304	World Music
NUR 360	Interpersonal Service Learning in Health in Central America
PHIL 120	Culture, Identity, and Values
PHIL 220	Asian Philosophy
PHS 360	Interprofessional Service Learning in Health in Central America
POLS 110	Introduction to Politics
POLS 130	Comparative Politics

**Courses for General Education Requirements**

POLS 231	Politics of Developing States
SOC 210	Contemporary Social Problems
SOC 275	Inequality in America
SOCW 260	Diverse Populations: Human Rights & Justice
SPAN 291	Topics in World Cinema
THEO 317	The World of the New Testament
THEO 321	Medieval Christianity: East and West
THEO 333	Black Theology and Black Church
THEO 345	The Church in the World
THEO 360	Themes in the History of Religions
THEO 361	Indian Religions and Culture
THEO 362	Islamic Religion and Culture
THEO 363	Religions of China and Japan
THEO 364	Native American Religions
THEO 367	Topics in South Asian Religions
THEO 368	Scripture, Law, and Gender
WLC 150	Global Perspectives

**Humanities: Fine and Performing Arts**

CC 205	Word and Image
CC 300	Seminar (as designated)
CC 325	Seminar (as designated)
CHIN 291	Topics in World Cinema
CVA 101	Ancient to Medieval Art History
CVA 102	Renaissance to Modern Art History
CVA 121	Drawing
CVA 163	Introduction to Digital Photography
CVA 221	Painting
CVA 227	Figure Drawing
CVA 230	Graphic Design
CVA 230	Graphic Design
CVA 270	Introduction to Cinema Studies
CVA 271	Cinema Production
CVA 291	Topics in World Cinema
CVA 324	Video Art
CVA 324	Video Art
CVA 330	Advanced Design
CVA 330	Advanced Design
CVA 331	Web Design
CVA 331	Web Design
EAST 395	Chinese Culture and Civilization (Off Campus Program only)
ENGL 201	Introduction to Creative Writing
ENGL 270	Introduction to Cinema
ENGL 321	Intermediate Composition
ENGL 323	Short Story Writing
ENGL 324	Poetry Writing
ENGL 325	Creative Nonfiction
ENGL 431	Advanced Writing and Rhetoric
FREN 271	French Play Production
FREN 291	Topics in World Cinema
GER 271	German Play Production
GER 291	Topics in World Cinema
GKRO 220	Introduction to Greek and Roman Archaeology
GKRO 250	Greek and Roman Monuments in Context
GKRO 251	Greek and Roman Mythology
GKRO 291	Topics in World Cinema
JAPN 250	Topics in Japanese Literature and the Fine Arts (when topic is Japanese Poetry and Calligraphy)
MUEN 350	Choirs (three credits of choir)

### Courses for General Education Requirements

MUEN 352	Bands (three credits of band)
MUEN 354	Orchestra (three credits of orchestra)
MUS 101	Introduction to Music
MUS 190	Introduction to Computational Music
MUS 318	Music of Baroque, Classical and Early Romantic Eras
MUS 319	Music of the Late Romantic and Modern Eras
MUS 350	Music and Meaning
MUS 473	Church Music and Liturgical Theology
MUTH 120	Introduction to Music Therapy
SPAN 291	Topics in World Cinema
THEO 456	Church Music and Liturgical Theology
THTR 101	Introduction to Theatre
THTR 130	Theatre Practicum: Stage Management (three credits from three different sections)
THTR 131	Theatre Practicum: Scenery and Lighting (three credits from three different sections)
THTR 132	Theatre Practicum: Costume and Makeup (three credits from three different sections)
THTR 133	Theatre Practicum: Performance (three credits from three different sections)
THTR 230	Costume and Makeup
THTR 231	Scenery and Lighting
THTR 232	Educational Outreach Theatre
THTR 235	Acting I
THTR 238	Theatre and Culture I
THTR 239	Theatre and Culture II
THTR 252	Writing for the Stage and Screen
THTR 289	Dance Styles and Techniques
THTR 292	Ballet Technique I
THTR 293	Modern Technique I
THTR 294	Jazz Technique I
THTR 295	Lyrical Jazz Technique I
THTR 296	Tap Technique I
THTR 297	Musical Theatre Dance
THTR 298	Dance Composition
THTR 337	American Theatre
THTR 392	Ballet Technique II
THTR 393	Modern Technique II
THTR 394	Jazz Technique II
THTR 395	Lyrical Jazz Technique II
THTR 396	Tap Technique II

### **Humanities: History**

Any 3-credit course in History (HIST)	
GKRO 310	Greek Civilization and Culture
GKRO 311	Roman Civilization and Culture
WLC 337	Ethnology and History of Costa Rica

**Humanities: Literature**

CHIN 200	Contemporary Chinese Culture
EAST 340	East Asian Humanities Topics
ENGL 200	Literary Studies
ENGL 309	Literature of the Medieval Period
ENGL 312	American Literature I
ENGL 313	American Literature II
ENGL 320	Literature of the Sixteenth and Seventeenth Centuries
ENGL 330	Literature of the Restoration and Eighteenth Century
ENGL 350	British Literature of the Nineteenth Century
ENGL 365	Studies in American Literature
ENGL 370	Modern and Contemporary Fiction
ENGL 372	Modern and Contemporary Drama
ENGL 375	Modern and Contemporary Poetry
ENGL 410	Shakespeare
ENGL 456	The Novel
ENGL 478	Literature for Children
ENGL 479	Young Adult Literature
ENGL 490	Topics in Literature
ENGL 493	Seminar in English Literature
FREN 200	French and Francophone Literary Studies
FREN 220	Approaches to French Literature
GER 200	German Literary Studies
GER 220	Approaches to German Studies
GKRO 200	Tales of Heroism: Greek and Roman Epic Poetry
GKRO 201	Antiquity on Stage: Drama in Greece and Rome
GKRO 390	Seminar in Greek and/ or Roman Studies
JAPN 200	Japanese Literary Studies
SPAN 200	Hispanic Literary Studies
SPAN 220	Selected Readings in Hispanic Literature

**Humanities: Philosophy**

Any 3-credit course in Philosophy (PHIL) except PHIL 145 or PHIL 345	
CC 110	Texts and Contexts I: Traditions of Human Thought
CC 300	Seminar (as designated)
CHEM 490	The Scientific Endeavor (when cross-listed with CC 300)
NS 490	The Scientific Endeavor (when cross-listed with CC 300)
PHYS 490	The Scientific Endeavor (when cross-listed with CC 300)
THEO 335	Philosophy of Religion
THEO 341	Bioethics

**Social Sciences**

A 3-credit course from Economics (ECON)	
A 3-credit course from Political Science and International Relations (POLS)	
A 3-credit course from Sociology (SOC)	
CC 115	Texts and Contexts II: Traditions of Human Thought
CC 255	Interpretation: Self, Culture, and Society
CC 300	Seminar (as designated)
CC 325	Seminar (as designated)
ED 206	School and Society
ENGL 344	Sociolinguistics: Language Across Cultures
GEO 101	World Human Geography
GEO 102	Globalization and Development
GEO 200	American Ethnic Geography
GEO 201	Economic Geography
GEO 212	Introduction to Archaeology
GEO 265	Sustainability: Environment, Economy, Society
GEO 274	North American Indian on Film
GEO 280	Geography of Cyberspace

### Courses for General Education Requirements

GEO 301	Regional Geographies of the World
GEO 320	Urban Geography
GEO 321	Urban and Regional Planning
GEO 420	Rural Geography
GEO 470	Political Geography
GEO 474	Historical Geography of the United States
GEO 475	Culture, Nature, Landscape
GNST 201	Introduction to Gender Studies
PSJ 201	Principles of Peace and Social Justice
SOCW 151	Introduction to the Profession of Social Work
SOCW 210	Social Welfare Policy: History and Programs
SOCW 220	Human Behavior and Social Environment
SOCW 260	Diverse Populations: Human Rights & Justice
WLC 335	Perspectives on Health Care in Costa Rica

### Natural Science

ASTR 101/101L	Astronomy
ASTR 252/101L	Introduction to Stellar Astrophysics
ASTR 253/101L	Introduction to Galactic Astrophysics and Cosmology
BIO 125	Biotechnology
BIO 151	Human Anatomy and Physiology I
BIO 152	Human Anatomy and Physiology II
BIO 171	Unity of Life
BIO 172	Diversity of Life
BIO 270	Genetics and Genome Evolution
CHEM 111	Introduction to Chemistry
CHEM 121	General Chemistry I
CHEM 122	General Chemistry II
CHEM 131	General Chemistry I – Honors
CHEM 132	General Chemistry II – Honors
GEO 104	Introduction to Geomorphology
GEO 130	Earth From Above
MET 103	Introduction to Meteorology
MET 190	Topics in Weather and Climate
NS 101	Introduction to Forensic Science
NS 102	Science of the Indiana Dunes
NS 103	Practical Stream Stewardship
NS 104	Principles of Evolution
NS 105	Discovering Insects: Pests or Pals?
NS 190	Science of Indiana: Ecology and Sustainability of Indiana Farms
PHYS 111/111L	Essentials of Physics
PHYS 112/112L	Essentials of Physics
PHYS 141/141L	Newtonian Mechanics
PHYS 142/142L	Physics: Electricity, Magnetism, and Waves
PHYS 151/141L	Newtonian Mechanics-Honors
PHYS 152/142L	Physics: Electricity, Magnetism, and Waves-Honors
PSY 110/111	General Psychology

## Quantitative Analysis

Please refer to degree requirement descriptions for details. Some degrees require specific courses from this list.

CS 115	Computers and Computation
MATH 120	Mathematics in Modern Society
MATH 122	Applied Calculus
MATH 124	Finite Mathematics
MATH 131	Calculus I
PHIL 145	Elementary Logic and Critical Thinking
PHIL 245	Formal Logic and Critical Thinking
POLS 210	Research Methods in Political Science
PSY 201	Statistical Methods
SOC 315	Quantitative Survey Analysis
SOC 319	Research Methods I
SOCW 366	Research and Statistics: Implementation
STAT 140	General Statistics
STAT 240	Statistical Analysis

## Writing Intensive Courses

Specific sections of the courses below may be used to fulfill this requirement.

CC 215	The Christian Tradition
CE 213	Technical and Professional Writing in Civil Engineering
ECE 211	Technical Writing for Electrical and Computer Engineers
ENGL 200	Literary Studies
ENGL 203	Middle Eastern Literatures
ENGL 204	Middle Eastern Cinemas
ENGL 210	Introduction to Business and Professional Writing
FREN 220	Approaches to French Literature
GEO 265	Sustainability: Environment, Economy, Society
GER 220	Approaches to German Studies
HIST 333	Latin America in the Cold War Era
HIST 390	Topics in History (when topics are American Conservatism or The Holocaust)
MATH 120	Mathematics in Modern Society
ME 201	Technical Writing for Mechanical Engineers and Bioengineers
MUS 350	Music and Meaning
MUS 390	Topics in Music
POLS 290	Topics in Political Science (when topic is Policy and Persuasion)
SOCW 210	Social Welfare Policy: History and Programs
SPAN 220	Selected Readings in Hispanic Literature
THEO 200	The Christian Tradition
THEO 333	Black Theology and Black Church
THEO 364	Native American Religions

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# VALPARAISO UNIVERSITY

**Location:** Valparaiso, Indiana--Population 34,000  
45 Miles Southeast of Chicago; 13 Miles South of Lake Michigan  
**Campus Size:** 350 Acres, 60+ Buildings  
**Control:** Independent  
**Religious Affiliation:** Lutheran

## Major Academic Divisions (Approximate Enrollments, Fall 2020)

College of Arts and Sciences—1280	College of Business—340	College of Engineering—480
College of Nursing and Health Professions—640	Christ College (Honors)—290	Graduate School—400

## Accreditation

### The Higher Learning Commission (All Programs)

230 South LaSalle Street, Suite 7-500, Chicago, IL, 60604-1411; Tel: 800.621.7440  
[www.hlcommission.org](http://www.hlcommission.org)

### Council for the Accreditation of Educator Preparation

1140 19<sup>th</sup> Street NW, Suite 400, Washington, DC, 20036; Tel: 202.223.0077; [www.caepnet.org](http://www.caepnet.org)

### Indiana Department of Education

Indiana Government Center North, 9<sup>th</sup> Floor, 100 N. Senate Ave., Indianapolis, IN, 46204; Tel: 317.232.6610; [www.doe.in.gov](http://www.doe.in.gov)

### Indiana State Board of Nursing (Bachelor of Science in Nursing)

402 W. Washington St., Room W072, Indianapolis, IN, 46204; Tel: 317.234.2043; Fax: 317.233.4236; [www.in.gov/pla/nursing](http://www.in.gov/pla/nursing)

### National Association of Schools of Music

11250 Roger Bacon Drive, Suite 21, Reston, VA, 20190; Tel: 703.437.0700; [nasm.arts-accredit.org](http://nasm.arts-accredit.org)

### Council on Social Work Education

333 John Carlyle Street, Suite 400, Alexandria, VA, 22314; Tel: 703.683.8080; [www.cswe.org](http://www.cswe.org)

### AACSB International

777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602; Tel: 813.769.6500; [www.aacsb.edu](http://www.aacsb.edu)

### ABET

415 North Charles Street, Baltimore, MD, 21201; Tel: 410.347.7700; [www.abet.org](http://www.abet.org)

### Commission on Collegiate Nursing Education (Bachelor of Science in Nursing)

655 K Street, NW, Suite 750, Washington, DC, 20001; Tel: 202.887.6791; [www.ccneaccreditation.org](http://www.ccneaccreditation.org)

### Council for Accreditation of Counseling and Related Educational Programs

500 Montgomery Street, Suite 350, Alexandria, VA, 22314; Tel: 703.535.5990; [www.cacrep.org](http://www.cacrep.org)

### Accreditation Review Commission on Education for the Physician Assistant, Inc. (Provisional)

12000 Findley Road, Suite 275, Johns Creek, GA, 30097; Tel: 770.476.1224; [www.arc-pa.org](http://www.arc-pa.org)

## Approvals and Affiliations

American Chemical Society

American Council on Education

American Music Therapy Association

American Schools of Oriental Research

American Society for Engineering Education

Association of American Colleges and Universities

Association of Governing Boards

Center for Research Libraries

Council of Applied Masters Programs in Psychology

Indiana State Board of Nursing

Lutheran Education Association

Lutheran Educational Conference of North America

National Association of Independent Colleges and Universities

National Council for State Authorization Reciprocity Agreements

The American Association of Colleges of Nursing

The Council of Independent Colleges

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# VALPARAISO UNIVERSITY

Campus Map

