CORRESPONDENCE DIRECTORY

For prompt attention, inquiries should be addressed as indicated below:

Admissions .................................. Director of Admissions
Alumni interests ........... Vice-President for Public and Alumni Affairs
Arts and Sciences ............. Dean, College of Arts and Sciences
Business Administration ...... Dean, College of Business Administration
Business matters ............... Vice-President for Business Affairs
Christ College ....................... Dean, Christ College
Employment of seniors, alumni . Dean of Student Services
Engineering ..................... Dean, College of Engineering
Evening Division .......... Dean, College of Arts and Sciences
General information ... Vice-President for Public and Alumni Affairs
Gifts ............................ Vice-President for Public and Alumni Affairs
Graduate Program ............ Dean, College of Arts and Sciences
Law ........................................ Dean, School of Law
Nursing ............................... Dean, College of Nursing
Scholarships, student aid .......... Director of Financial Aid
Student concerns .............. Vice-President for Student Affairs
Summer session .......... Dean, College of Arts and Sciences
Teacher placement .... Chairperson, Department of Education
Transcripts, grade reports .... Registrar

Visitors are invited; guides are available. Appointments should be made by writing to Director of Admissions, Valparaiso University, Valparaiso, Indiana 46383, or by calling the Admissions Office of the University. The University number is (219) 464-5000.

For your convenience this bulletin is indexed on page 299.

Cover Photograph:
Freshman Student, Paul G. Indorf, Jr. (Undeclared Major).

Photographic Assistance:
Freshman Student, Paul G. Indorf, Jr. (Undeclared Major).
Senior Student, Richard A. Fioas (Art Major).

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The General Catalog Number of the Valparaiso University Bulletin is published every other year to provide a comprehensive picture of the University. In alternate years an Announcements Number is published to provide information regarding major changes in calendar, staff, program, and policies.

In addition, separate catalogs are issued relative to the School of Law, the Graduate Division, and the Summer Session.

Note: The material contained in this Bulletin is for information only and does not constitute a contract between the student and the University. The University and its various units reserve the right to revise policies, amend rules, alter regulations, and change financial charges at any time in accordance with the best interests of the institution.

It is the policy of Valparaiso University not to discriminate on the basis of sex, handicap, race, color, religion, age, veteran status, or national or ethnic origin in its educational programs, admissions policies, employment policies, financial aid, or other school-administered programs. This policy is enforced by federal law under Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, and section 504 of the Rehabilitation Act of 1973. Inquiries concerning the application of said Title IX and the published regulations to this University may be referred to the University's Compliance Director of Affirmative Action Plan.

Valparaiso University is authorized under federal law to enroll non-immigrant alien students.

UNIVERSITY CALENDAR FOR 1979-1980

For the College of Arts and Sciences, the College of Business Administration, the College of Engineering, and the College of Nursing.

1979

MINI SUMMER SESSION
(May 21-June 14)

SUMMER SESSION
June 18, Monday, 7:30 A.M.; 1:00 P.M. Instruction begins. Late registration.
July 4, Wednesday. No classes.
August 8, Wednesday. Summer Session closes 5:00 P.M.
August 10, Friday, 10:00 A.M. Deadline for all grades.

FALL SEMESTER
August 25, Saturday, 8:00 A.M. Orientation week for freshmen begins.
August 28, Tuesday, 9:00 A.M. Registration for upperclassmen.
August 29, Wednesday, 8:00 A.M. Registration for freshmen and transfer students.
August 30, Thursday, 8:00 A.M. Instruction begins.
August 30 - October 18. Dates for first half short courses.
September 5, Wednesday, 5:00 P.M. Deadline for adding first half short courses.
September 7, Friday, 5:00 P.M. Deadline for adding regular courses.
September 19, Wednesday, 5:00 P.M. Deadline for withdrawing from first half short courses with grade of W.
October 6, Saturday. Homecoming Day.
October 11 - October 17. Adjustment period for adding second half short courses (and arranging course intensification).
October 15, Monday. Last day to file application of candidacy for the associate's and bachelor's degrees to be conferred in May or August, 1980.
October 25, Thursday, 5:00 P.M. Deadline for adding second half short courses.
October 31, Wednesday, 5:00 P.M. Deadline for withdrawing from regular courses with grade of W.
November 8, Thursday, 5:00 P.M. Deadline for withdrawing from second half short courses with grade of W.
November 16, Friday, 6:30 P.M. Thanksgiving recess begins.
November 26, Monday, 8:00 A.M. Thanksgiving recess ends.
December 14, Friday, 5:00 P.M. Deadline to officially withdraw from the University for fall semester.
December 14, Friday, 6:30 P.M. Instruction ends.
December 15, Saturday. Reading Day.
December 17, Monday, 8:00 A.M. Final examinations begin.
December 21, Friday, 1:00 P.M. Final examinations end. Semester ends.
December 23, Sunday, 5:00 P.M. Deadline for all grades. Registrar's Office open 1:00 P.M. - 5:00 P.M.

1980

SPRING SEMESTER
January 7, Monday. Orientation for new students.
UNIVERSITY CALENDAR FOR 1980-1981

For the College of Arts and Sciences, the College of Business Administration, the College of Engineering, and the College of Nursing.

1980

MINI SUMMER SESSION
(May 19 - June 12)

SUMMER SESSION
June 16, Monday, 7:30 A.M.; 1:00 P.M. Instruction begins. Late registration, July 4, Friday. No classes.
August 6, Wednesday. Summer Session closes 5:00 P.M.
August 8, Friday, 10:00 A.M. Deadline for all grades.

FALL SEMESTER
August 23, Saturday, 8:00 A.M. Orientation week for freshmen begins.
August 26, Tuesday, 8:00 A.M. Registration for upperclassmen.
August 27, Wednesday, 8:00 A.M. Registration for freshmen and transfer students.
August 28, Thursday, 8:00 A.M. Instruction begins.
August 28 - October 16, Dates for first half short courses.
September 3, Wednesday, 5:00 P.M. Deadline for adding first half short courses.
September 5, Friday, 5:00 P.M. Deadline for adding regular courses.
September 17, Wednesday, 5:00 P.M. Deadline for withdrawing from first half short courses with grade of W.
October 9 - October 15, Adjustment period for adding second half short courses (and arranging course intensification).
October 11, Saturday. Homecoming Day.
October 15, Wednesday. Last day to file application of candidacy for the associate's and bachelor's degrees to be conferred in May or August, 1981.
October 17 - December 12. Dates for second half short courses.
October 23, Thursday, 5:00 P.M. Deadline for adding second half short courses.
October 29, Wednesday, 5:00 P.M. Deadline for withdrawing from regular courses with grade of W.
November 6, Thursday, 5:00 P.M. Deadline for withdrawing from second half short courses with grade of W.
November 21, Friday, 6:30 P.M. Thanksgiving recess begins.
December 1, Monday, 8:00 A.M. Thanksgiving recess ends.
December 12, Friday, 5:00 P.M. Deadline to officially withdraw from the University for fall semester.
December 12, Friday, 6:30 P.M. Instruction ends.
December 13, Saturday. Reading Day.
December 15, Monday, 8:00 A.M. Final examinations begin.
December 19, Friday, 1:00 P.M. Final examinations end. Semester ends.
December 22, Monday, 9:00 A.M. Deadline for all grades.

1981

SPRING SEMESTER
January 5, Monday. Orientation for new students.
January 6, Tuesday, 8:00 A.M. Registration for upperclassmen.
January 7, Wednesday, 8:00 A.M. Registration for all freshmen and transfer students.
January 8, Thursday, 8:00 A.M. Instruction begins.
January 14, Wednesday, 5:00 P.M. Deadline for adding first half short courses.
January 16, Friday, 5:00 P.M. Deadline for adding regular courses.
January 28, Wednesday, 5:00 P.M. Deadline for withdrawing from first half short courses with grade of W.
February 19 - February 25. Adjustment period for adding second half short courses (and arranging course intensification).
February 27 - May 5. Dates for second half short courses.
March 5, Thursday, 5:00 P.M. Deadline for adding second half short courses.
March 6, Friday, 6:30 P.M. Spring recess begins.
March 23, Monday, 8:00 A.M. Spring recess ends.
March 25, Wednesday, 5:00 P.M. Deadline for withdrawing from regular courses with grade of W.
April 2, Thursday, 5:00 P.M. Deadline for withdrawing from second half short courses with grade of W.
April 15, Wednesday. Last day to file application of candidacy for the associate’s and bachelor’s degrees to be conferred in December 1981.
April 17, Good Friday. No classes.
April 24, 25, and 26, Friday, Saturday, and Sunday. Spring Festival begins 4:00 P.M. on Friday.
May 5, Tuesday, 5:00 P.M. Deadline to officially withdraw from the University for spring semester.
May 5, Tuesday, 10:00 P.M. Instruction ends.
May 6, Wednesday. Reading Day.
May 7, Thursday, 8:00 A.M. Final examinations begin.
May 12, Tuesday, 1:00 P.M. Final examinations end. Semester ends.
May 13, Wednesday, Noon. Deadline for grades for all candidates for all degrees.
May 15, Friday, 5:00 P.M. Deadline for all other grades.
May 17, Sunday, 107th Annual Commencement.

Certain other dates are observed annually by the University with special convocations or special religious services: The Festival of the Reformation, Veterans Day, Lincoln’s Birthday, Washington’s Birthday, Ash Wednesday, and The Festival of the Ascension.
VALPARAISO UNIVERSITY. The University is a medium-sized, private, church-related, coeducational university which includes seven units: the College of Arts and Sciences, Christ College, the College of Business Administration, the College of Engineering, the College of Nursing, the School of Law, and the Graduate Division. In addition, the University offers liberal arts courses in the Hospital Schools of Nursing in Lutheran hospitals in St. Louis, Cleveland, and Fort Wayne. The University has a total student enrollment of over 4,000, a full-time on-campus enrollment of over 3,500, and a faculty which numbers over 270. The educational program utilizes a plant of over 70 instructional and residential buildings, located on a campus of 310 acres and comprising property valued at approximately thirty-seven million dollars.

Valparaiso University operates within a religious tradition which recognizes no hostility between the life of the mind and the life of the spirit. Instead, with its emphasis upon Christian freedom and upon the sacredness of vocation, it liberates men and women so that they may explore any idea, any theory without having to fear that somewhere along the line they will have to choose between faith and intellectual honesty.

As the nation’s largest Lutheran-affiliated institution of higher education, Valparaiso University is large enough to provide a broad range of academic programs and collegiate experiences; yet, in its seven units, it is oriented to small classes and individual guidance. Through its commitment to academic excellence, Valparaiso is truly a university; yet, by its rootage in Christian heritage, it shares the message of the church.

OBJECTIVES. Valparaiso University aspires to serve the growth of whole men and women. As thought, feeling, and expression are always involved in human action, an educational philosophy or program which neglects any of these factors must in some degree be inadequate. In common with other institutions of higher learning, Valparaiso University is concerned with the preservation and application of the accumulated knowledge of mankind. As a church-related institution, the University sees knowledge of the Christian tradition as essential to the educated person; for this reason it places emphasis on the religious heritage of mankind, particularly on the Christian heritage as grasped by the Lutheran Church, which constitutes the largest body of Protestant Christians in the world.

HISTORICAL BACKGROUND. Valparaiso University’s history has three distinct phases.

Valparaiso Male and Female Academy was founded in 1859 as one of the first coeducational institutions in our land.

After reverses caused by the Civil War, classes were suspended in 1869, but the institution was revived by Henry Baker Brown as the Northern Indiana Normal School and Business Institute in 1873. "Mr. Brown’s School," a flourishing private, proprietary institution, was renamed Valparaiso College in 1900 and rechartered as Valparaiso University in 1907.

A new chapter in the history of the University was begun in the summer of 1925, when the University was purchased by the Lutheran University Association. This Association, an Indiana corporation composed of men and women affiliated with the Lutheran Church-Missouri Synod, now owns and controls the University.
The oldest current unit of the University is the College of Arts and Sciences, dating back to the founding of the institution in 1859. The School of Law was founded in 1879 as the Northern Indiana Law School and became part of the University in 1905. The reorganized College of Engineering dates back to 1949. Graduate Division offerings first appeared in 1963. The Department of Business and Economics became the College of Business Administration in 1964. In 1966, the honors program of the University was reorganized into Christ College, a separate honors unit in the institutional structure. The newest school is the College of Nursing, inaugurated in 1968.

LOCATION. Valparaiso, Indiana, the seat of the University, is forty-four miles southeast of Chicago on U.S. 30 and Indiana 49 and 2. Situated eight miles south of Interstate 80-90 (Indiana Toll Road) and eleven miles east of I-65, it is a residential city of twenty thousand inhabitants. Porter County, of which it is the county seat, adjoins the industrial communities of the Calumet District. The community is served by Greyhound and Trailways Bus Lines and the national railway system. Commuter service is available from the local airport to the major airports in Chicago. Direct limousine service between Valparaiso and O'Hare Airport is also available.

The location of Valparaiso offers many advantages. Students of physical geography and biology profit by the fact that the city is situated on the crest of the Valparaiso Terminal Moraine and that it is within a few miles of the Indiana Dunes, Lake Michigan, and the marshes of the Kankakee River region. Students of the sciences, both physical and social, and of commercial studies find the nearness of the great Calumet Industrial District and of Chicago a great advantage. Field trips and inspection tours form a regular part of the course of study in several departments.

Since Chicago can be reached in approximately an hour by car or railroad, many students also take advantage of the cultural opportunities offered by the great libraries, museums, art galleries, and concert halls of that city.

Students interested in outdoor life find the small lakes nearby and Lake Michigan, which is only twelve miles away, a great advantage.

ACCREDITATION. Valparaiso University is fully accredited by the North Central Association of Colleges and Schools for the offering of bachelor's and master's degrees. The undergraduate and graduate programs for the preparation of teachers are approved by the Indiana State Department of Public Instruction; the undergraduate program is also accredited by the National Council for Accreditation of Teacher Education. Valparaiso's offerings are further accredited by the National Association of Schools of Music and approved by the American Association of University Women.

The School of Law is a member of the Association of American Law Schools and is approved by the American Bar Association.

The College of Engineering is fully accredited in all its degree programs by the Engineers' Council for Professional Development, and is an institutional member of the American Society for Engineering Education. The College of Engineering has a local chapter of Tau Beta Pi, the national engineering honorary fraternity, on the campus.

The College of Nursing is accredited by the Indiana State Board of Nurses' Registration and Nursing Education and by the National League for Nursing.

The University is a member of the American Association of Colleges for Teacher Education, the American Council on Education, the Association of American Colleges, the Council on Social Work Education, and the Lutheran Education Association.

MOTTO. Valparaiso University's emphasis on the cultivation of the whole person finds expression in its motto: "In thy light do we see light."

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

Students and faculty participate with the Dean of the Chapel of the Resurrection in preparing and carrying through a rich range of services. On Sunday there is Morning Worship and the celebration of Holy Communion. Monday through Friday the University has appointed 10:10 for Morning Prayer when members of the University identify themselves as Christ’s people serving him in their multifarious callings. Evening Prayer is also held evening at 10:10. Every evening there is a pastor in the Dean's room for personal counseling. Much music, song, art, and drama flow into the Chapel of the Resurrection for the delight of our Lord and his people.

FACULTY. The approximately 270-member faculty of the University represents a rich variety of graduate study and personal experience in a broad range of fields. The student-faculty ratio is comparatively low. While the University includes a Graduate Division, the graduate students are not used for teaching undergraduate courses. With few exceptions, the teaching program is carried out by full-time faculty members. The basic emphasis at Valparaiso is thus on quality teaching. However, faculty members are encouraged to do research in their respective fields to develop further teaching competence.

STUDENT CONDUCT. When a student enrolls at Valparaiso University, he/she thereby accepts the rules, regulations, and procedures as found in the University Catalog and the 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.

Under the Honor Code, the University presumes that students are able and willing to accept the duties and responsibilities of honorable conduct for the sake of the Valparaiso University community. Before he/she can be admitted to the University, every entering student must sign and submit a statement that he/she understands the Honor System we have and is aware that all his/her academic work must be submitted under his/her signature and that he/she has done this work in agreement with the Honor Code.

Under the Honor System all written examinations, of any length, are taken in an atmosphere free from the surveillance of a proctor. Every student has the responsibility to keep academic work free of dishonesty, that is, to neither give nor receive unauthorized aid. Non-toleration of the use of unauthorized aid is a further responsibility which is inherent in the Honor System. Each
student must report to the Honor Council any violation of the System of which he/she becomes aware. The student is usually asked to sign a pledge on work done for academic credit to the effect that no unauthorized aid was given, received, or tolerated.

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 alleged Honor Code violations and then makes a recommendation to the President of the University regarding guilt or innocence and any penalty. The Council is composed of students who are chosen by the incumbent members subject to the approval of the President of the University.

The faculty reserves the right to abrogate the Honor System at any time.

STUDENT PERSONNEL PROGRAM. This program, which is under the supervision of the Vice-President for Student Affairs, coordinates the various services provided by the University for student welfare and development. These services include Office of the Dean of Men, Office of the Dean of Women, Health Services, Admissions, Financial Aid, Placement, Counseling Services, Valparaiso Union, Security, and Special Programs. A personnel file of each student is kept in the Office of the Dean of Men or Dean of Women.

UNIVERSITY COUNSELING SERVICES. Counseling services at the University are provided by the University Counseling Center and the Chapel Counseling Program.

The professional staff of the University Counseling Center offers a variety of services for full-time students without charge, except for a small fee charged for certain testing programs. Services included are: individual and group counseling, vocational/career development programs, a career resource center, special psychological education programs, and consultation services. Additionally, the Center offers interest, personality, psychological, and other specialized tests, as well as providing the services of a consulting psychiatrist.

Under the direction of the Dean of the Chapel, a pastoral counselor is available each evening in the chapel for personal/theological concerns.

The University Counseling Center and the Chapel Counseling Program function cooperatively yet as administratively independent offices whose records are kept separately and confidential.

PLACEMENT SERVICE. The Office of Placement and Career Counseling offers assistance to Valparaiso graduates in securing employment and offers counseling to all students who may need assistance in making vocational choices.

The Placement Office has close contact with a wide variety of businesses, industries, and government agencies throughout the country. Each year, a large number of companies and agencies send representatives to the campus in order to interview seniors.

The Office keeps on file the credentials (personal data and references) of all graduates who register, without any charge.

Browsing racks at the Office contain a wealth of information regarding institutions, companies, and job opportunities.

The Teacher Placement Office gives assistance to beginning and experienced teacher candidates who have completed requirements for certification under the supervision of the Department of Education in Valparaiso University.

ADVISORY PROGRAM. Each entering student is assigned to an academic adviser to assist him/her in selecting a curriculum, meeting University requirements, and making the most of his/her studies.

In the College of Arts and Sciences, a student who has not declared a major is assigned a general adviser. As soon as a student declares a major, he/she is assigned to his/her major department for advising. The major field of study should be chosen by the beginning of the junior year at the latest. Students who are interested in teacher certification should declare that intention at the beginning of the freshman year if they desire to complete their degree and certification requirements in four years. The failure to take courses which anticipate the requirements of some fields of study may lengthen the time needed to complete degree requirements.

Each student must have the schedule signed by his/her academic adviser at the beginning of each semester before the schedule is filed with the Registrar. Subsequent changes in the schedule must also be signed by the student’s adviser. The signature of an academic adviser simply indicates that the adviser has counseled the student.

THE 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.

THE MEDAL OF MERIT. This medal is an award to recognize the outstanding service to society by the recipient through his chosen calling and by his exceptional activity in the advancement of the mission of Valparaiso University.

AWARDS AND PRIZES. The Sloan Galleries of American Paintings annually award prizes to students for work done in the various media taught in the Department of Art. The Committee on the Sloan Fund, which determines the recipient, reserves the right to retain the works as additions to the Sloan Collection.

An annual award is presented by the Beta Nu Chapter of Pi Sigma Alpha, national honorary political science organization, to the outstanding political science major voted by the faculty of the Department of Political Science.

An annual scholarship award is presented by Rentner Senate of the Delta Theta Phi Law Fraternity to the pre-law student who, at the completion of his/her seventh semester, has the highest average in all collegiate work taken at Valparaiso University, provided that he/she has completed at least four of the seven academic semesters at Valparaiso University.

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

The Student Senate is empowered by the Instrument for Internal Governance of the University with executive, legislative, and judicial powers over the student body. It is composed of upper class student representatives and officers elected in the spring and freshman representatives elected in the fall. The Student Senate gives students the opportunity to assume the privileges and responsibilities of self-government. It also coordinates the five standing committees of Publications, Broadcasting, Residences, Off-Campus and Commuter Students, and Union Board.

The Committee on Publications is responsible for policies and regulations of the University's student publications. These include The Beacon, the University yearbook; The Lighter, literary magazine; and The Torch, campus newspaper.

The Committee on Broadcasting is responsible for policies and regulations of the campus radio station, WVUR, (89.5 FM).

The Committee for Off-Campus and Commuter Students is designed to serve as a clearing house for information and services to off-campus students. Responsibilities include: providing forms to match potential roommates; acquiring information on available housing; maintaining correspondence with local, state, federal, and private agencies; and providing programs, services, and information to commuter students.

The Valparaiso Union Board develops, presents, and coordinates social, recreational, and educational events and programs to broaden student acquaintances and improve student life, and establishes policies for the use of the Valparaiso Union.

The Committee on Residences has responsibility for the policies and procedures regarding residence hall use.

Academic or Professional Organizations: American Society of Civil Engineers, American Society of Mechanical Engineers, Student Business Association, American Society of Civil Engineers, Engineering Society, Geography Club, Home Economics Club, Institute of Electrical and Electronic Engineers, Phi Mu Alpha—Music men, Physics Society, Pre-Med Society, Psychology Club, Sigma Alpha Iota—Music women, Social Services Club, Sociology Club, Student Education Association, University Players, Varsity Club.

Honorary Societies: Alpha Lambda Delta—all freshmen, Alpha Pi—Senior men, Alpha Psi Omega—Drama, Aurora—Junior women, Eta Sigma Phi—Classics, Gamma Theta Upsilon—Geography, Junior Men’s Honor Guard, Kappa Delta Pi—Education, Mortar Board—Senior women, Omicron Delta Epsilon—Economics, Phi Alpha Epsilon—Journalism, Pi Sigma Alpha—Political Science, Sigma Xi—Research, Tau Beta Pi—Engineering, Alpha Epsilon Delta Pre-Medical and Pre-Dental.

Miscellaneous Organizations: Gamma Delta, Gold Splash—Swimming, Highlights, Women’s Recreation Association, Young Democrats, International Relations Club, Mental Health Club, Young Republicans, Alpha Phi Omega, Women’s Service Organization.

Intercollegiate and Intramural Athletics. The programs of intercollegiate and intramural athletics are integral parts of the total educational program, affording all students the opportunity to participate in a variety of physical activities, and providing those students who have special aptitudes in certain sports opportunities to achieve a high level of mastery. Participation with proper guidance will give the students the chance to develop many sound qualities and attitudes: respect for discipline and rules and constituted authority, valuing of teamwork, capacity to lead and direct, the ability to act effectively under stress, and self-discipline in times of achievement.

For the non-participant—students, faculty, community, supporting constituency, and other friends of the University—the program of intercollegiate athletics serves as a rallying point providing a common interest through which loyalty, a spirit of unity and high morale can be created and sustained.

The women’s division of the intercollegiate athletic program offers participation in basketball, gymnastics, field hockey, swimming, tennis, and volleyball. Membership is maintained in the Indiana Association of Intercollegiate Athletics for Women and the Association for Intercollegiate Athletics for Women.

The men’s division sponsors intercollegiate competition in baseball, basketball, cross country, football, golf, swimming, tennis, track, and wrestling, and holds membership in the Indiana Intercollegiate Athletic Association, and the National Collegiate Athletic Association. All teams, with the exception of baseball, which operates as a major independent program, are also members of the Heartland Collegiate Conference.

The Director of Athletics is responsible to the President of the University through the Vice-President for Public and Alumni Affairs. Participation policies are established by the University Senate on recommendation of its Committee on Intercollegiate Athletics.

The University is committed to a thorough and complete program of intramural athletics to provide wholesome and stimulating athletic activity for every student. All students are invited to participate in the many different team and individual activities which are scheduled throughout the academic year. Students are also encouraged to participate in the planning and conduct of the intramural programs. Co-recreational activities are included in this program.

Although the University provides an experienced staff and takes every precaution to avoid injury to all participants in the intercollegiate and intramural programs, the University assumes no responsibility for accidents and students participating in intramural and intercollegiate athletics do so at their own risk.

The University Theatre, under the supervision of the Department of Speech and Drama, provides a means for creative activity in curricular and extracurricular areas. The work in theatre encompasses two objectives. First, it provides a program of cultural enrichment through active participation in plays; students become acquainted with great drama of the past and present, developing a sound critical sense. Second, it gives students practical training in acting and all phases of play production, including experience in various aspects of management and advertising.
The University Theatre annually presents four major stage productions, one of which is a musical. Students are thereby given training in specialized forms of acting. These major productions are supplemented by studio and one-act plays which are classroom productions directed by students in play directing and special project courses.

**Musical Opportunities:** Musical organizations of the Department of Music are open to qualified students from all disciplines. The choral organizations include the University Choir, the Schola Cantorum, the University Choral Society, and the Chamber Choir. The University Choir and the Schola Cantorum perform the finest in choral literature both sacred and secular. The primary function of the Choral Society is to prepare large works for performance with the University Orchestra. A Chamber Choir provides service music for the Chapel and performs small choral chamber works.

The University-Civic Orchestra and the University Chamber Orchestra appear in several concerts each year in which students, faculty, and guests often appear as soloists. They assist the University Choral Society in the production of large-scale choral works and participate in opera productions. The Concert and Symphonic Bands are dedicated to the performance of the best in band literature. The Marching Crusaders Band and the Pep Band provide music for athletic events, and the Jazz-Lab Band provides a workshop in jazz literature.

The Opera Workshop is an ensemble class for gifted singers devoted to the study and performance of major operatic works. Chamber music groups are open to students who can qualify by audition. The Collegium Musicum specializes in the performance of works outside the standard choral and instrumental repertoire. A number of instruments are available to students enrolled in the above ensembles.


Students may enroll for applied music lessons upon payment of an applied music fee. Registration for applied music entitles the student to practice room facilities.

**Service Opportunities** offered by Alpha Phi Omega, Women's Service Organization (WSO), and a number of other organizations give students opportunity to extend service to the University community.

Specially qualified upperclass students are eligible for positions as counselors in the residence halls.

**Alpha Phi Omega** is the nation's largest service fraternity assembled to develop leadership, promote friendship, and render service to the campus, community, and nation. Valparaiso Zeta Gamma Chapter, founded in 1948, maintains an office at 818 Mound Street. Although Alpha Phi Omega is a service fraternity, its program aims at the development of the individual through both service and social events. Membership in this, the world's largest fraternity, in no way interferes with membership in a social fraternity. Pledgeship involves no hazing, but is instead a period of constructive service.

**Women's Service Organization** was established for the purpose of providing service to campus and community and to promote friendship and good will to all. Membership is open to all women irrespective of their course of study or affiliation with other organizations.

WSO maintains an office at 818 Mound Street. Pledgeship consists of a period of preparation and training in the ideas and purposes of Women's Service Organization.

**Fraternities and sororities** on this campus are more than simply social clubs. Offering academic challenge, the close friendship of "brothers" and "sisters," athletic competition at the intramural level, opportunities for community service projects, as well as a comfortable social atmosphere, fraternities and sororities add much to the college education of some students. Fraternity and sorority members are actively represented in student leadership, athletics, and professional organizations.

The Dean of Women is the official adviser to the sororities and the Interfraternity Council. The Dean of Men is the official adviser to the fraternities and the Interfraternity Council.

**The Valparaiso Union** is the center of student activity. The Union is the living room of the campus; a place to relax, meet informally with other students as well as members of the faculty and staff, or to bring visitors.

Among the many facilities of the Union is the Cafeteria and Snack-bar, known as Ye Olde Grail, which offers a variety of popular food items including homemade pizza, make your own sandwiches and salads, and submarine sandwiches. Private dining rooms are also available for special dinners or luncheons.

Other facilities include the Great Hall, where a variety of meetings, banquets, and student activities take place. There is also a Games Room with four bowling alleys, pool tables, ping pong tables, foosball, and a variety of electronic games.

Offices of the Student Senate and its various committees, including the Union Board, The Beacon (the yearbook) and The Lighter (the student Literary Magazine) are also housed in the Union.

The meeting rooms in the Union are used by all campus organizations, and many services are offered to various campus groups to take care of their complete meeting needs.

The Information Desk at the Union offers a number of services including candy, cigarette and sundry concession, check-out of music listening head-phones and table games, and ticket sales for various campus events including bus tickets to Chicago.

All in all, the Union becomes "the home away from home" for many students.

**STUDENT ACTIVITIES.** The University considers a sound and interesting program of organized student activities to be an important part of student life. The Director of the Valparaiso Union acts as general adviser to the Union Board and other organizations concerned with the overall Student Activities Program. Students take an active role in providing a well-balanced, diversified offering of student activities through the eleven committees of the Union Board including: Outdoor Recreation, Concerts, Dances and
Coffeehouses, Travel, Production, Hospitality, Special Events (Homecoming, Winter Weekend, Spring Weekend), Tempo (Lectures and Debates), Mini Courses, House, Films, and Publicity. In the various residence halls, there is a social program under the supervision of the residence hall directors and their social program committees. Sororities and fraternities have numerous social events. Various clubs on campus, centered around specific majors, also have a variety of activities. The center of student activity is the Valparaiso Union. Parties, picnics at the Indiana Dunes, ski trips, concerts by well-known professional groups, current films, and a host of other activities all contribute to an exciting and well-rounded activities program.

LECTURES.
The 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.

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

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

The O. P. Kretzmann Lectureship in Christian Ethics, established in honor of the late President Emeritus, is delivered annually. The topics and speakers each year will be designated by the President of the University, after consultation with his advisers. Earnings from the O. P. Kretzmann Memorial Fund will 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.

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

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

THE SLOAN GALLERIES OF AMERICAN PAINTINGS. The Galleries and their extensive collection of works by American artists are located in the Henry F. Moellering Memorial Library. The collection and a fund for its maintenance and expansion were gifts to the University from Spencer and Percy H. Sloan in memory of their parents, Junius R. and Sara L. Spencer Sloan. Approximately four hundred paintings in this collection are in constant exhibition in the Galleries and throughout the campus, making a significant contribution to cultural life. In addition, the Galleries maintain a schedule of visiting exhibitions representing various aspects of American art.

UNIVERSITY LIBRARY FACILITIES. The Henry F. Moellering Memorial Library, the general library of the University, contains over 275,000 standard volumes, bound periodicals, and microforms. It receives over 1,000 periodicals and is an associate member of the Metropolitan Periodical Service. The Library is also a depository for selected documents of the government of the United States and of the State of Indiana. In addition, as a depository library it has approximately 100,000 maps of the U.S. Geological Survey and the Army Map Service. The book stacks are open to all students, and the reading rooms are air-conditioned. Musical and literary recordings are available in a separate reading room. The University Archives, Multi-Media Center, and Developmental Reading Laboratory are located on the lower level of the Library.

The Curriculum Library is located in the J. W. Miller Hall, and the library of the School of Law, in Wesemann Hall.

THE CAMPUS. Seventy instructional, residential, and service buildings are located on the 310-acre campus of the University. The buildings and grounds are valued at approximately thirty-seven million dollars.

The 46-acre campus purchased by the Lutheran University Association in 1925 now is known as West Campus. The newer East Campus has been acquired and developed by the University Board of Directors since 1944. Southeast from it across U.S. Highway 30 is the Alumni Campus, a 52-acre tract acquired by the Alumni Association and presented to the University as a Centennial gift in 1959. Eastward across Indiana Highway 49, a 58-acre extension of the East Campus was developed in 1969 with the construction of eight all-purpose intramural fields, a hard surface track, and a varsity baseball facility. Additional physical education, intramural, and intercollegiate athletic facilities are planned here.

MAJOR BUILDINGS.

Chapel of the Resurrection. At the center of the University's developing campus and of its activities, is the largest university chapel in North America. Funds received from members of the Lutheran Church—Missouri Synod, alumni of the University, members of the Valparaiso University Guild, and many others made possible the construction of this Chapel seating over 3,000 persons. First used in the fall of 1958, the structure was dedicated September 27, 1959.

The Baptistry, at the foot of the circular staircase leading from the narthex, includes a five and one-half ton font made of a single block of Rockville granite, a paschal candlestand, and a 17-foot hanging sculpture made of torch-fired bronze. The Music Window, crafted in Cologne, Germany, and rising more than 55 feet in the center front of the Chapel, is the gift of Mr. and Mrs. Richard E. Meier. The Chancel Windows, also crafted in Cologne, are gifts of Mr. and Mrs. Alfred C. Munderloh. The Fred and Ella Reddel Memorial Organ has a movable console and 70 ranks, with potential for expansion; among its unique features is a 61-pipe copper Trompeta Real. The pulpit was given by the family of the Rev. Louis G. Nuechterlein as a memorial to his ministry. The altar and altar rail were a gift of Mr. and Mrs. Len C. Heine. The Christus Rex, a symbolic representation of Christ's victory over death, is a memorial to Miss Elizabeth Selle, a former student at the University. The Chapel office, at the west side of the narthex, and the Baptistry were gifts of Mr. and Mrs. A. J. W. LeBien.

The August H. and Ella Louise Brandt Campanile, flanking the Chapel and towering to a height of 143 feet, sounds out the passing hours and the calls to worship with the notes of a 61-bell electronic carillon, a gift of the University Guild.
The Henry F. Moellering Memorial Library. Dedicated on December 6, 1959, the library is a gift of Mrs. Henry F. Moellering of Fort Wayne, Indiana, and her children. Supplementary funds were provided by the Lilly Endowment, Inc., of Indianapolis and the Kresge Foundation of Detroit. An addition was completed in the fall of 1969. A two-story structure with three stack levels, the original library provides reading space for 500 persons and shelf space for more than 200,000 volumes. The addition provides space for 160 individual study carrels and shelf space for 70,000 volumes. The lower level contains stacks, archives, seminar rooms, faculty lounge, multi-media center, rare books, and an educational laboratory. The main level consists of two large reading rooms, lobby, circulation desk, catalog file, lounge, offices, stacks, receiving room and workroom. The Sloan Galleries of American Paintings are located on the main floor.

Alumni Hall is a residence hall for women, first occupied in 1966. The room only fee is $370.00 per semester.

Art-Music Building, formerly the Engineering Laboratory, was designed, financed, and constructed by students in 1949. It is now remodeled for use by the Departments of Art and Music.

Bogarte Hall contains classrooms and offices for the Department of Speech and Drama.

Brandt Hall, a residence hall for 332 men, was first occupied in 1962. The room only fee is $370.00 per semester.

Dau Hall, a residence hall, octagonal in shape, for 164 freshman men, was constructed in 1955 as a twin to Kreinheder Hall, to which it is connected by coed dining and commons rooms added in 1964. The room only fee is $370.00 per semester.

Deaconess Hall, a dormitory and headquarters for the Lutheran Deaconess Association, was constructed in 1957 with funds from the Lutheran Women's Missionary League and the "Building for Christ" campaign of The Lutheran Church-Missouri Synod. It houses 60 women and includes a chapel and offices. As space permits, non-deaconess students are also housed in this building at a room only fee of $370.00 per semester.

DeMotte Hall, formerly the College of Business Administration building, is being remodeled to accommodate other University offices and some classrooms.

Dickmeyer Music Hall providing practice rooms and offices for the Department of Music, was first occupied in 1972.

Fraternity row, consisting of six dormitory residences housing 50 men each, was built in 1969 and made available for use by fraternities.

Gellersen Engineering-Mathematics Center, made possible by the gift of William Gellersen, was first occupied in 1968 and contains all offices, classrooms, and laboratories of the College of Engineering and the Department of Mathematics.

Graland Hall, completed in 1956, contains the offices of the Division of Public and Alumni Affairs.

Guild Center of Admissions, a gift of the Valparaiso University Guild, occupied in 1965, has facilities for the Director of Admissions, Director of Financial Aid, and a conference room for the University's Board of Directors. A 1969 addition houses the offices of the Dean of Student Services and Placement Director.

Guild Hall, a gift of the Valparaiso University Guild, is a residence hall for women built with Memorial Hall in 1947. The room only fee is $370.00 per semester. The Office of the Vice-President for Business Affairs is in the north wing of the ground floor, and the Office of the Registrar is in the south wing.

Gymnasium, constructed in 1939, contains a gymnasium, offices, team rooms, locker and shower rooms. A major expansion, completed in 1983, includes a six-lane intercollegiate swimming pool, over 2,000 additional gymnasium seats, an auxiliary gymnasium, wrestling room, multipurpose room, additional dressing rooms, and offices.

Heimlich Hall contains several studios for the Department of Art.

Heritage Hall contains several small classrooms, student lounge, and administrative and faculty offices.

Journalism Building, the former Vale Day School building, was purchased in 1977. It was converted into a journalism center, bringing together scattered major activities of the Department of Journalism and student communication media. It was first occupied in January 1978.

Kreinheder Hall is a residence hall, octagonal in shape, for 164 freshman women, constructed in 1955 as a twin to Dau Hall, to which it is connected by coed dining and commons rooms which were added in 1964. The room only fee is $370.00 per semester.

Kroencke Hall, completed in 1952, provides classrooms, a small theatre- auditorium, and laboratories for the Department of Speech and Drama, as well as classrooms and offices for the Department of Geography. An addition, in 1956, provides space for classes in stage design, costume design, and make-up, as well as storage for theatre properties and costumes.

Lankenua Hall is a residence hall for 332 women, first occupied in 1964. The room only fee is $370.00 per semester.

LeBien Hall is named for University benefactors, Mr. Alfred J. W. and his wife, Elfrieda M. LeBien. The College of Nursing building is located less than a block from Porter Memorial Hospital, and contains large lecture-demonstration classrooms, a multi-purpose room, seminar rooms, offices, and lounges. It was first occupied in 1970.

Lembke Hall contains an art laboratory and faculty offices.

Loke Home Economics Center, the gift of Mr. and Mrs. Edgar William Loke and other friends, was first occupied in 1968 and contains three large laboratory-classroom areas and six offices.

The Medical Center, formerly the Health Service Building, adjacent to Scheele Hall, is a former private home renovated to accommodate the offices of the Medical Director and his staff.
Dr. Richard E. and Oma Meier Hall is a one-story brick building, completed in 1968, which has 18 classrooms, a language laboratory, and offices for faculty members.

Memorial Hall, a residence hall for women, was built with Guild Hall in 1947. The room only fee is $370.00 per semester. The Administrative Computer Center is located in the north wing on the ground floor.

J. W. Miller Hall, the former elementary school building of Immanuel Lutheran Church, Valparaiso, was purchased and renovated for teacher education purposes in 1968.

Moody Laboratory, completed in 1946, houses psychology laboratories.

Ewald H. Mueller Hall houses the University's Christ College (honors program). It also contains the President's office, the office of the Dean of Christ College, faculty offices, classrooms, seminar rooms, lecture-theatre room, and a small dining-meeting room. It was first occupied in 1970.

Julius and Mary Neils Science Center, a gift of the Neils family, contains offices, laboratories, and research facilities for the Departments of Biology and Chemistry. The first unit was completed in 1967. The second unit, called the Oswald W and Erna Klingsick Hall Addition, was completed in 1973 and houses new facilities for the Department of Physics and contains several general classrooms and a large auditorium.

Scheele Hall, a five-story residence hall accommodating 322 sorority women and providing sorority-allocated lounges, was first occupied in 1961. The room only fee is $370.00 per semester.

Student Affairs Building, a former residence owned by Immanuel Lutheran Church, was renovated for faculty and administrative offices in 1967. It contains the offices of the Vice-President for Student Affairs and of the Deans of Men and Women.

William E. Urschel Hall, the College of Business Administration building, is a two-level structure first occupied in the fall of 1979. It contains offices, classrooms, and an auditorium seating 191.

Valparaiso Union, completed in 1955, contains student offices, lounges, meeting rooms, recreation facilities, a short-order counter, and dining and banquet rooms. The Union, a center of activity for the campus community, is designed to serve as an informal educational agency through its programs and facilities and to provide a rounded and wholesome social, cultural, and recreational program.

Wehrenberg Hall, a four-story, Y-shaped residence hall for 285 men, was first occupied in 1959. The room only fee is $370.00 per semester.

Wesemann Hall, the School of Law building, which was first occupied in 1963, was named for benefactors Mr. and Mrs. Adolph H. Wesemann. The library wing, containing space for approximately 87,000 volumes, was enlarged in 1976 and this addition was named after benefactors Clara and Spencer Werner.

**EXPENSES (Undergraduate and Professional Tuition).**

<table>
<thead>
<tr>
<th>College or School</th>
<th>Each Semester</th>
<th>Academic Year</th>
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<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>$1,560.00</td>
<td>$3,120.00**</td>
</tr>
<tr>
<td>College of Business Administration</td>
<td>1,610.00</td>
<td>3,220.00</td>
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<tr>
<td>College of Engineering</td>
<td>1,610.00</td>
<td>3,220.00</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>1,560.00</td>
<td>3,120.00</td>
</tr>
<tr>
<td>School of Law</td>
<td>1,980.00</td>
<td>3,960.00</td>
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</table>

FEES. The General Fee for each semester amounts to $83.00 and includes a Student Senate Fee of $14.50. The fee is paid by all full-time students registered for at least 10 credit hours per semester. The fee is used to defray the cost of the following services: Health and hospitalization program, Union and gymnasium building fund requirements, and co-curricular activities. The Student Senate Fee is administered, by authorization, as the Student Senate determines.

Laboratory fees are charged in some departments and are listed under the respective courses. All students enrolling for laboratory courses are financially responsible for breakage or damage to equipment. Instructors report such damage to the Business Office and the student or the parent is billed for the cost of repair or replacement.

Applied Music Fees. The University encourages students to continue applied music instruction by charging modest fees for private lessons.

Non-music majors will pay a fee of $90.00 per semester for instruction in one private or class lesson in applied music with no additional charge for use of instrument or practice room. Students taking private lessons beyond one applied music subject will pay an additional $50.00 for each subject.

Students taking private music lessons are held responsible for making arrangements with the instructor to complete all lessons during the semester. If the student is unable to complete within the semester the series of lessons for which he/she was assessed, a report should be made immediately to the chairperson of the department by the student.

*Any day student who registers for a given semester in day and Evening Division classes will be considered to be a day student and will be charged the regular charges applicable to a day student. A day student may not take more than 6 hours in the Evening Division Program.

**Music majors add $45.00 per semester ($90.00 per year). This includes all applied music fees.
TUITION AND FEES FOR PART-TIME STUDENTS (Undergraduate and Professional Programs). Students who register for no more than 9 credit hours are classified as part-time students.

Such students pay a tuition charge of $102.00** per credit hour, regardless of the college or school of the University. This charge does not include the use of facilities of the health service nor participation in the student insurance plan.

Students who initially register as part-time students and subsequently increase their registration load (other than audited courses) will be charged tuition and fees in accordance with policies which pertain to their revised program.

Auditors pay $98.00 per credit hour equivalent.

Tuition and fees for students enrolled only in courses in the Evening Division offered by the University are listed in a separate publication.

HOUSING REGULATIONS. The University’s regulations require all freshmen, sophomores, and juniors*** to live in University residence halls. Exceptions are made for veterans, those who at the fall registration will be 21 before the next January 1, those living with parents or spouse, and sophomore and junior fraternity men who live in a fraternity house.

Senior students may apply to live in University residence halls. Senior, graduate, and law students may examine, in person, in the Housing Office a listing of rooms in private homes, apartments, and homes for sale or rent. Every landlord whose property is listed has signed a non-discrimination statement. Students desiring such accommodations should plan to visit campus at least six weeks prior to the semester of enrollment to inspect the available listings and make arrangements with the individual landlords.

Every student whose property is listed has signed a non-discrimination statement. Students desiring such accommodations should plan to visit campus at least six weeks prior to the semester of enrollment to inspect the available listings and make arrangements with the individual landlords. These listings are not provided by mail nor over the telephone. The University is not involved in arrangements between students and landlords, except in the event of racial discrimination.

Application for University housing is mailed to each new student with the Permit to Enter form. This application and the $50.00 housing deposit should be returned to the Admissions Office as soon as possible (former students returning should mail their deposit to the Business Office). All checks should be made payable to Valparaiso University Association, Inc. A student who occupies a room in a residence hall will have $50.00 credited to his/her entire account. All returning students for whom the University can provide housing in its own residence halls, and who desire such accommodations for the Fall Semester, are required to make an advance room deposit of $50.00 on or before the date indicated by the Housing Office.

Assignments to a residence hall will be made by the Housing Office in the order in which they are received. The University will endeavor but cannot guarantee to assign accommodations according to the preferences indicated by the student.

*For Veterans Administration purposes, a full-time undergraduate student is one who is carrying a minimum of 12 semester credits for each semester of the school year (6 semester credits in a summer session).

**Music majors add $46.00 per semester. This includes all applied music fees.

***Class standing is determined by academic standards.

Refunds of one-half (50%) of the Housing Deposit will be given if a written notice of cancellation is received by the Housing Office on or before June 1 for new students and July 1 for returning students for the Fall Semester; on or before December 1 for new and returning students for the Spring Semester. No refund will be given after these dates. If a student is denied admission or readmission or if the University should be unable to provide housing, the full amount of the deposit will be refunded.

An Agreement is entered into by each student assigned University housing which makes it mandatory for him/her to occupy the residence hall space assigned for both semesters of the school year excluding vacation periods. The student is permitted to move out of the residence hall only if he/she withdraws from the University or graduates.

Roommate preferences should be listed on the housing application. Freshmen are notified in July of their roommate assignments. The specific room number in the residence hall will be given when the student arrives on campus.

Arrival at the residence hall for new freshmen and new transfer students should coincide with the first day of orientation activities, to be announced later. All students are expected to report immediately to their assigned residence hall when they arrive on campus for specific room assignment. Luggage may be sent a week prior to the opening of the residence halls. Any changes in the residence hall assignment must be submitted in writing and receive permission from the Housing Office. No guest accommodations are available in the residence halls.
All rooms in the University residence halls are provided with the necessary basic furniture. Occupants generally supply their own bedding, pillows, towels, lamps, and throw rugs if desired. Coin operated washers and dryers and ironing boards are also provided within each residence hall. Several laundries and dry cleaning establishments are located adjacent to the campus. Many students use the optional linen service from a local firm which provides fresh linen (sheets, pillowcases, towels, and wash cloths) each week. A blanket rental service is also available from the same source. Draperies are provided. Further information is available from the Housing Office.

The University residence halls are under the care of resident directors. All students residing in University-owned residence halls and houses are financially responsible for damage to rooms and equipment. Residence hall directors report such damage to the Business Office and the student or the student's parent is billed for the cost of repair or replacement.

The University reserves the right to make changes in residence hall assignments if necessary for the most effective accommodation of the student body.

DINING FACILITIES. The University operates dining facilities in the Valparaiso Union and selected residence halls for the convenience of the students. Service will be available during periods of scheduled classes. When service is not provided in a residence hall, students residing in such halls may participate at a neighboring dining facility.

Freshmen living on campus in the residence hall system will be required to contract for a meal plan covering Monday breakfast through Friday dinner (fifteen meals per week) at a cost of $365.00 per semester. An optional plan of twenty meals is available at a cost of $435.00 per semester covering the period of Monday breakfast through Sunday noon.

Other students may contract for a board plan at the same rates, or they may pay cash for each meal, or purchase meal coupon books which can be used at the Union or at the residence hall providing a-la-carte service.

Information on type of service to be provided in residence halls will be made available each year prior to registration and room reservation time.

<table>
<thead>
<tr>
<th>ESTIMATE OF EXPENSES.</th>
<th>College of Arts and Sciences</th>
<th>Average Cost</th>
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<td>Tuition</td>
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<tr>
<td>General Fee</td>
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<td>$83.00</td>
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<tr>
<td>Rent of Room and Board</td>
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<td>$805.00</td>
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<tr>
<td>Lab. Fees, Books, and Supplies</td>
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<td></td>
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<td>$2,598.00</td>
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<tr>
<td>College of Business Administration</td>
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<tr>
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</table>

The expenses for each academic year (two semesters) are approximately twice the above semester figures.

Clothing, travel, incidental expenses, fees for applied music lessons, and special fees** are not included in these estimates.

Amounts due the University are payable in full at the time of registration for each semester.

*The student is responsible for providing transportation whenever it is necessary for off-campus clinical experience. Access to a car is necessary during the junior and senior years.

**See Special Fees, page 29.
Parents are billed approximately three weeks prior to registration with an invoice containing the estimated charges for the coming semester. Either payment in full or evidence of participating in an approved education expense payment plan as outlined below must be received in the Business Office a week prior to registration. The minor adjustments in the billing required by additional course fees, for example, are detailed in a statement forwarded to the parents approximately one month after registration. Credits for scholarships, loans, grants, etc., may be deducted in arriving at the balance due prior to registration.

Amounts to be earned through campus employment may not be deducted, since these are paid during the course of the semester directly to the student through our regular payroll procedure.

Each student registering at Valparaiso University assumes responsibility to pay all college-related expenses not covered by financial aid.

Students who officially 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, infirmary fees, etc. The student's transcript will not be released until satisfactory payment of all obligations has been made.

Each graduating student must pay any remaining financial obligations to the University prior to graduation.

No degree will be conferred upon and no transcript will be given for a student whose account with the University or the Student Senate has not been settled in full.

Loans such as National Direct Student Loans (NDSL), Federally Insured Student Loans (FISL), or Valparaiso University Student Loans become due as stated in the promissory note signed by the student. Transcripts will not be released to students who fall in arrears on payment of these loans.

EDUCATIONAL EXPENSE PAYMENT PLANS. Parents of Valparaiso University students may select one of the following commercial plans for the payment of educational expenses.

(a) The Tuition Plan, Concord, New Hampshire 03301.

Any amount for University expenses may be borrowed, and later adjusted, for a 1-4 year plan. Payments starting in October may be spread over a 12 to 72 month period. The annual interest rate ranges from 14 to 18%. A prepayment plan (non-borrowing) provides that payments for each school year may begin in any month from January to July. The Tuition Plan forwards payments to the University in accordance with its agreement. Life insurance on the wage earner parent is available to cover the balance of the contract in the event of the death of the wage earner.

(b) Education Funds, Inc.—Fund Management, 2700 Sanders Road, Prospect Heights, Illinois 60070.

Any amount for University expenses may be budgeted for one year at a time, or on a multi-year contract. The borrower makes ten payments the first year, starting in June, twelve payments in subsequent years. There is no interest charge, only a one-time charge of $25.00. The company forwards payments to the University.

(c) Insured Tuition Payment Plan, 53 Beacon Street, Boston, Massachusetts 02108.

This organization has made monthly payment programs available at schools and colleges since 1953. These programs protect the student's educational plans with life and disability insurance on the parent.

The Insured Tuition Payment Plan is a monthly savings plan under which money held for payment to the school earns 5% interest for you. You pay as you go. Therefore, early enrollment provides smaller monthly payments.

The Extended Repayment Plan is a loan plan which allows you to extend your monthly payments beyond the date the student graduates. (12% interest on loans.)

PAYEE. Drafts, checks, and money orders, should be made payable to the Valparaiso University Association, Inc.

TREFUNDS. In case of formal voluntary withdrawal* only, the tuition fee, room rent, and board in University operated dormitories are refundable as indicated below. Refunds on tuition and room rent are made until seven weeks after the first official day of classes of a semester. If a student is dismissed, there is no refund due. General, special, and laboratory fees are never refunded.

Refunds are made to students unless the University is instructed in writing to remit to parents or guardians. Refunds must be claimed in writing within six months of the close of the semester in which the assessments were made.

SPECIAL FEES.

**Application—$10.00. This fee is payable at the time of application for admission to the University. It is not refundable.

Readmission—$5.00. This fee is payable at the time of application for re-admission to the University. It is not refundable.

Tuition Deposit—$50.00. This fee is required of all new students, both resident and commuter. A refund of $25.00 will be given if a written notice of cancellation is received before June 1 for the Fall Semester or before December 1 for the Spring Semester.

*Based on the day the application to withdraw is submitted to the Office of the Registrar.
**See page 67.

For School of Law—$25.00.
Housing Deposit—$50.00. This fee is required of all students requesting University housing. In case of cancellation, see "Refunds" on page 25.

Automobile Registration—$10.00.

Matriculation—$5.00. This fee is payable once only, when the student registers in the University.

Overseas Study—$50.00. This fee is payable by each participant.

Graduation—$15.00, payable at the time formal application for a degree is filed.

Developmental Reading Program—$56.00.

Transcript—No charge is made for the first transcript issued. For each additional transcript, the fee is $2.00. No official transcript of a student's record is released until the student has met in full his/her obligations to the University.

Late Registration—$40.00. This fee becomes effective after the close of the last official day of formal registration. In no case will late registrants be exempted from this fee, unless for valid reasons they have been given written authorization for exemption by the Vice-President for Student Affairs.

STUDENT SENATE FEE. This fee is collected by the University each semester and is allocated to the Student Senate. This entity the student to participate in the activities conducted by the Student Senate and its committees. This includes lectures, entertainment, publications, University Radio Station, and other activities sponsored by the Student Senate.

FINANCIAL AID. This program at Valparaiso is intended to provide financial assistance to students who, without such aid, would be unable to attend the University. In selecting the students to receive this assistance, the University places primary emphasis on the student's academic achievement, character, and future promise. 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 him/her with college expenses. Assistance awarded by Valparaiso should be viewed as supplementary to the effort of the family, and will not exceed the need of the candidate.

In order to assist in achieving these objectives, the University participates actively in the College Scholarship Service of the College Entrance Examination Board. It supports the principles and practices of this organization and requires that the parents of all aid candidates submit the Parents' Confidential Statement of the College Scholarship Service.

Types of Awards.

Scholarships. Normally a student qualifies academically for a scholarship when ranked in the upper ten per cent of the graduating class and has reported scores on the Scholastic Aptitude Test of the College Entrance Examination Board which clearly indicate that he/she should be able to maintain a 3.0 average at Valparaiso. Scholarships vary in size up to full tuition.

Academic Grants. Students who need financial assistance and are expected to do better than average academic work may receive an academic grant.

Grants-In-Aid. Grants-in-aid are available to students in critical need of financial assistance and who are expected to maintain at least a 2.0 average at Valparaiso.

Educational Opportunity Grants. Provided for in the Higher Education Act of 1965, Educational Opportunity Grants are awarded to students whose families can assist them to only a limited extent. The size of the grants varies according to the computed amount of parental contribution from income and assets.

Campus Employment. Students are employed on campus as departmental assistants, library workers, dormitory receptionists, typists, stenographers, maintenance workers, and cafeteria workers. Salaries range from $100 to $400 per academic year. The College Work-Study Program, created by the Economic Opportunity Act of 1964, funds some of the campus employment.

Assignments will not be made to the detriment of the student's academic success.

Loans. Valparaiso participates in the well known National Direct Student Loan Program, through which a student may borrow at an interest rate of 3% with repayment of principal and interest deferred until the termination of his/her full-time college attendance. A student may borrow up to $1,000 per year depending on need. If the borrower teaches after graduation, the loan may be cancelled at the rate of 10% for each year he/she teaches, to a maximum of 50%.

A smaller number of student loans are privately administered by the University.

Renewal. All financial assistance requires a yearly application, including the filing of a Parents' Confidential Statement. Renewal depends on continued need and the availability of funds. In addition, the minimum academic requirement for an academic scholarship is 2.7 and for grants-in-aid, 2.0. Academic deficiency precludes a student from receiving financial assistance.

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 assistance:

1. File an Application for Admission with the Director of Admissions. No student may be considered for scholarship until his/her formal application has been approved.

2. Submit a Parents' Confidential Statement to the College Scholarship Service with Valparaiso University being listed as an institution to receive a copy and its analysis. This form may be secured from your high school guidance office or by writing the Office of Financial Aid, Valparaiso University.

The filing of the PCS should be completed at the time of application for admission or as soon as possible thereafter. The Committee on Financial Aid cannot guarantee aid consideration for those students whose PCS is filed later than March 1.
3. Take the Scholastic Aptitude Test (morning section) of the College Board Examination. These scores are necessary for admission approval as well as for aid consideration.

Scholarships. Listed below are the specific scholarships awarded annually by Valparaiso University. The largest portion of the awards available are University Scholarships. Recipients of these specific scholarships are selected from the total group of applicants who have completed the regular application procedure. By completing this application, a candidate may assume that he/she will automatically be considered for whichever of these restricted awards he/she is eligible. If additional information is required of him/her, he/she will be contacted after he/she has filed the standard application for financial assistance.

University Scholarships. In addition to the specific endowed, donated, and other scholarships listed below, the Board of Directors annually authorizes hundreds of scholarships ranging in value from $100.00 to $1,500.00 a year.

Honorary Citation. $100.00 one-time awards—students with no need.

The Charles P. Addis Scholarship. It is to be awarded to a student athlete from the greater Rockford area in the amount of $2,000.00 annually.

Aetna Life and Casualty Scholarship. Annual grant to help qualified students, with preference to disadvantaged and minority students.

Aid Association for Lutherans. Competitive Nursing, All College, Lutheran Campus, and Lutheran American Minority Scholarships.

Mr. and Mrs. Oliver W. (Emma) Allen. Preministerial student.

Alpha Phi Delta Sorority. Upperclass sorority members.

Anna B. Althans. Social work major—Annual award.

Amoco Foundation, Inc. Scholarship. Awarded to one or two deserving students; they should be either in their junior or senior year and majoring in Mechanical Engineering.

The John W. Anderson Scholarship. Annual awards are made to students in the College of Nursing. Preference will be given to students from the Northwest Indiana area.

Reverend Theodore and Vera Andres Scholarship. Annual award.

The Robert Augustine Memorial Scholarship. Annual award with preference to students from Wisconsin. The amount and number will vary depending upon the earnings of the established fund.

The Eric Lee Bandick Scholarship. This fund was established by Lorenz Bandick in memory of his son, Eric Lee Bandick, to be used as an engineering scholarship/loan fund for needy and worthy students.

Herbert C. Bartelt Scholarship. Valparaiso University senior student who plans to enter the Lutheran Ministry by way of Concordia Seminary in St. Louis, Missouri or Fort Wayne, Indiana.

Dr. and Mrs. Henry Frederick Beckman. Resident of Indianapolis, Indiana—Annual award.

The Benz Basketball Scholarship. Awarded to a member of the University's men's intercollegiate basketball team.

Charlotte Bertsch Scholarship. College of Nursing—Annual award.

Wilfred and Olga Bernthal Scholarship. Annual award. Established by their son and daughter-in-law, Mr. and Mrs. Harold G. Bernthal.


The Charles H. and Elizabeth Blume Endowed Scholarship. Preference given to students from Northwest Indiana.

The William F. and Martha Boeger Memorial Scholarship. Varying amounts for needy students.

The Rudolf F. Boening Memorial Scholarship. Established by the Valparaiso Board of Realtors in memory of past president Rudolf F. Boening. To be awarded annually to a business major from Porter County with preference given to a senior who has maintained a 3.0 average regardless of need.

(Mrs.) Amalie Bokerman. Resident of Pennsylvania—Annual award.

John V. Borgerding. Resident of greater Pittsburgh or Pennsylvania—Annual award.

The Mr. and Mrs. Stanley E. Bovim Scholarship. Established in their honor on the occasion of their forty-fourth wedding anniversary. Preference will be given to students from Wisconsin.

Professor John Bowman Scholarship. Preference for students enrolled in the School of Law. Amount and number to vary depending upon the earnings of the established fund.

Julius C. Bruechner Scholarship. Any student in need of assistance.

Luella R. and Herbert P. Buetow Scholarship. Worthy student(s) who plans to enter upon a career in the broad service of the Church. The award will be made on the basis of academic ability, character, future promise, and need for financial assistance.

John E. Christen Memorial Scholarship. Annual scholarship for the School of Law.

City Glass Specialty, Incorporated. Resident of Fort Wayne, Indiana—$1,200.00 annually.

The Emma E. Claus Scholarship. Amount and number to vary depending upon the earnings of the established fund. Students participating in the Christ College program are eligible.

The Robert F. and Caroline McMillan Ceolings Scholarship. Preference given to New England students majoring in either art or speech and drama. The amount and numbers will vary depending upon the earnings of the established fund.

Robert F. Connell Memorial Scholarship. Annual award—School of Law.

The Kenneth Bayard Copeland and Todd Cushman Copeland Family Memorial Scholarship. The income from this endowed scholarship to be awarded annually with preference given to engineering and pre-medical students.
The Roy and Gertrude Dallman Scholarship. Awarded annually on the basis of merit or need to a Wisconsin student, preferably from the Shawano area.

The Arthur Vining Davis Scholarship. Amount and number to vary depending upon the earnings of the established fund.

The Chaplain Edward G. Deffner Memorial Scholarship. Awarded annually on the basis of merit or need. Preference given to students from Wisconsin.

The Edwin F. Deicke Scholarship. Amount and number to vary depending upon the earnings of the established fund. Preference given to students from Northern Illinois.

Alpha Gamma Chapter of Delta Kappa Gamma. Senior woman resident of Porter, Jasper, Newton, or Pulaski Counties in Indiana—$125.00 annually.

Delta Upsilon Chapter of Eta Sigma Phi Scholarship. Classics honorary. Awarded annually to promising students who have had at least one year of Greek or Latin at Valparaiso University.

The John L. DeVoss Memorial Scholarship. Annual award. Preferential recipients will be those third-year law students who are from Adams County or who intend to practice in the Adams County area.

Sophie Doern Scholarship. Annual award.

The Donald W. Dopp Memorial Scholarship. The income from this endowed scholarship, established with gifts from members of the Dopp family, to be given annually to Michigan residents, preferably from Macomb County.

The Wilbur C. Dopp Memorial Scholarship. For employees of Dopp Distributors, Incorporated, or for an employee’s son, daughter, or grandchild.

Wilbur H. and Marguerite M. Dosland Scholarship. Awarded annually, on the basis of merit or need, to students from Iowa with preference given to Eastern Iowa.

The Rev. Ernest H. Eggers Memorial Endowed Scholarship. Annual award with preference to a student from Texas.

Reverend and Mrs. P. J. (Myrtle E.) Eickstaedt. Annual award.

Carl and Bertha Eigert Scholarship. Outstanding students. Awards made on the basis of academic ability, character, and need.

Robert Elmore Findling Memorial. Engineering student—$100.00 annually.

First Federal Savings and Loan Association of Valparaiso. Porter County, Indiana residents—Annual awards.

First National Bank, Valparaiso. Residents of Porter County, Indiana—Annual award.

The Henry W. Flemming Scholarship. For qualified students from the Rochester, New York, area, if possible—Annual award.

The Edith Schuchardt Forsberg Family Memorial Scholarship. Established by Harvey B. Schuchardt. Preference given to students from the Wisconsin area.

The Arthur Franke Memorial Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Frank Freimann Engineering Scholarship. Full tuition, fees, and books for engineering students.

Dr. and Mrs. E. C. Galsterer. Resident of Saginaw, Michigan or Saginaw Valley.

Gast Manufacturing Corporation. Resident of Southwestern Michigan, if possible—majoring in engineering—$1,000.00 annually.

The William C. Gast Memorial Scholarship. Preference given to students from Southwestern Michigan. Amount and number will vary depending on the earnings of the established fund.

The Henry C. and Ura E. Guhl. Annual award.

The Elsa (Mrs. Lloyd) Halverson Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Harvey Scholarship. Pre-osteopathic major, if possible.

The Dr. Karl H. Henrichs Scholarships. For Lutheran or other students. The scholarship sponsors are Mr. and Mrs. Henry J. Moellerling. The amount and numbers will vary depending on the earnings of the established funds.

Herman C. Hesse Scholarships. Three annual awards. The awardees to be noted as Hesse Scholars.

The Mrs. Charles H. Hickman Scholarship. In memory of her husband. The amount and numbers will vary upon the earnings of the established fund.

Mary Hilgemeier. Preferably a member of Emmaus congregation, Indianapolis, Indiana.

The Walter S. Hiltpold Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Hoepfner, Wagner, and Evans Scholarship. Financial awards administered by the School of Law’s Financial Aid Committee and made on an annual basis to one student from each of the second and third year classes.

Richard J. Hoerger Scholarship. Interest—government. The amount and number will vary depending on the earnings of the established fund.

Dr. O.C.J. Hoffmann—Dr. A. G. Huegli Endowed Scholarship. Annual award with first preference given to St. Louis Lutheran High School graduates, and second preference to St. Louis area students. The amount and number will vary depending upon the earnings of the established fund.

The Clara A. Holman Scholarships. Varying amounts for needy students in the fields of chemistry and medicine.

Oscar Homann. Preference to resident of Illinois—Annual award.

Dr. and Mrs. A. G. Huegli Endowed Scholarship for Leadership. Established in their honor by their children.

A.G. Huegli Southeastern Michigan Endowed Scholarships. Earnings from
this endowment to be used for annual scholarship grants awarded on high school achievement, with preference given to students from Southeastern Michigan. Recipients will be designated "Huegli Scholars."

Joyce Huegli Endowed Memorial Scholarship. Preference for students in the College of Nursing. The amount and numbers will vary upon the earnings of the established fund.

Indiana Home Economics Association. $350.00 scholarship to upperclass student, rotated alphabetically among privately supported institutions that offer degree in home economics.

The Owen C. Jackson Scholarship. To be awarded to an athlete, preference to football, from River Forest, Illinois, amount of $2,000.00 annually.

Judge and Mrs. F. A. Jaeckel Memorial. Annual award.

Richard F. and Martha W. Jeske. Annual award.

Edward Jiede, Jr. Annual award.

Mr. and Mrs. Emil Jochum. Scholarships in varying amounts up to full tuition annually for students from Ohio, preferably Cleveland and vicinity.

Kappa Kappa Kappa. Senior girl from Valparaiso High School—Annual award.

The James G. Kemper Foundation Scholarship. To be awarded to freshmen or sophomores whose curriculum is compatible with the needs of the insurance industry. Academic excellence, financial need, and a willingness to explore a career in insurance are criteria.

Mr. and Mrs. Victor Kirsch. $1,000.00 annually.

The Mr. and Mrs. Edwin H. Koeneman Endowed Scholarship. Preference will be given to students from Concordia Lutheran High School, Fort Wayne, Indiana. The amount and number will vary depending upon the earnings of the established fund.

Erra E. Koenemann (Mrs. Henry F.) Scholarship Fund. Preference given to students in the College of Nursing.

The Herbert H. and Edith A. Koenig Scholarship. Annual award with preference to students from St. Paul's Lutheran Church, Fort Wayne, Indiana.

George E. Kottingan Memorial Scholarship. $100.00 annually. Preference to a philosophy student.

The Jayne Hoffmann Kraeggel Memorial Scholarship. The amount and number of awards will vary depending upon the earnings of the established fund. Preference will be given to students with an interest in journalism.

The Mr. and Mrs. Gilbert W. Krause Athletic Scholarship. Preference will be given to students with outstanding athletic and academic records. The scholarship was established by members of their family on the occasion of their fortieth wedding anniversary.

The O. P. Kretzmann Scholarship Fund. Established by the Class of 1970 to honor Dr. O. P. Kretzmann.

William H. Kroeger. A resident of Akron, Ohio—Annual award.

The Walter H. Kroehnke Scholarship. Annual award. Preference given to students in the College of Business Administration. Established with gifts from the Reverend and Mrs. Justus P. Kretzmann and other members of their family.

Frederick William Kroenecke Memorial. Upperclass student. Annual award.

Krueckenberg Family Scholarship. Awarded annually, on the basis of merit or need, to a student from Wisconsin, preferably from the Clintonville area.

Krumseg Trust. This trust is established in memory of Charles J. Krumseg, Ida F. Krumseg, and Elma Krumseg Kraft with the income to be used for scholarships or loans for students in need of financial help.


Earl F. Landgrebe. $275.00 annually.

Mr. and Mrs. Erwin A. Lange. Major in College of Business Administration or Department of Mathematics—Annual award.

H. F. Lange Memorial Scholarship. Annual award.

The Langer Basketball Scholarship. Awarded annually to a member of the University's men's intercollegiate basketball team.

The Charles E. Laue Scholarship. Annual award with preference to a child or children of an employee(s) of the Hamilton Pax Company. The amount and number will vary depending upon the earnings of the established fund.

A. J. W. and Elfrieda M. LeBien. College of Nursing students. The amount and number of recipients will vary depending on the income realized from the established fund.

The Phoebe Leeds Memorial Scholarship. Annual award with preference given to applicants who are orphaned, adopted, and/or foster children.

The Ernest and Clara M. Lichtfuss Endowed Scholarship. Annual award depending on the earnings of the established fund.

John A. Liechti Scholarship Fund. Any student in need of assistance.

Nancy Lienemeck Memorial Scholarship. With preference given to a fourth year female student in the area of social work or special education.

Carol F. Lindberg Memorial. Student in elementary education and student in secondary education—two awards in varying amounts annually.

Mr. and Mrs. Erick Lippert. Annual awards.

The Mr. and Mrs. Orval M. Lohse Scholarship. Preference given to students from Kansas. Amount and number of recipients will vary depending on the income realized from the established fund.

Mr. and Mrs. J. A. Long. Resident of Central Illinois—$200.00 annually.

Lynette and Norman Luekens Scholarship. The income from this endowed scholarship to be awarded annually with preference given students from the Greater Cleveland area.

Lutheran Brotherhood. Junior and Senior College Scholarships for Lutheran students and Lutheran Brotherhood Members' Scholarships.
Lutheran Colleges Law School. Students in or graduates of Lutheran colleges and universities throughout the United States—each award full tuition.

Lutheran High School Principals’ Scholarship. Awarded to Lutheran high school seniors who are selected by their principals.

Lutheran President’s Scholarship. $1,000.00 scholarships will be awarded annually in the names of the respective church body presidents of each of the major Lutheran church bodies in America.

The Walter A. MacNary Memorial Scholarship. The amount and number of awards will vary depending upon the earnings of the established fund.

Dr. and Mrs. E. W. Marquardt. Annual award.

The G. H. Maskus Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

May Stone and Sand, Inc. Resident of Fort Wayne, Indiana—Annual awards.

Charles A. Maynard Memorial. Student majoring in the College of Engineering—$500.00 annually.


The Ernest A. Menzel Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Mr. and Mrs. Dirk Meyer. Resident of Pekin, Illinois—Annual award.

The Lucille M. Meyer Scholarship. Awarded annually on the basis of merit or need to a student majoring in music.

Gerhard F. Meyne Scholarship. The amount and numbers will vary depending on the earnings of the established funds.

Helen Miller Scholarship Fund. This scholarship is to benefit a student from St. Paul Lutheran Church, Napoleon, Ohio.

Henry F. Moeller. Resident of Fort Wayne or Allen County, Indiana—Annual award.

The Mr. and Mrs. Henry J. Moelleringer Music Scholarship. The recipients are to be selected on the basis of talent and need. The amount and number will vary depending upon the earnings of the established fund.

The Mr. and Mrs. Robert C. Moelleringer, Sr. Scholarship. Preference given to music majors or engineering students. The amount and numbers will vary depending upon the earnings of the established fund.

The Clara Mueller Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

The H.F.C. Mueller Scholarship Fund. Awards are to be given to eligible students who have completed the freshman year, for a maximum of four years, including one seminary year.

The George L. and Mary S. Myers Endowed Scholarship. Annual award.

3M Company Scholarship(s). Varying amounts for students who are U.S. citizens, funded by Minnesota Mining and Manufacturing Company of St. Paul, Minnesota.

Northern Indiana Bank and Trust Company. Residents of Porter County—Annual awards.

The Nicholas H. and Marguerite Lilly Noyes Endowed Scholarship Fund. Authorized by the Board of Directors of Valparaiso University to honor Mr. and Mrs. Noyes, whose generosity makes this scholarship possible. The Noyes Scholars are to be selected on the basis of need, character, personality, and leadership. The number of Noyes Scholars and the amount of scholarship will be determined each year by the University Scholarship Committee.

The Carl and Arnold C. Nuehlerlein Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund. Preference to College of Business Administration students who also agree to take at least one course, if available, on the subject of risk management or insurance.

Nutmeg State Chapter Valparaiso University Guild. Annual award.

The Oberst Family Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

The Walter E. Olson Memorial Scholarship. The amount and numbers will vary depending upon the earnings of the established fund. Preference given to students from the area of Northern Illinois District.

Dr. Richard Oster. Resident of New Orleans, Louisiana—Annual award.

Mollie V. Page. Member of Bethany Lutheran congregation, Waynesboro, Virginia—Annual award.

John Van Alstyne Pellier Memorial. Upperclass students in College of Engineering, preferably civil. The amount and number of recipients will vary depending upon the income realized from the established fund.

The Hattie Lowe Pierce Scholarship. Awarded annually to senior women with preference given those with a special interest in Political Science. The amount and number will vary depending upon the earnings of the established fund.

Pilgrim Evangelical Lutheran Church of Detroit Memorial Scholarship. Annual award. Preference given to students from the Detroit area.

The Arthur E. Pohlman Scholarship. Annual award. The amount and number will vary upon the earnings of the established fund.

Pohlman Family Scholarship. Annual awards with preference given to students from Western New York. Amount and numbers based on annual family gifts and earnings of the established endowment fund.

Porter County Doctors' Scholarship. Awards in varying amounts, giving preference to residents of Porter County, and pre-medical, nursing, and medical technology students.
Porter Memorial Hospital Guild. Residents of Porter County, Indiana who desire to enter the College of Nursing—$2,000.00 annually.

The Mrs. Hazel Predoehl Memorial Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund. Preference given to students from California and Oregon.


Vernon F. and Katherine H. Radde Scholarship. Annual award.

The Elizabeth Raney Scholarship. The amount and numbers will vary depending upon the earnings of the established fund.

The Mr. and Mrs. Fred A. Reddel, Sr. Endowed Scholarship. Established in their honor by their children. Preference will be given to Music and Art students. The amount and number will vary depending upon the earnings of the established fund.

The Reverend and Mrs. Arthur L. Reinke and the Reverend and Mrs. Elizabeth Reinke Memorial Scholarship. Established by Dr. Edgar C. Reinke in honor of his parents and grandparents. Two awards on the basis of academic excellence, not need—one to a student who has completed one year of college Latin and one to a student who has completed one year of college Greek. Renewable if the recipient elects to major in Latin, Greek, or Classics.

Mr. and Mrs. Carl Rittberger. Resident of Columbus, Lancaster, or Zanesville, Ohio area or from State of Ohio—$750.00 annually.

Frederick C. Roehl. Resident of Wisconsin, preferably the Oconomowoc area—Annual award.

The Waldemar M. Roth Memorial Scholarship. Annual award with preference to student(s) preparing for full-time Lutheran Church work.

Adele Rueftigers Scholarship Fund. Students in the College of Nursing.

Thomas Russell Charitable Foundation Scholarship. Annual award with preference to Illinois residents.

Sargent and Lundy Scholarship. Annual award.

The Walter W. Schantz Endowed Scholarship. Annual awards. The amount and number will vary depending upon the earnings of the established fund.

Mr. and Mrs. Henry J. Schneider Scholarship. The amount and numbers will vary depending on the earnings of the established fund.

Dr. Frederick C. Schuldt Memorial Scholarship. College of Nursing annual award.

Albert F. and Miriam B. Scribner Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund. Preference should be given students enrolled in the College of Nursing.

Carl W. and Caroline D. Seyboldt. Member of Bethlehem Lutheran Church, Ridgewood, New Jersey—$600.00 annually.

Louis and Helen Zahn Shales Scholarship. Awarded annually to a member of the First Lutheran Church, Berkeley and Marlboro Streets, Boston, Massachusetts.

Mr. and Mrs. Hugh O. Sherbert Scholarship. The income from this endowed scholarship, established with a gift of $10,000, is to be awarded to Lutheran students from Minnesota, preferably to graduates from Lutheran high schools.

John F. Sievers Memorial. Major in business or mathematics—$200.00 annually.

The Sigma Phi Epsilon Undergraduate Scholarship. Amount and number to vary depending on the earnings of the established fund.

The Sigma Tau Gamma Undergraduate Scholarship. Amount and number to vary depending on the earnings of the established fund.

Stanley B. Sink Scholarship. Valparaiso Community student.

Byron Smith Memorial. Resident of Porter County—$1,000.00 annually.

The J. Howard Smith Endowed Scholarship. Given by Harvey W. Smith in honor of his father, J. Howard Smith (Valparaiso University LL.B. 1907; LL.M. (Hon.), 1949; LL.D. (Hon.) 1950). Annual award. The amount and number will vary depending upon the earnings of the established fund.

Margaret Krause Smith. Student from Tennessee, preferably Chattanooga area—$1,000.00 annually.

The Carl O. Sohre Memorial Scholarship. Preference given to students from Minnesota. The amount and number will vary depending upon the earnings of the established fund.

Bertha A. Staede Memorial. Music major—resident of Minnesota—Annual award.

Edward I. P. Staede and Amanda Hall Staede. Annual awards.

J. L. Stendel Family Memorial Scholarships. Available to Michigan students or other students if there are not enough from Michigan requiring assistance. Varying in number depending on the earnings of the fund established.

Frederick A. Stendell and Harry E. Stendell. Annual award.

The Paul Stoner Endowed Scholarship. Established by his sister, Miss Ruth Stoner. Annual award—with preference given to students from Porter County, Indiana.

Mr. and Mrs. Herbert F. Stride Endowed Scholarship. Preference given to pre-law students from Illinois. The amount and number will vary depending upon the earnings of the established fund.

Margareta Sackville Tangerman Scholarship Fund. The income from this scholarship program will be awarded annually to a junior or senior social work major.
Mr. and Mrs. Paul E. Tegge Memorial Scholarship. The amount and numbers will vary depending on the earnings of the established fund. Preference given to students from the Milwaukee, Wisconsin area.

Lawrence E. Teich Scholarship. Annual award with preference given to Chemistry or Engineering students. The amount and number will vary depending upon the earnings of the established fund.

The Louis Thoeming Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

The John David Thomas Endowed Scholarship. To be awarded annually to a member of the Valparaiso University wrestling team who deserves and needs financial assistance. The amount and number will vary depending upon the earnings of the established fund.

Bertha S. Tietjen Scholarship. Resident of California, preferably from the San Francisco area.

Laura E. Traue Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Turk Family. Resident of Porter County, Indiana. Annual award.

Dr. and Mrs. H. L. Ulbrich. Annual award.

Urschel Laboratories. $500.00 annually.

Valparaiso University Guild Scholarship. Four $500.00 scholarships awarded annually by the Valparaiso University Financial Aid Office to students with financial need and with academic ability. The scholarship recipients shall be sons and/or daughters of Guild members.

Valparaiso Woman's Club Scholarship. Awarded annually. Number and amount vary according to the earnings of the established fund.

The Ed. L. Voelz Scholarship. Amount and number to vary depending on the earnings of the established fund. The student would be a resident of Bartholomew County, Indiana, and a graduate of St. Peter's Lutheran School. Guidelines available upon request.

Theodore H. and Paula Vogel Endowed Scholarship. Annual award with preference given to students from the greater St. Louis area. Amount and number will vary depending upon the earnings of the established fund.

The Anna Waldschmidt Memorial Scholarship. Annual award.

F. G. Walker. Resident of Cleveland or Cuyahoga County, Ohio—Annual award.

The David J. Walton Memorial Scholarship. Annual award. Preference given to students studying engineering. The amount and number will vary depending upon the earnings of the established fund.

Philip Wambganss Memorial. Resident of Allen County, Indiana—$175.00 annually.

Angus Ward Foreign Service. Expressed intention to serve as career officer in Foreign Service of the United States, based on academic standing and need—$1,000.00 annually.

Mr. and Mrs. Henry Wehrenberg, Sr. Descendants of Henry W. Wehrenberg, Sr.—One annual award—$1,000.00 maximum.

Dr. and Mrs. J. Frederic Wenchel Memorial Scholarship. Worthy student—Annual award.

Edith M. Will Endowed Scholarship. Annual award. The amount and number will vary depending upon the earnings of the established fund.

Mathilda E. Wolff Memorial Scholarship. Annual award(s). The amount and number will vary depending upon the earnings of the established fund.

Zuehlke Scholarship Fund. Assist worthy student(s) in the humanities.

Student Loan Funds.

The National Direct Student Loan Program. Valparaiso University is participating in the National Direct Student Loan Program, and has established a fund consisting of contributions from the government and the University. Details may be obtained from the Director of Financial Aid.

The Nursing Student Loan Fund. The Valparaiso University College of Nursing participates in the Nursing Student Loan Program and has established a fund consisting of contributions from the government and the University. Details may be obtained from the Director of Financial Aid.

The American Bar Association Fund for Legal Education provides a yearly allotment of funds to be used by students of the School of Law of Valparaiso University. Information pertaining to qualifications for this fund may be obtained from the Dean of the School of Law.

The Donna Francesca-Cesario Chesrow Loan Fund was established for the purpose of making small, short-term loans.

The 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. Details may be obtained from the Director of Financial Aid.

The Phi Alpha Delta Law Fraternity Endowment Fund. Loans from this fund are available to worthy student members of the fraternity who are in need of such loans to complete their law school education. The maximum amount of such loans is $500.00. Terms of the loans, which are prescribed by the national governing board of the fraternity, will be supplied upon request to the Dean of the School of Law.

The Henry George Poncher Foundation was designed to provide a revolving loan fund to be used for making loans to deserving college students who are taking a pre-medical course preparatory to entering medical school and also to students enrolled in medical school studying to become doctors of medicine. Application is to be made on a form available in the office of the Dean of the College of Medicine of the University of Illinois and in the office of the Vice-President for Business Affairs, Valparaiso University. Further information may be secured from these two offices.

The Fred Smoke Student Loan Fund, administered by the Valparaiso University Alumni Association, was established in January, 1965, and provides funds for loans to students who are residents of Porter County, Indiana. Details may be obtained from the Director of Financial Aid.
The Myra K. Tate Student Assistance Trust was established to provide loan benefits to certain students at Valparaiso University. This trust is administered by the Northern Indiana Bank and Trust Company as Trustee. The Trustee will consider applications from Engineering, Law, and pre-medical students who are in the last two years of their schooling at the University. Applications are received on recommendation of the Dean of the appropriate college or the pre-medical adviser and are processed through the Business Office of the University prior to being forwarded to the Trustee for consideration. Details may be obtained from the appropriate academic deans or the appropriate adviser.

The Valparaiso University Law School Alumni Student Assistance Trust Loans available to law students through this trust are awarded by the officers of the trust. Information may be obtained from the Dean of the School of Law.

The Valparaiso University College of Nursing Student Assistance Charitable Trust. The Trust is administered by Northern Indiana Bank and Trust Company as Trustee. Application should be made to the Dean of the College of Nursing.

The 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.

The Indiana Federation of Clubs Loan Fund (Lucy D. Putnam Loan Fund and the Porter County Federation of Women's Clubs Loan Fund).

The Mr. and Mrs. August Schoenherr Memorial Loan Fund was established by Mr. and Mrs. Leonard Schoenherr of Ludington, Michigan, as a memorial to his parents.

The Henry Strong Educational Foundation provides funds for loans to qualified upperclassmen under twenty-five years of age.

The Semester on the United Nations Loan Fund. This was established by the Valparaiso branch of the American Association of University Women for women students eligible to participate in the United Nations Semester at Drew University. Terms are similar to those of the Washington Semester Program Loan.

The Valparaiso University Association Loan Fund. A University Loan Fund has been established to help students who cannot qualify for a scholarship but who must have financial assistance or those with scholarships who need more help. Details may be obtained from the Director of Financial Aid.

In addition to funds provided by special appropriation of the Board of Directors, friends of the University who strongly believe in the principle of lending their resources to students in need have contributed to the University Loan Fund. These contributors are: M. E. Dinsmoore Memorial, Frank B. Estell, Oscar Homann, Glenn Krabec, Aaron H. Kruse, The Lutheran Ladies Seminary, Anna and Bertha Meyer, Robert Miller Laboratory, Albert and Anna Raether Memorial, Mr. and Mrs. Henry J. Schneider, Mr. Werner Schroeder, Trinity Tool Company.

The Washington Semester Program Loan Fund. Only students fully accepted for the Washington Semester Program at the American University are eligible. Loans up to one hundred dollars are given; the student is expected to repay the loan plus a donation to the principal of the fund of twenty-five per cent within five years after leaving the University.

The Janette G. Wesemann Student Loan Fund was established for the purpose of making loans primarily to qualified pre-law and law students, preferably from the State of Illinois, who are in need of financial assistance to continue their education. Loans from this fund are available to students who are making satisfactory progress toward a degree.

The Betty Rose Wulf Memorial Loan Fund was established by her parents, Mr. and Mrs. Walter H. Wulf, to be used by students preparing for church work, such as deaconess training.

LOAN REPAYMENT TERMS. For: The Overton, Indiana Federation of Clubs, Schoenherr, Henry Strong, VUA, Wesemann, and Wulf Loans: No interest accrues while the borrower is enrolled full time at Valparaiso University; three per cent interest begins when he/she leaves. A four year repayment schedule is called for by the terms of the promissory note. Certain adjustments are possible on repayment schedules while a borrower attends graduate school.

REHABILITATION GRANTS. 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. At Valparaiso University, the Registrar's Office accepts referrals for applications. The grants pay tuition and some fees.

THE VALPARAISO UNIVERSITY FEDERAL CREDIT UNION. This is an organization whose membership is open to all students, members of the faculty, and employees of the University. Its purpose is to promote thrift and to provide a source of credit for its members. To become a member, one must subscribe for at least one five-dollar ($5.00) share of stock. The purchase of one share of stock entitles one to all the rights and privileges of full membership. Interest on loans is charged at the rate of three-quarters per cent (3/4 % = 9% A.P.R.) to one per cent (1% = 12% A.P.R.) per month on the unpaid balance. This association is governed by a board of directors elected by the membership and is supervised by The National Credit Union Administration of the United States Government. All accounts up to $40,000.00 are insured by the National Credit Union Administration.
SUMMER AND EVENING PROGRAMS

GRADUATE DIVISION
THE SUMMER SESSION. This program, an integral part of the University, serves directly the cultural, vocational, and professional needs of teachers in service, persons interested in specific courses (with or without college credit), students who wish to accelerate their academic progress, or new students who desire to begin academic work on the college level.

Students enrolled full time in the Summer Session normally earn nine semester hours of credit. These credits have the same value as those earned during the regular year and are transferable.

During the summer of 1963, Valparaiso University began a program leading to the degree Master of Arts in Liberal Studies. This program continues to prove valuable for a wide range of students who wish to strengthen their vocational preparation and to secure breadth of background in academic areas. It also provides for the needs of both elementary and secondary classroom teachers who wish to work toward advanced certificates. They will be able to adjust their programs within the fields of concentration and electives so as to strengthen their subject matter competence and add to their professional training in education.

Courses on the undergraduate level will be offered in the following subject matter areas: Accounting, Art, Biology, Economics, Education, English, Finance, Foreign Language, Geography, History, Management, Mathematics, Music, Philosophy, Physical Education, Physics, Political Science, Psychology, Social Work, Sociology, Speech and Drama, and Theology.

Courses on the graduate level will be offered in Art, Economics, Education, English, Geography, History, Music, Political Science, Psychology, Sociology, Speech and Drama, and Theology.

A Mini Summer Session of three and one-half weeks will be offered from May 21 to June 14 in 1979. This short term session is designed primarily for our resident students, but it is available to others as well.

The combination of the Mini and the regular Summer Sessions permits students to earn almost a semester of credits during the summer months.

From time to time, Summer Educational Tours are conducted.

Information regarding these tours is normally included in the Mini and Summer bulletins.

Summer Session Fees (June 18 to August 8, 1979).

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matriculation</td>
<td>$5.00</td>
</tr>
<tr>
<td>Tuition per credit hour for the first 3 credits (Undergraduate)</td>
<td>55.00*</td>
</tr>
<tr>
<td>Tuition per credit hour for the first 3 credits (Graduate)</td>
<td>60.00**</td>
</tr>
<tr>
<td>Private Music Lessons (in addition to tuition fee)</td>
<td></td>
</tr>
<tr>
<td>One private or class lesson in applied music</td>
<td>90.00</td>
</tr>
<tr>
<td>Beyond one applied music subject</td>
<td>50.00***</td>
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THE EVENING DIVISION. This program, combining the services of the former extension and adult education program, was organized in the Spring of 1963 to make the offerings of all colleges and departments available to the

*$50.00 per credit hour for additional credits.
**$55.00 per credit hour for additional credits.
***For each subject.
residents of the greater Valparaiso community, as well as to the full-time students on our campus.

The course offerings are designed to serve the needs of employed persons who desire to continue their college education for self-improvement or to complete requirements for a degree or for teacher certification. Evening courses are the same in content, objectives, and credit value as corresponding day courses.

The Evening Division also offers non-credit courses for those who are not working toward a degree or teacher certification, but who wish to explore some field of special interest under the guidance of qualified instructors. Every effort will also be made to meet the needs of industrial and business groups where special courses are desired.

Admission to the Evening Division. Admission is open to any student who has earned a High School diploma or who can qualify on the basis of a GED test. Students who have not matriculated in the undergraduate program and who have never attended Valparaiso University must apply for admission as special students to the Dean of the College of Arts and Sciences. Students who plan to complete requirements for a degree from Valparaiso University and students who plan to complete the requirements for teacher certification must file applications for admission with the Director of Admissions of the University.

Students who wish to take a graduate course must be admitted to the Graduate Division. Requests for applications should be addressed to the Dean of the College of Arts and Sciences.

Registration in the Evening Division. Matriculated campus undergraduate students register for Evening Division courses on the regular registration form at the time of official registration for day courses. Such students may register in the Evening Division for up to six semester hours, provided that their total course load in evening and day courses does not exceed the maximum load permitted according to the catalog. Any day undergraduate student who registers for a given semester in day and Evening Division courses will be considered to be a day student and will be charged the regular charges applicable to a day student.

Registration in the Evening Division for those taking evening courses only is conducted by mail and in person according to the schedule announced in the brochure published in advance for each semester.

The regular time schedule lists all courses offered by all departments and colleges of the University in numerical order with evening courses prefixed by "Ev."

THE GRADUATE DIVISION. The University, in offering graduate programs, is seeking to fulfill an objective set by the Lutheran University Association when it acquired the plant in 1925: to make the institution a Christian center of advanced study. The University desires through these programs to broaden its educational service to its constituency and to the community as a whole. There are elements of uniqueness in these programs, both in breadth and depth, which make them unusual in American higher education.

The program of graduate studies was initiated by Valparaiso University in the Summer Session of 1963. It has continued through late afternoon and evening courses during subsequent academic years. At present the plan is to offer graduate courses in this pattern of Summer Sessions and evening courses.

The graduate programs are under the general supervision of the President and the Faculty of the University. The policies of the Graduate Division are determined by the Graduate Council, and the programs and regulations as defined by the Council are administered by the Dean of the College of Arts and Sciences.

Accreditation. Valparaiso University is fully accredited by the North Central Association of Colleges and Schools for the offering of bachelor's and master's degrees. The graduate programs for the preparation of teachers are approved by the Indiana State Department of Public Instruction.

Admission Requirements. An applicant to the Graduate Division must be a graduate of an accredited college or university with a standing of at least 2.5 (C=2.00) in all work attempted.* Official transcripts of all undergraduate and previous graduate work and a completed form for admission (available from the Graduate Office) must be forwarded to the Dean of the College of Arts and Sciences for evaluation. The transcripts and other application materials become part of the records of the Graduate Division, Valparaiso University, and are not returnable.

The Dean will assign an adviser according to the selected area of academic concentration once the student is admitted to the Graduate Division. Those students who are also working toward qualifying for teaching certificates will be assigned an adviser in the Department of Education in addition to their academic adviser.

Program for Master of Arts in Liberal Studies. This program is broad in scope, offering opportunities for study in several fields. Two basic two-hour courses in The Western Tradition, which are required of all students, provide an integrating core. Also, the student is required to present ten hours of work in one subject matter field other than education. The remaining hours in the forty hour program are elected by the student after conference with his/her adviser(s). A maximum of ten of these elective hours may be in professional education.

In addition, the program provides for the needs of both elementary and secondary classroom teachers who wish to work toward advanced certificates. Students will be able to adjust their programs within the field of concentration and the electives so as to strengthen subject matter competence and, if they desire, to add to their professional training in education.

The M.A.L.S. program provides a particularly challenging opportunity for professional workers who wish to strengthen their preparation and secure breadth of background in academic areas.

*Seniors wishing admission to the Graduate Division: A senior in Valparaiso University who has a standing of at least 2.50 in all work and a standing of at least 3.00 in the work taken in his/her major field, and who needs not more than six semester hours of credit to meet the requirements for the baccalaureate degree, may be granted provisional admission to the graduate program. A student who has been granted such admission will be permitted to enroll for not more than six semester hours of courses designated for graduate credit and not more than twelve semester hours during a semester; or for not more than three semester hours of courses designated for graduate credit and not more than a total of six semester hours during a Summer Session. Courses taken for graduate credit may not be counted toward fulfilling the requirements for a baccalaureate degree.
To be eligible for the degree of Master of Arts in Liberal Studies, a student must complete at least thirty semester hours, distributed as follows:

1. A core of 14 semester hours consisting of:
   A. 10 semester hours in one subject-matter field (other than education), 7 semester hours of which must be taken at Valparaiso University, and
   B. 4 semester hours in the courses entitled The Western Tradition I and The Western Tradition II.

2. 16 semester hours of electives (of which not more than 10 semester hours may be in education).

At least 5 of the 10 semester hours required in the one subject-matter field and at least 15 of the 30 semester hours presented for the degree must be in courses numbered 300 or higher. These courses must be taken at Valparaiso University.

Under the Master of Arts in Liberal Studies program, students may concentrate their study in the following fields: English, Geography, History, Music, Psychology, Religion, or Sociology.

Teachers who plan to use the M.A.L.S. degree to professionalize their licenses should note the teacher certification requirements on page 54 and should consult with the chairperson of the Department of Education concerning their specific programs.

Program for Master of Education. This program, authorized for the first time as of the school year 1972-1973, is used by elementary teachers in professionalizing their certificates. The Master of Education degree program is open only to certified elementary teachers or persons with a planned program for achieving certification.

To be eligible for the degree of Master of Education, a student must complete at least thirty-three credits, distributed as follows:

Professional Education ........................................ 12 semester credits
   (a minimum of six hours of 300 courses at Valparaiso University)
Psychological Foundations of Education ..................... 3 semester credits
   (Education 310, Psychology 242, 252, 253, 303, or 315)
Subject-matter field(s) other than education ............ 12 semester credits
   (a minimum of six hours of 300 courses at Valparaiso University)
Electives .................................................. 6 semester credits
Total minimum requirement .................................. 33 semester credits
(Minimum 300 courses at Valparaiso University) ............ 15 semester credits

All students who are enrolled in the Master of Education program should note the teacher certification requirements on page 54 and should consult with the chairperson of the Department of Education concerning their specific programs.

Regulations for the Degrees M.A.L.S. and M.Ed. No thesis is required, but a term paper is a regular part of graduate courses.

Admission to Candidacy. Admission to candidacy is a separate step from admission to the graduate program, and requires separate approval by the Dean of the College of Arts and Sciences. To become a candidate for a degree, a student must have completed at least six semester hours at Valparaiso University with a standing of at least 2.7 (B = 3.00). Application for candidacy should be filed before the student has completed half of his/her graduate work. The student must file a tentative program of study which has been approved by his/her academic adviser. Forms for this purpose are available through the Graduate Office.

Application for Graduation. To receive the master’s degree from Valparaiso University, students must make formal application to the Dean of the College of Arts and Sciences within the first week of the term in which they expect to be graduated. They must give evidence that they have fulfilled all requirements for the degree and receive the approval of the Graduate Council. No student who has not made application for candidacy (see above) will be eligible for the degree.

Marking System and Quality Points. The grade marks reported and recorded in the Registrar’s Office are as follows. The corresponding number of quality points per credit hour are also indicated.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points Per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: Except for the grades D+, D, D-, and F, all grades give credit toward graduation.

Graduate credit may be received for grades of C- and above. BUT NOT MORE THAN six semester hours of C-, C, or C+ work may be counted toward the degree.

Students must maintain a grade point average of 2.7 (B = 3.0) in all graduate work undertaken at Valparaiso University.
I. Incomplete. The grade I (Incomplete) may, at the discretion of the instructor, be given to a student whose completed work in a course indicates the probability of his/her passing the course but who has failed to complete a segment of the assigned work of the course because of circumstances beyond his/her control. An I (Incomplete) received in one semester or summer session must be removed by the beginning of the official examination period of the next succeeding semester or it will automatically become an F. The student's deadline for submitting the outstanding work to the instructor shall be one full week prior to that date.

W. Only in exceptional cases, such as prolonged or serious illness, will the Graduate Council permit a student to withdraw from a course without a grade of F after the end of the seventh week of the semester or after the third week of a Summer Session.

Repetition of Courses for Credit. Unless a course may be repeated for credit, only the credits, grade, and grade points received the last time a course is taken by a student at Valparaiso University shall be used in determining credit for graduation and the cumulative grade-point average(s). A grade of W shall be excluded from this policy.

Other Regulations. Not more than fifteen semester hours of work for graduate credit may be carried in any one semester, nor more than nine semester hours of credit in any Summer Session. All work for the master's degree must be completed within a period of five calendar years from the date of admission into the program.

Teacher Certification. Because of new state certification laws now in effect, it is imperative that students seeking professional certification should consult with the chairperson of the Department of Education concerning specific certification requirements prior to, or at the start of, graduate study.

Elementary Certification. Persons seeking to professionalize their general elementary licenses must devote at least 15 semester hours of their work to a combination of courses in education and subject matter directly related to elementary school teaching with a minimum of 12 semester hours in professional education.

The Master of Education degree is designed to meet these requirements. The Master of Arts in Liberal Studies degree may be used for professionalizing the general elementary license, but coursework above the 30 semester hour minimum for that degree will be required. Consult the Department of Education concerning specific requirements.

Secondary Certification. Secondary teachers wishing to professionalize their teaching licenses should take the Master of Arts in Liberal Studies degree program. A minimum of 6 semester credit hours in professional education coursework is required, with at least 3 of these taken at the 300 level at Valparaiso University. A list of subject fields for which licenses may be professionalized is available from the Department of Education.

Reading Program. The University offers courses which meet the certification requirements of the State of Indiana to teach reading as a subject-matter field and to professionalize such certification. Specific information regarding the reading program is available from the Department of Education.

Independent Study. With the permission of the chairperson of the department concerned and of the Graduate Council, a student may earn up to six of the thirty or thirty-three semester hours required for the degree by means of independent-study projects. No student may apply for permission to undertake an independent-study project until he/she has satisfactorily completed a minimum of twelve semester hours of his/her approved master's degree program.

Before registering for an independent-study project, a student must place on file with the Graduate Office an outline of his/her project, together with a bibliography, which have the written approval of the directing professor and his/her department chairperson.

An independent-study project will be recorded as either course 290 or course 390 of the department concerned, depending upon the nature of the project. Neither course may be repeated for credit toward the fulfillment of degree requirements.

The titles and descriptions of these courses are as follows:

290. Independent Study. Cr. 3 Investigation of a special topic through readings under supervision of a faculty adviser. Certain departments may also require research, creative work, and/or a concluding paper.

390. Research Project. Cr. 3. The study of a topic of special interest to the student under regular supervision of a faculty adviser. A concluding paper of substantial proportions is required.

No student may register for an independent-study project during the final Summer Session of his/her program and no student should expect to start and complete an independent-study project in one Summer Session.

Restricted Credits. Not more than six semester credits earned in institutes or workshops may be counted toward the degree. With the exception of workshops and institutes, all graduate courses offered by Valparaiso University which meet for a full semester or summer session will be accepted for credit towards a master's degree. In addition, a student may present in fulfillment of degree requirements a maximum of six hours of credit earned in courses which meet for less than a full semester (or its equivalent as determined by the Graduate Council) or a full summer session.

Transfer Credits. A maximum of six semester hours of transfer credit from another accredited graduate institution will be accepted for the degree. No course presented with a grade of less than B- will be considered for transfer. These credits must have been earned not more than ten years before the student is admitted to the graduate program. Transfer credit is subject to all of the restrictions that apply to short-term classes, workshops, and institutes. With the exception of travel-study, only graduate courses that meet for more than one calendar week will be eligible for credit transfer. In addition, courses that carry two semester credits must meet for a minimum of two calendar weeks, while courses that carry three semester credits must meet for a minimum of three calendar weeks. Transfer for travel-study will not exceed two credits per calendar week. All requests for transfer must be in writing and will be evaluated by the Dean of the College of Arts and Sciences.
Fees. Application fee $10.00
This fee is to accompany the application for admission form. It is payable only once, upon initial application. It is not refundable.

Matriculation fee $5.00
This fee is payable only once, when the student enrolls in his first course at Valparaiso University. It is not refundable.

Graduation fee $15.00
This fee should accompany the application for graduation.

Placement fee (optional) $10.00
This fee will be charged each teacher candidate who wishes to use the Teacher Placement Service. This fee provides placement service for one placement year (October 1 - September 30).

Students enrolled in the graduate program are expected not to enroll in undergraduate courses, unless approved by the Dean of the College of Arts and Sciences. If a deviation is granted, the graduate student will then pay the undergraduate fee rate for those undergraduate courses.

Other fees are indicated in University bulletins covering Summer Session, evening offerings, and the regular academic year.

Graduate Scholarship in English Literature. The Vera L. Sieb Scholarship in Literature was established by Floyd W. Sieb as a memorial to his sister, whose name the scholarship bears.

The purpose of the scholarship is to make it possible for a promising student to devote his/her entire time during the academic year to graduate study with a concentration in English literature at Valparaiso University. No more than five years may have elapsed between completion of the student's undergraduate studies and application for this scholarship.

The scholarship grant will be paid in two installments; one half will be paid at the beginning of the fall semester of the holder's first graduate year and the other half at the beginning of the spring semester of that year.

The scholarship will be awarded annually upon the recommendation of the professorial staff of the Department of English. The recommendation must be accompanied by a detailed statement of purpose written by the student being recommended.

The Department of English will give first consideration to graduates of Valparaiso University. If there are no suitable candidates in this category, the scholarship may be given to graduates of other colleges or universities who will pursue their graduate work at Valparaiso.

Deadline for application is March 15.

For further information write to: Dean of the College of Arts and Sciences.

Courses for Graduate Credit. All courses numbered 200 and above are open only to those students who have been officially admitted to the Graduate Division.

NOTE: Announcements for specific semesters and for summer sessions will indicate which courses are offered during those periods.
GENERAL REQUIREMENTS FOR ADMISSION. Seeking an academically strong, yet diversified student body, Valparaiso University admits those candidates who demonstrate potential for success in rigorous academic work. Qualified applicants are admitted without regard to race, color, sex, national or ethnic origin, or physical handicaps. The credentials of each applicant are individually evaluated, with consideration given to academic record, test scores, character, personality, and motivation for college studies.

To provide uniform predictive and evaluative norms, the University requires that all candidates for admission to the freshman class take the Scholastic Aptitude Test of the College Entrance Examination Board. In exceptional cases (e.g. when SAT scores would not be available early enough for full admission and financial aid consideration) the SAT requirement may be waived in favor of the PSAT and/or the ACT, if these scores seem satisfactory.

To be admitted, an applicant should normally be a graduate of an approved secondary school or possess a state high school equivalency certificate. Graduates of non-approved secondary schools and veterans who may not have completed requirements for high school graduation may be granted admission, if their scores on the required entrance examination clearly demonstrate their aptitude for college level studies. Exceptionally well-qualified students will be admitted prior to graduation if their candidacy is endorsed both by their high school officials and their parents.

Applications may be filed at any time, but preferably well in advance of the semester in which admission is desired. Each application must be accompanied by an Application Fee of $10.00, which is non-refundable. No other fee is required by the University at the time of application. All applications for admission to the undergraduate programs of Valparaiso University should be made to the Director of Admissions.

College of Arts and Sciences and College of Business Administration. Since Valparaiso's curriculum offers flexibility and attention to individual talents and needs, no one specific high school program is required of all applicants. Students planning to attend Valparaiso University should take the strongest possible college-preparatory program available to them. Within these guidelines, individual selections of specific courses are best made by the student and his/her high school counselor.

Students planning their high school curricula are urged to include a minimum of three units in English, two units in mathematics (algebra, geometry), two units in social studies, two units in laboratory sciences, and two units in a foreign language.

College of Engineering. Applicants to the College of Engineering should follow a strong college preparatory program with emphasis on mathematics and science. Candidates should submit a minimum of three and one-half years of mathematics, including 1 1/2 units of algebra, 1 unit of geometry, 1/2 unit of trigonometry (business, general, or shop mathematics may not be counted), and one year of either chemistry or physics with regular laboratory work. These requirements are minimum; applicants are encouraged to take four years of formal mathematics and both chemistry and physics.

College of Nursing. The requirements for admission to the College of Nursing are essentially the same as those of the College of Arts and Sci-
ences. It is recommended that the student have a year of both biology and chemistry. If available, a second year of biology will better prepare the student for the nursing curriculum.

Christ College. Students are admitted to Christ College only by invitation of the Faculty Committee on Christ College and hold concurrent admission to the College of Arts and Sciences, the College of Business Administration, the College of Nursing, or the College of Engineering.

School of Law. See pages 251-254.

Graduate Division. See page 51.

Special Student Status. An undergraduate applicant who is not admitted as a regularly classified student (working toward a baccalaureate degree) may be admitted as a special student. Credits received may be subject to revision should the student in the future become a candidate for a degree. This status is not available to a student dismissed from the University.

For regulations regarding admission as a special student in the School of Law, see page 253.

READMISSION OF FORMER STUDENTS TO UNDERGRADUATE AND PROFESSIONAL PROGRAMS. A student who has fully matriculated at Valparaiso University and who, for some reason (except students enrolled in the Deaconess Training Program—these students usually spend one year in in-service training), has interrupted his/her studies must apply for readmission to the University through the Readmissions Committee. The request for readmission is to be sent to the Registrar.

Applications for readmission must be made at least one week prior to the registration date of the term in which the student wishes to enroll. Applications will not be accepted after this date.

A student being readmitted must present the necessary information such as records of attendance and grades at other colleges, and a new medical examination report, if he/she has been out of school during the previous sixteen month period, before action will be taken on his/her request to be readmitted.

The case of each student applying for readmission will be presented to the Readmissions Committee. The student will be notified by the Registrar of the Committee's decision.

*ADVANCED STANDING—TRANSFER STUDENTS. The University welcomes transfer students from junior colleges, community colleges, and other accredited institutions of higher education. A transfer student is defined as a student who has matriculated at another college or university before enrolling at Valparaiso University. Students seeking regular admission as transfers to Valparaiso University must apply for admission through the Director of Admissions at least three weeks prior to the official registration days of the session for which they are applying and must present evidence of honorable dismissal from the institution last attended. A transfer student will not be given a Permit to Enter from the Director of Admissions until official transcript(s), a completed medical report, and other required credentials are on file in the Admissions Office. In some cases, the Director of Admissions may require a personal interview before admission is approved. After the applicant's record has been evaluated, he/she will be notified regarding the courses which are found acceptable for transfer. Courses with grades of "D" will be accepted as credit for graduation provided a grade-point average of 2.00 (C) or better is attained on work completed at any one institution, and which has not previously been evaluated.

Credits earned more than fifteen years ago will be accepted toward graduation requirements on a provisional basis, subject to validation by first year's work (30 semester hours) completed in residence with a 2.00 average. The University reserves the right to reject any applicant for admission by transfer whose academic record is unsatisfactory.

Most credits earned in secretarial studies and credits earned in Developmental Reading are not applicable toward any degree granted by Valparaiso University.

The maximum number of advanced standing credits that may be transferred to the University is 94 credits (Colleges of Arts and Sciences, Business Administration, or Nursing) or 106 credits (College of Engineering).

Advanced standing is the record of courses and credits accepted by Valparaiso University from another institution. Students who enter with advanced standing because of credits transferred from another school must earn at Valparaiso University twice as many quality points as semester hours attempted in order to be eligible for a degree.

Transfer students should become familiar with the sections on housing (page 24), financial aid (page 30), residence requirement (page 72), and graduation (page 71).

The following applies to the use of advanced standing in meeting degree requirements within the College of Arts and Sciences:

A. General Education. A Statement of Equivalence is prepared by the Dean of the College of Arts and Sciences in regard to the general education requirements for the Bachelor of Arts degree. The following special rules apply:

1. Religion. A transfer student may apply a maximum of 6 credits in religion from his/her advanced standing to the religion requirement. Otherwise, a transfer student with more than 45 credits but less than 75 credits of advanced standing need complete two courses (6 credits) of religion at Valparaiso University. A transfer student with 75 credits or more of advanced standing need complete one course (3 credits) of religion at Valparaiso University.

2. University Course. This one course requirement must be fulfilled at Valparaiso University. In some instances, the General Education Officer, with appropriate advice, may allow transfer students to substitute an appropriate course taken at another institution.

B. Concentration Requirements. Statements of equivalence for academic majors or professional block schedules are prepared by the departments concerned.
*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 University’s Office of the Registrar, where an evaluation will be made for possible acceptance of transfer credits. Courses with grades of "D" will be accepted for graduation, provided a grade-point average of 2.00 or better is attained on work completed at any one institution, and which has not previously been evaluated.

**ADVANCED STANDING BY EXAMINATION.** The University offers three basic means for students to receive advanced placement and/or credit. These include:

1. **The Advanced Placement Program of the CEEB—AP.** Applicants for admission, who take one or more of the Advanced Placement Examinations in May, will receive credit toward a degree for scores of "5" (Extremely Well Qualified) or "4" (Well Qualified). A score of "3" (Qualified) will be referred to the department chairperson concerned for evaluation and recommendation for credit or placement.

2. **The College Level Examination Program of the CEEB—CLEP.** 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 of 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 592, Princeton, N.J. 08540.

   Valparaiso University awards credit for CLEP General Examinations in English, Humanities, Social Science-History, and Natural Science, subject to the following conditions:
   
   A. The General Examination must be taken prior to matriculation at Valparaiso University.
   
   B. Credit for a CLEP General Examination may not be applied to a major field or any specific course requirement except as listed under D, E, F, and G.
   
   C. 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.
   
   D. A score of 500 or above on the English General Examination will entitle a student to four (4) credits for English 3-4 or 5.
   
   E. A score of 500 or above on the Humanities General Examination will entitle a student to three (3) credits in the area of Literature and Fine Arts.
   
   F. A score of 500 or above on the Social Science-History General Examination will entitle the student to three (3) credits in the area of Behavioral and Social Sciences.
   
   G. A score of 500 or above on the Natural Science General Examination will entitle a student to four (4) credits in the area of Natural Science and Mathematics. A student who applies these credits to the general education requirement in Natural Science and Mathematics will be expected to complete at least one laboratory course in science.

   Valparaiso University awards credit for CLEP Subject Area examinations as indicated in the separate departmental listings. Credit for Subject Area examinations is awarded only if the examination is taken before a student has enrolled in a college-level course in the department concerned.

3. **University Placement Testing.** During the orientation period which 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 (as described below), or to meet certain general education requirements.

   Currently advanced placement and credit are awarded in biology, chemistry, foreign languages, and mathematics, as explained in the catalog sections dealing with those departments.

**REGISTRATION.** All students are expected to register on the official registration days of each semester as listed in the University Calendar.

*Responsibility Assumed by Registration.* By registering, the student subscribes to the terms and conditions, financial and otherwise, which have been set forth in these announcements. One of these is that every first-time, full-time student and every student who has not been registered during the previous sixteen month period must submit to the University Medical Center a report of his/her medical history, physical examination, and required immunization.

**Course Prerequisites.** Students will be held responsible for meeting the prerequisites of all courses for which they enroll. In unusual cases, the appropriate committee may waive certain prerequisites upon formal petition by the students concerned.

**Change of Program.** At the beginning of each semester or session, changes of enrollment may be made in accordance with the dates found in the official University calendar as noted on pages 3, 4, 5, and 6, with the signature of the student’s adviser and the written approval of the department chairperson involved. There is no adjustment in the tuition and general fees after the deadline for adding regular courses of a semester.

Thereafter, students will be permitted to withdraw from a course with a grade of "W" in accordance with the published dates as noted in the official University calendar. Cases which involve special circumstances, such as serious or prolonged illness, will be handled by the dean of the student's college, by means of a petition.

Changes in enrollment concerning second half short courses or the course in the intensification program may be made in accordance with the official University calendar.

Application for changes in enrollment must be made by the student on proper forms and filed at the Office of the Registrar.

**Admission to Courses on a Satisfactory/Unsatisfactory Basis.** Certain courses normally result in S/U grades, as noted in the catalog course

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*Credit for workshops, institutes, or travel-study ordinarily will be granted only for work taken at Valparaiso University. In cases of exception to the preceding restriction, transfer credit for institutes and travel-study programs usually will not exceed one credit per calendar week of instruction. Transfer credit for workshops usually will not exceed two credits per calendar week.

See page 255 for students in the School of Law.
descriptions. An undergraduate student may take, in addition to any such course or courses, one course, normally numerically graded, each semester on a Satisfactory/Unsatisfactory basis, subject to the following conditions:

A. Such courses must not be selected from:
1. the student's major field;
2. the required courses for any professional degree or pre-professional program, except for liberal arts electives or other courses approved by the dean of the student's college;
B. Such registration must be signed by the student's advisor;
C. Decision to elect a course on such a basis is to be made by the deadline for withdrawing from the course concerned with a grade of W.

NOTE: In selection of the S/U option, the student is advised to discuss the implications of that option with his/her advisor concerning entrance into professional schools.

Admission to the Course Intensification Plan. A student may propose a special project for earning one extra credit in one liberal arts course in which he/she is enrolled in a given semester. This opportunity is part of the University's Course Intensification Plan. The following regulations pertain to this option for a student:

1. The course must be a liberal arts course.
2. The course must be offered in the time schedule for 3 or more credits.
3. The initiative and responsibility for developing a satisfactory proposal is expected to lie with the student.
4. The proposal is subject to the approval of the instructor of the course.
5. Approved proposals must be filed in the Office of the Registrar during the period specified in the academic calendar.

Admission to Courses as an Auditor. A classified student may register in a course as an auditor only with the permission of his/her advisor and the chairperson of the department concerned. 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.

A mature student, not regularly enrolled at the University, who desires to take courses without credit may enroll as an auditor upon receiving the approval of the instructors concerned and the dean of the college. Payment of an auditor's fee is required.

Declaration of a Minor in the Professional Colleges. Students in the professional colleges may be allowed to declare a minor in the College of Arts and Sciences, provided that no more than six hours required of the professional program are used in fulfilling a minor offered by the College of Arts and Sciences, and to have this minor listed on the students' official transcript records.

Transfer to Another Program. If a student transfers from one major or program of studies to another, all requirements of the new specialization must be met. Such a transfer will subject credits previously earned to a re-evaluation. In certain cases the change of program may result in some loss of credit. Therefore, such transfers may not be made without the written approval of the advisors and deans concerned. Necessary forms may be obtained from the Registrar.

Credit Hours. A credit represents one hour of recitation or lecture, or two or more hours of laboratory a week for one semester. If time outside of the laboratory is required to prepare laboratory notes, two hours may be equivalent to one hour of class work. Drawing, shopwork, and other courses demanding no outside preparation require a minimum of three hours for one credit. For the exact number of hours, see the respective courses.

Maximum and Minimum Registration. The maximum registration for a full program for students in the College of Arts and Sciences is 17 semester credits. For students in certain professional programs, the authorized maximum registration is given in the following table.

Number of Credit Hours Without Petition:

<table>
<thead>
<tr>
<th>College of Arts and Sciences:</th>
<th>Maximum, 17 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business Administration</td>
<td>Maximum, 17 Credits</td>
</tr>
<tr>
<td>College of Engineering, except as required in certain block schedules</td>
<td>Maximum, 20 Credits</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>Maximum, 17 Credits</td>
</tr>
<tr>
<td>School of Law</td>
<td>Maximum, 17 Credits</td>
</tr>
</tbody>
</table>

Students who maintained a standing of three (3.00) during the previous semester may register for extra work, provided their formal petitions for such work are granted by the appropriate committee. Freshmen will not be allowed to carry extra work during the first semester.

The minimum registration for a full-time student is 10 semester credits.

*Withdrawal from the University. A student who wishes to withdraw from the University for the remainder of a semester or session (see official calendar, pages 3-6, for deadline date) should apply to the Vice-President for Student Affairs for a permit to withdraw. Upon return of the permit properly signed to the Office of the Registrar, the Registrar will authorize the return of such fees as are refundable. In the case of a student who is less than twenty-one years of age, the parent or guardian is notified of the withdrawal by the Vice-President for Student Affairs. If a student withdraws after the seventh week of a semester, he/she is ordinarily not granted readmission for the following semester, unless unusual 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 will not be granted unless the student's conduct and character are such as would entitle him/her to continue in the University.

*For the School of Law, see page 256.
A student who withdraws from the University without authorization is not entitled to refunds of any kind and the instructor of each subject in which the student is enrolled is required to report a final grade of F to the Registrar.

EXAMINATIONS. The regular written examinations of the University are held at the close of each semester. Each examination is usually limited to two or three hours.

In addition to the regular prescribed examination, written tests are given from time to time, at the discretion of the instructor.

The semester examinations are conducted according to a published schedule.

All examinations in courses of less than 3 credits will be conducted during regularly scheduled class periods. Deviations from this policy for final examinations must be approved by the dean of the college.

The policy concerning the use of a final examination in a course will be determined by the professional college or the Arts and Sciences department which offers the course.

ACADEMIC DEFICIENCY. In the College of Arts and Sciences, the College of Business Administration, the College of Engineering, and the College of Nursing, students whose cumulative resident grade-point average falls below 2.0 will be considered academically deficient and 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. Notice of such deficiency will appear on the student's grade report. The Dean of each college will establish procedures adequate to give students who are academically deficient timely warning of their being denied continuation of their studies.

Deficiency warnings are sent to parents and guardians of all undergraduate students in the day program who are less than twenty-one years of age, unless the student who is not a dependent of his/her parents or guardians notifies his/her academic dean to the contrary.

For regulations concerning academic deficiency in the School of Law see page 258 of this bulletin.

DROPPED FOR LOW SCHOLARSHIP. Whenever, in the judgment of an academic dean, a student who is academically deficient would benefit from an interruption of this work in a particular college of the University, the dean will notify the student in writing that he/she has been dropped and will specify a) the period of time for which he/she has been dropped and b) the conditions which he/she must satisfy in order to be readmitted.

ABSENCE FROM CLASS. The following regulation concerning absence from class has been adopted by the Faculty:

Every student is expected to attend every one of his/her classes unless his/her absence has been approved by the instructor concerned or by the appropriate dean.

Absence from class is primarily a matter between the student and the instructor of the class. It is the student's responsibility to discuss with his/her instructor the reason for his/her absence and to learn what make-up work may be required.

**MARKING SYSTEM AND QUALITY POINTS.** The grade marks reported and recorded in the Registrar's Office are as follows. The corresponding number of quality points per credit hour are also indicated.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points Per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

NOTE: Except for the grade of F, all grades give credit toward graduation. A student who receives a grade of D- (0.7 points per credit hour) is advised not to enroll in other courses for which the given course is a prerequisite.

I. Incomplete. The grade I (Incomplete) may, at the discretion of the instructor, be given to a student whose completed work in a course indicates the probability of his/her passing the course but who has failed to complete a segment of the assigned work of the course because of circumstances beyond his/her control. An I (Incomplete) received in one semester or summer session must be removed by the beginning of the official examination period of the next succeeding semester or it will automatically become a grade of F (0.0 points per credit hour). The student's deadline for submitting the outstanding work to the instructor shall be one full week prior to that date.

W. Authorized withdrawal. (See Change of Program). This mark carries no credit.

S. Satisfactory; meets course objectives. Hours with grade of S count toward graduation but are not counted in computing the student's standing. All regular work of the course is required of students electing the S/U registration. It is assumed that work should be of a quality which is comparable to a grade of C- (1.7 points per credit hour) better to warrant the grade of S.

U. Unsatisfactory; does not meet course objectives. Hours with grade of U do not count toward graduation and are not counted in computing the student's standing.

Grades of S and U are used in certain courses which are so designated in the course descriptions contained in the University Bulletin. (See page 59 for further use.) They may be used in other courses only in exceptional cases when approved by the dean of the respective college and the Vice-President for Academic Affairs.

For the School of Law, see page 256. For the Graduate Program, see page 53.
Any student withdrawing from a subject without first securing the official permission of his/her adviser will receive a grade of F (0.0 points per credit hour) in that subject for the semester.

Only in exceptional cases, such as prolonged or serious illness, will the appropriate committee permit a student to withdraw from a course without a grade of F (0.0 points per credit hour) after the deadline for withdrawing from a course with the grade of W.

**Definition of the Standing of a Student.** A student's standing is determined by the ratio of the total number of quality points to the total number of hours attempted in all the work at Valparaiso University. Thus, a student who makes an average mark of 2.00 throughout a course of 124 semester hours will have 248 quality points, 124 credits, and a standing of two (2.00). An average mark of 3.00 will give the student 372 quality points, 124 credits, and a standing of three (3.00). When a semester's work is to be considered "standing" is understood to be the ratio of the number of quality points gained to the number of credits scheduled.

**SEMESTER REPORTS.** Reports are sent only to students and at the address indicated by them on the official registration form. These reports are considered by the University to be the progress records maintained by the University and furnished to the students as required by the Veterans Administration DVB Circular 20-76-84.

**CLASSIFICATION OF STUDENTS.** In the College of Arts and Sciences, a student must have 24 semester credits and 48 quality points to be classified as a sophomore; 56 semester credits and 112 quality points to be classified as a junior; 88 semester credits and 176 quality points to be classified as a senior.

In the College of Business Administration, a student must have 24 semester credits and 48 quality points to be classified as a sophomore; 56 semester credits and 112 quality points to be classified as a junior; 88 semester credits and 176 quality points to be classified as a senior.

In the College of Engineering, a student must have 24 semester credits and 48 quality points to be classified as a sophomore; 60 semester credits and 120 quality points to be classified as a junior; 94 semester credits and 188 quality points to be classified as a senior.

In the College of Nursing, a student must have 24 semester credits and 48 quality points to be classified as a sophomore; 60 semester credits and 120 quality points to be classified as a junior; 88 semester credits and 176 quality points to be classified as a senior.

A student in the School of Law shall have completed 30 hours to be classified as a second year student and 60 hours to be classified as a third year student.

**CLASSIFICATION OF COURSES.** The courses offered by the University are classified as (a) lower division courses, numbered 1-99; (b) upper division courses, numbered 100-199; and (c) graduate courses, numbered 200-399.

*For exceptions, see page 72.
Degrees. Upon the recommendations of the Faculties of the Colleges of Arts and Sciences, Business Administration, Engineering, Nursing, School of Law, and the Graduate Council and the Graduate Faculty, the University confers the degrees as indicated below. All work toward a degree must be completed to the satisfaction of the Faculty recommending the degree. In all cases, the student is responsible for meeting the requirements for graduation.

The minimum number of credits required for graduation varies with curricula chosen, as shown in the following summary.

<table>
<thead>
<tr>
<th>Degrees</th>
<th>Credits Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate in Science</td>
<td>60</td>
</tr>
<tr>
<td>Bachelor of Arts (except in combined curricula)</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Music</td>
<td>128-134</td>
</tr>
<tr>
<td>Bachelor of Music Education</td>
<td>132-134</td>
</tr>
<tr>
<td>Bachelor of Science (except in combined curricula)</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Education</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Fine Arts</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Home Economics</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Physical Education</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Social Work</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Business Administration</td>
<td>124</td>
</tr>
<tr>
<td>Bachelor of Science in Civil Engineering</td>
<td>138</td>
</tr>
<tr>
<td>Bachelor of Science in Electrical Engineering</td>
<td>138</td>
</tr>
<tr>
<td>Bachelor of Science in Mechanical Engineering</td>
<td>138</td>
</tr>
<tr>
<td>Bachelor of Science in Nursing</td>
<td>124</td>
</tr>
<tr>
<td>Juris Doctor</td>
<td>90</td>
</tr>
<tr>
<td>Master of Arts in Liberal Studies</td>
<td>30</td>
</tr>
<tr>
<td>Master of Education</td>
<td>33</td>
</tr>
</tbody>
</table>

Credit and Quality Point Requirements. Candidates for graduation with the associate's degree or the bachelor's degree must have a standing of two (2.00) in all their work at Valparaiso University. In addition, candidates for the bachelor's degree must have a standing of two (2.00) in their major field, or fields, based upon their work at Valparaiso University. Also, candidates for the associate degree must have a standing of two (2.00) in all their science courses at Valparaiso University. In the computation of these standings grades of D+, D, D-, and F are included. Candidates for the master's degree, see page 53. Candidates for the J.D. degree, see page 258.

Repetition of Courses for Credit. Unless a course may be repeated for credit, only the credits, grade, and grade points received the last time a course is taken by a student at Valparaiso University shall be used in determining credit for graduation and the cumulative grade-point average(s). A grade of W shall be excluded from this policy.

Residence Requirements. Irrespective of other degree requirements, candidates for all bachelor's degrees must meet the following requirements in residence at Valparaiso University: 1) at least half (with a minimum of 15 credits) the number of credit hours required for the first major; 2) at least 3 credits in religion; 3) one course designated as University Core where required (Colleges of Arts and Sciences and Business Administration); and 4) at least 30 of the last 40 credits presented for the degree. Candidates for the J.D. degree, see page 258. Candidates for the master's degree, see page 53.

Ordinarily, credit is not given for courses taken at other approved schools or for correspondence courses taken during a student's residence at the University. Any exception to this policy must have the approval of a student's adviser, his/her dean, and the Committee on Academic and Professional Standards.

University Course. Each undergraduate student, except for a student in the College of Engineering or in the College of Nursing, is required to meet this requirement at the junior/senior level. These courses are specifically intended to represent an elucidation of a particular approach to problems or values with significant human concern. The courses may be comparative or integrative studies in the arts, humanities, social sciences, or natural sciences.

The following guidelines apply to these courses:

A. There are no prerequisites, stated or implied;
B. Not open to freshmen or sophomores;
C. Students are allowed to take courses listed in their major fields, although such courses cannot be used to fulfill this requirement;
D. To fulfill this requirement, the course must be taken outside the student's major field(s);
E. These courses may not apply to the minimum major(s) requirements.

These courses are listed below. For the specific course descriptions, see departmental listings.

| Art 168          | Journalism 168 |
| Biology 168      | Latin 168      |
| Chemistry 168    | Music 168      |
| Economics 168    | Philosophy 168 |
| English 168      | Physical Education 168 |
| French 168       | Political Science 168 |
| Geography 168    | Psychology 168 |
| German 168       | Russian 168    |
| Greek 168        | Sociology 168  |
| History 168      | Spanish 168    |
| Home Economics 168 |         |

Application for Degrees. A student who wishes to receive his/her degree at the end of a Fall Semester must make formal application for the degree on a form provided for this purpose by the Registrar's Office not later than the preceding April 15th. A student who wishes to receive his/her degree at the end of a Spring Semester or a Summer Session, must make formal application for the degree on a form provided for this purpose by the Registrar's Office not later than the preceding October 15th.

A Summer Session student not enrolled in the previous academic year who expects to receive a degree at the end of a Summer Session must make application for the degree at the beginning of that Summer Session.

If, for any reason, a student (except graduate students) does not meet the requirements for graduation after filing his/her application, the student must file a new formal application (no charge) by the beginning of the session in which the student now expects to receive the degree.
Candidates for degrees (August and December), who expect to complete requirements in absentia, must be sure that all course work is completed and the session ended by the deadline date set for resident candidates. Official transcripts must be on file in the Office of the Registrar no later than ten days after the close of a semester or session. This does not apply to May candidates, since these candidates must be certified prior to the May Commencement Exercises. Further information will be furnished upon request from those candidates completing degree requirements in absentia.

Presence at Commencement. A candidate for graduation at the end of the spring term must be present at commencement in order to receive his/her degree. Degrees are not conferred in absentia, except on special permission from the President.

A student who completes his/her work toward a degree at the end of a Fall Semester or of a Summer Session may be granted the degree at that time.

Bachelor’s Degrees with Distinction. A student who has been in attendance at Valparaiso University at least three years and who has maintained a standing of 3.60 in his/her work at this institution will be graduated “With High Distinction.” A student who has been in attendance for only two years must maintain a standing of 3.80 to be eligible for this honor.

A student who has been in attendance at least three years and who has maintained a standing of 3.40 in his/her work at Valparaiso University will be graduated “With Distinction.” A student who has been in attendance for only two years must maintain a standing of 3.60 to be eligible for this honor.

For the professional degree (J.D.), see page 259.

The number of years completed in this institution is determined by the number of semester hours earned and not by the time spent in residence.

HONORS IN SCHOLARSHIP. An undergraduate student (freshman, sophomore, junior, senior) who achieves a standing of 3.50* in any semester (except the last semester prior to graduation) will be awarded honors, provided he/she received no grades of F or U at the official end of the semester concerned, and that he/she was registered for at least 14 hours of work for that semester in the College of Arts and Sciences (12 hours in the Washington Semester Program or the Semester on the United Nations or the Overseas Study Programs), for at least 15 hours in the College of Engineering, for at least 14 hours in the College of Business Administration, or for at least 14 hours in the College of Nursing (13 hours in the third year of the nursing program).

Graduating senior honors are announced at Commencement and are based on the work of the last two semesters. This particular honor* is based on the same rules as for class honors except the student must have been registered for: at least 28 hours in the Colleges of Arts and Sciences, Business Administration, and Nursing; and at least 30 hours in the College of Engineering. The appropriate numerical adjustment shall be made for those students who registered in a special program as noted in the preceding paragraph.

*For the School of Law, see page 257.

TRANSCRIPTS OF ACADEMIC RECORDS. The Family Educational Rights and Privacy Act of 1974 (the Buckley Amendment) provides, in part, that the institution will maintain the confidentiality of student academic records. The University’s entire policy may be found in the Student Handbook.

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.

With regard to transcripts of academic records, the University’s policy covering “dependency” determination is to consider all undergraduate students in the day program as “dependent,” unless they specifically inform the Office of the Registrar at the beginning of each academic year that they consider themselves to be “independent.”

Official transcripts of academic records are released only upon the written request of the student.
OBJECTIVES. The College offers courses which are designed to provide an intellectual foundation and context for the University's undergraduate programs.

Some of the courses, such as those in writing, mathematics, and foreign languages, are valuable in themselves in addition to their important application to other fields.

Courses in the natural sciences acquaint the student with some of the methods and results of humankind's efforts to understand and shape their natural environment as well as themselves, understood as part of nature. In the courses offered by the social sciences, students inquire into the problems connected with individuals and social groups living together in the peculiar conditions of the modern world. The humanities deal with values and perspectives as they are expressed in intellectual and artistic works. Especially important is the sequence of courses in religion in which the religious dimension of human life is examined. Emphasis is given to a study of the Christian tradition which has shaped much of our cultural heritage and still today lays claim to the loyalties of many people. By requiring a variety of courses in these major branches of learning, the general education program gives students many occasions in which they may discover their interests and competencies. Thus informed they may make intelligent choices of fields of concentration. By specifying that general education work continues into the student's junior and senior years, the College affirms the ideal that specialization should always be accompanied by a widening circle of learning in order that the student may see and understand the world whole, as much as possible.

The College provides advanced work in a number of fields of study, including several professional programs. It is the objective of the College to provide each of its students with a field of concentration which will introduce him/her to the basic information, theory, and methodology of a discipline. Such specialization complements the breadth of the general education program, but at the same time can provide the background for graduate work, professional school, teacher certification, and many types of employment.
A student may not apply more than 12 credits collectively from the professional colleges of the University toward a degree in the College of Arts and Sciences subject to the following exceptions:

1. Courses in Economics are excluded from this restriction.
2. For a student in the Home Economics—Merchandising Emphasis, required courses in the College of Business Administration are excluded.
3. A student selecting a General Business Minor in lieu of a second major may earn up to 24 credits in Business Administration courses. Economics 71 and 72 will be counted in this total.

Note: A student who transfers from one of these professional colleges into the College of Arts and Sciences may elect to apply credits within the restrictions listed above.

Regulations Concerning General Education Requirements.

1. A student may not use any course to meet more than one general education requirement.
2. Only courses of at least three credits may be used in meeting general education requirements (excluding the requirement in physical education), except in specific cases where authorized.
3. A student may not use a course to meet both a general education requirement and the plan of study option of the concentration requirement.
4. Not more than one course in a student's major field or in the General Business Minor may be used in partial fulfillment of each one of the seven basic categories of the general education requirements, with the following exceptions:
   a. A student majoring in the Department of Foreign Languages may use two courses in his/her major to fulfill the Foreign Language requirement if he/she fulfills the Literature and Fine Arts requirement with a course outside his/her major.
   b. A student majoring in Physical Education may use two courses in his/her major to fulfill the Physical Education requirement.
   c. A student majoring in Religion may use three courses in his/her major to fulfill the Religion requirement.

The Associate in Science Degree.

A. General Education Requirements:
1. Religion (3 credits).
2. English 5, Exposition and Argument (4 credits), or its equivalent.
3. Humanities and Fine Arts (3 credits).
4. Behavioral and Social Sciences (3 credits).
5. Physical Education (1 credit).

For further information on these categories see pages 82 and 83 concerning The General Education Requirements of the Bachelor of Arts degree.
B. Concentration Requirements: A student must complete at least 30 credits in the Natural Sciences and Mathematics. (Students preparing for admission to one of the allied health fields should develop an appropriate program of study with the Dean's Office.)

C. Other Requirements:
1. A student must complete at least 60 credits.
2. The following work must be completed in residence at Valparaiso University:
   a. 30 of the last 34 credits toward the degree.
   b. At least 15 credits in the Natural Sciences and Mathematics.
   c. The General Education requirement in Religion.
3. The student must earn a cumulative grade-point average of 2.00 on all work in residence and on courses in the Natural Sciences and Mathematics taken in residence.

The Bachelor of Arts Degree.

A. General Education Requirements:
1. Religion. Three courses (9 credits) in the Department of Theology. See departmental listings for the required distribution of these courses.
2. Language and Communications. At least 12 credits including the following:
   a. English. 4 credits earned in Exposition and Argument, or English for Foreign Students, or in the two-semester sequence, Fundamentals of Composition (2 credits each semester);
   b. Foreign Language. Course Number 20 in a foreign language in which the student has no more than one year of high school credit, or Course Number 30 in any foreign language. (A student with more than one year of high school credit in a foreign language may not earn college credit in a First Semester course in that language at Valparaiso University.)
3. Humanities and Fine Arts. At least 10 credits including the following:
   a. English. One course (4 credits) in Literary Studies.
   b. Literature or Fine Arts. One course (3 credits). (Only courses of a historical-critical nature may be selected from the fine arts.)
   c. History or Philosophy. One course (3 credits) selected from either department.
4. Behavioral and Social Sciences. Three courses (9 credits) from at least two of the following fields: Economics**, Geography, History*, Political Science, Psychology*, and Sociology.
5. Natural Sciences and/or Mathematics. Three courses (12 credits) from at least two of the following fields: Biology, Chemistry, Mathematics, Physical Geography**, Physics, and Psychology (with laboratory).

**Courses in Physical Geography are listed under the Department of Geography.
***If a student selects a General Business minor, then only 3 credits (Economics 71 or 72) are applicable toward this requirement.

*6. University Course. One upper-division course outside the student's major field(s) specifically designated as University Course. University Courses are listed each semester in the Time Schedule.

7. Physical Education. Two single credit courses (2 credits). See page 80 for specific requirements.

B. Concentration Requirements:
1. A student must complete a minimum academic major. The following major fields which are offered by departments may be applied to the Bachelor of Arts degree: Art, Biology, Chemistry, Classics, Economics, English, French, Geography, Geology, German, Greek, History, Journalism, Latin, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Religion, Sociology, Spanish, and Speech and Drama with additional areas in Theatre, Communication, or Speech Pathology.

Of these major fields, Classics, French, German, Greek, Latin, and Spanish are offered by the Department of Foreign Languages; Geology is offered through a special program of the Department of Geography; and the remainder are offered by the departments of the same name. Certain interdisciplinary programs or approved Interdisciplinary majors may be presented in lieu of the majors listed above. See pages 93-98 for information on Interdisciplinary Studies. No more than 48 credits in any one field may be included in the 124 total credits required for graduation.

2. A student must further develop his/her concentration studies by one of the following options:
   a. By completing an individual plan of study of at least 40 credits which are not used to fulfill General Education requirements. The plan of study normally includes all work in the major field (except those credits used for General Education) plus appropriate courses from related disciplines. The plan of study must be approved by the major adviser prior to the time at which the student files for his/her degree.
   b. By completing a second academic major. This major may be selected from the list in paragraph 1 above. In addition Home Economics or Physical Education may be selected. See page 184 for details concerning a second major offered by the Department of Theology for students interested in voluntary service in the church. See pages 94 and 95 for details concerning the Interdisciplinary Program in Metropolitan Studies which offers a second major as well as other interdisciplinary programs.
   c. By completing a General Business Minor. See page 98 for details of this program.
   d. By completing at least 40 credits in the first major. No more than 48 credits in the major field may be included in the 124 total credits required for graduation.

The Bachelor of Music Degree. The requirements for this degree are given in the announcements of the Department of Music on page 157 of this bulletin.

The Bachelor of Music Education Degree. The requirements for this degree are given in the announcements of the Department of Music on page 158 of this bulletin.

*This requirement must be fulfilled at Valparaiso.
The Bachelor of Science Degree. The requirements for this degree are identical with those of the Bachelor of Arts degree (See pages 82 and 83) except for the following:

1. The Foreign Language Requirement. A student must earn credit for a second-semester course in a foreign language. (A student with more than one year of high school credit in a foreign language may not earn college credit in a first semester course in that language at Valparaiso University.)

2. The Natural Science and Mathematics Requirement. A student must include at least one course (4 credits each) from each of the following groupings:

   a. Mathematics 36 (or its equivalent).
   b. Chemistry or Physics.
   c. Biology, Physical Geography, or Psychology (with laboratory).

3. Concentration Requirements. A student must include one science major of at least 32 credits and a plan of study; or one science major of at least 32 credits and a non-science major; or two minimum science majors (Biology, Chemistry, Geology, Mathematics, Physics, Psychology). Geology is offered in a special program of the Department of Geography. The others are offered by the departments of the same name.

The Bachelor of Science in Education Degree. The requirements for this degree are given in the announcement of the Department of Education on page 113 of this bulletin. (This curriculum is intended for students planning to become teachers in elementary schools.)

The Bachelor of Science in Fine Arts Degree. The requirements for this degree are identical with those of the Bachelor of Arts degree (see pages 82 and 83) except for the following:

1. The Foreign Language Requirement. Work in a foreign language is optional.

2. The Concentration Requirements:

   a. The student must complete a major in Art consisting of at least 40 credits and including Art 196.
   b. The student may earn more than 48 credits in the Department of Art provided that he/she earns at least 62 credits (of the minimum total of 124 credits) in other departments.
   c. The student must receive approval by the Department of Art of a portfolio presentation by the beginning of the junior year in order to be eligible for this degree.

   Note: A student completing a major of at least 40 credits will be considered as completing the plan of study option.

The Bachelor of Science in Home Economics Degree. The requirements for this degree are identical with those of the Bachelor of Arts degree (see pages 82 and 83) except for the following:

1. The Foreign Language Requirement. Work in a foreign language is optional.

2. The Concentration Requirements. The academic major must be in Home Economics. See page 144 for specific requirements of this major.

The Bachelor of Science in Physical Education Degree. The requirements for this degree are identical with those of the Bachelor of Arts degree (see pages 82 and 83) except for the following:

1. The Foreign Language Requirement. Work in a foreign language is optional.

2. The Concentration Requirements. The academic major must be in Physical Education. See page 166 for specific requirements of this major.

The Bachelor of Social Work Degree. The requirements for this degree are identical with those for the Bachelor of Arts degree. The concentration area must be Social Work. (See page 176 for the specific requirements of this major.)

THE LIBERAL ARTS AREAS.

Introduction. Although certain departments in the College of Arts and Sciences are engaged largely in professional and pre-professional programs, the majority of departments are actively engaged in the liberal arts.

The University Course requirement of the general education program concerns upper-class courses which are offered by one or more of the liberal arts departments and, in certain instances, by professional colleges of the University.

Under the course intensification plan a liberal arts department may schedule a special lecture, discussion, or laboratory section of a course in which each student who registers is assigned additional work for which an extra credit is earned. Enrollment is handled by normal registration procedures.

For purposes of organizing the curriculum, the liberal arts are classified into Humanities and Fine Arts, Behavioral and Social Sciences, and Natural Sciences and Mathematics. This pattern is included in the statement of general education requirements for the Bachelor of Arts degree. Furthermore, it is useful as a basis for interdepartmental cooperation in offering courses of an interdisciplinary nature.

The Humanities and Fine Arts. The Departments of Art, English, Foreign Languages, History, Journalism, Music, Philosophy, Speech and Drama, and Theology constitute the Humanities and Fine Arts area offered within the College of Arts and Sciences.

All students interested in this area should consider the following guidelines for strengthening their programs beyond minimum requirements:

1. An advanced course in a foreign language is recommended. A student who is planning to do graduate work should consult his/her department for further guidance concerning a foreign language.

2. One year of Western Civilization or a year of History of Philosophy is recommended.

3. A course in literature or fine arts outside the student’s major field is recommended.
4. A course in non-Western studies is recommended.

5. A senior integrative course or seminar is recommended in partial fulfillment of concentration requirements.

Students should consult with their advisers concerning priorities in developing schedules.

The following types of courses are applicable to the Literature or Fine Arts Requirement:

1. An intermediate (Number 65) or advanced literature course in the Department of English.

2. An advanced literature course in one of the foreign languages or a course in literature in translation (Number 50 or Greek 51) taught by the Department of Foreign Languages.

3. Some of the historical-critical courses in the fine arts listed in each semester's time schedule.

The Behavioral and Social Sciences. The Departments of Economics, Geography, History, Political Science, Psychology, and Sociology constitute the Behavioral and Social Sciences.

All students majoring in this area should consider the following guidelines for strengthening their programs beyond minimum requirements:

1. A year of Western Civilization or History of Philosophy is recommended.

2. A course in Mathematics and one in Statistics is recommended.

3. A course in non-Western studies is recommended.

4. A senior integrative course or seminar is recommended in partial fulfillment of the concentration requirements.

A student with a major in Economics, Geography, History, Political Science, or Sociology may complete a second major under the Interdisciplinary Program in Metropolitan Studies. See page 94 for further details concerning this program.

The Natural Sciences and Mathematics. The Departments of Biology, Chemistry, Mathematics, Physics, and Psychology constitute the Natural Sciences. The Department of Geography offers work in physical geography which is applicable to the natural science general education requirement and offers a major in geology available through a cooperative program with Indiana University—Northwest Campus. (See page 101 for details.)

A freshman student who plans to major in a science may have to postpone either mathematics or a foreign language for his/her program. He/she should give priority to mathematics. It is recommended that all students interested in this area fulfill the foreign language requirement with either French, German, or Russian. A student interested in graduate study should consult his/her department for further information on language work.

Since a major in this area may be applied toward either the Bachelor of Science or the Bachelor of Arts degree, students should note the differences in requirements for these degrees as given on page 84.
The Teacher-Education Program is under the general direction of the Teacher-Education Committee. Eligibility for admission to the program is determined by the Committee.

**Preparation for the Medical Arts.** Students may prepare for entrance into medical, dental, veterinary, medical technology, or para-medical schools by entering one of the pre-medical arts programs of the University. Students in these programs must have their schedules approved at the beginning of each semester by an assigned special adviser. Advising in the medical arts is handled by pre-medical advisers or the Dean's Office, depending on the student's choice of field.

In some fields such as medicine, dentistry, and veterinary medicine completion of a bachelor’s degree is often advantageous before entering the professional program. 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’s work at an approved professional school. (See the next section of this catalog for details.) This program is often used by students in medical technology. (The University has formal affiliations with the Schools of Medical Technology at St. Mary Medical Center, Gary, Indiana, Lutheran Medical Center, Cleveland, Fort Wayne Lutheran Hospital, and Evanston Hospital, Evanston, Illinois. However, students may attend other institutions.

Students wanting to enter allied health fields which require two years or less of college preparation may want to earn the Associate in Science degree at Valparaiso University which requires two years of college credit. (See page 81 for requirements of this degree.) Further information about allied health fields may be obtained from the Dean's Office.

**The Combined Liberal Arts-Medical Arts Program.** A student may complete the degree of Bachelor of Arts or of Bachelor of Science from Valparaiso University by completing three years of study at the University and completing an additional year’s work at an approved school of medicine, dentistry, veterinary medicine, medical technology, or of another allied health discipline. Prior approval of the program must be secured from the Committee on Pre-Medical Arts.

Specifically, the student who elects one of these programs must meet the following requirements:

1. He/She must spend the junior year in residence at Valparaiso University.
2. He/She must meet all general education requirements for the Bachelor of Arts or of the Bachelor of Science degree with the exception that one course in religion and the University Course requirement are waived.
3. He/She must complete an academic major. For the Bachelor of Science degree this major must be in one of the science fields.
4. He/She must offer at least 93 semester credits of college work.
5. He/She must make application for graduation by the deadline date as noted in the official University calendar as found on pages 3-6 of this catalog and present to the Registrar an official transcript of an additional year’s satisfactory work at an approved professional school.
Combined Liberal Arts-Engineering Program. A student may earn in five years (ten semesters) both the Bachelor of Arts degree and one of the Bachelor of Science degrees in Engineering. He/She may earn the two degrees by completing one of the engineering curricula and completing the general education requirements of the College of Arts and Sciences as well as the major requirement of that college. This will require him/her to earn 168 credit hours and to have a standing of at least two (2.00) in all his/her work. Students electing 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.

Preparation for the Study of Law. According to the consensus of legal educators, particular courses are not a prerequisite for law study. Significant qualities of undergraduate preparation derive from the intellectual discipline required by exacting teachers rather than the subject matter of what is taught. The pre-law student should therefore consult with his academic advisor or Pre-Law Adviser to select courses in the student's areas of interest which will place demands on analytic skills and both verbal and written expression.

Preparation for the Foreign Service of the United States. A student who wishes to enter the Foreign Service of the United States should carefully prepare himself/herself for the Foreign Service Officer Examination. To this end, as many as possible of the following courses should be taken:

- Principles of Economics (Economics 71 and 72)
- American Literature (English 101 and 102)
- Advanced Composition (English 131)
- Modern Foreign Language—French, German, Russian, Spanish (Enough courses to gain fluency in speaking)
- Introduction to Human Geography (Geography 1)
- Introduction to World Patterns (Geography 2)
- Introduction to Political Science (Political Science 1)
- Comparative Politics (Political Science 44)
- International Relations (Political Science 65)
- Public Administration (Political Science 162)
- Foreign Political Areas (Political Science 153, 154, 158)
- History of Western Thought and Society (History 1)
- Introduction to the Contemporary World (History 2)
- The History of the United States (History 30 and 31)
- Introductory Sociology (Sociology 1)

For information concerning the Angus Ward Foreign Service Scholarship, see page 42.

Students interested in foreign service should also consider the interdisciplinary Program in International Economics and Cultural Affairs outlined on page 95.

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

The student must meet the requirements of the College of Arts and Sciences for a degree of Bachelor of Arts with a major in Religion. She may elect to have a second major in her study program or develop an approved individual plan of study to complement the Religion major. Each student must fulfill the requirements of the Department of Theology and the Lutheran Deaconess Association.

Pi Delta Chi is the professional sorority of student deaconesses. This organization assists the student in her understanding of the diaconate and of the varieties of ministries in which she can serve God and people.

A directed Field Work Program for academic credit provides opportunity to begin the development of professional skills.

A year of Internship is required between the junior and senior year. Under special circumstances, the Internship may be taken after the senior year. This is a year of supervised learning through working in a church related setting, enabling the student to develop the knowledge, skills and understandings required for functioning in Deaconess Ministry.

The Deaconess student is expected to reside in Deaconess Hall during her junior and senior years. She also is encouraged to participate in University activities as a part of the learning experience.

A college graduate may complete the Deaconess Educational Program by attending Valparaiso University for a minimum of two semesters, with the specific requirements being determined on an individual basis. The Educational Program is under the counsel and guidance of the Staff of the Lutheran Deaconess Association. Inquiries should be directed to the Director of Student Services, Deaconess Hall.

Preparation for Seminary Entrance. Although the University is not one of the regular preparatory schools of the Lutheran Church with a special program of pre-seminary education, it is possible for students to prepare for the seminary in the University's College of Arts and Sciences. Upon graduation the students are eligible for matriculation at seminaries of the Lutheran Church—Missouri Synod and at other Protestant seminaries requiring the liberal arts B.A. The University Committee on Pre-Seminary Studies stands ready to assist such students in arranging their undergraduate programs for future seminary admission.

Normally the students select a major and a minor from a wide variety of possible subject-matter areas; some in religion, others in philosophy, history, social sciences, classical languages, and English. The prime interest of the University and also of most seminaries is a thorough liberal arts education on the undergraduate level to give the future pastor the best possible cultural, historical, and intellectual training. Most seminaries require competence in the languages necessary for seminary studies: Greek, Latin, Hebrew, and German. Courses in all of these languages are offered at the University.

Students interested in preparation for entrance to a seminary may wish to pursue the special interdisciplinary Major designed for pre-seminary students by the University Committee on Pre-Seminary Studies. Information on this major is available from the Chairperson of the Department of Theology.
INDEPENDENT GROUP STUDY PROGRAM. This Program is administered by the Dean of the College for students who desire to work as a group on an academic project.

Group Studies 100.

Independent Group Study Project. Each sem. Cr. 1-3. An independent group project is conducted on a topic selected by the group. Grading is limited to the use of S or W. Prerequisites: Approval of a faculty sponsor and the Dean of the College of Arts and Sciences.

A proposal for an independent group study project must be submitted to the Dean of the College of Arts and Sciences at least three weeks before the beginning of the registration period for the semester in which the project is to occur.

Further details and an application form may be obtained at the Office of the Dean of the College of Arts and Sciences.

BLACK STUDIES PROGRAM. The University has established a Black Studies Program. Consistent with the University's commitment to the Liberal Arts tradition, the special emphasis of this program is to assist the student to explore and understand the Afro-American experience.

The nature of the Afro-American experience is such that the program consists largely of work in the social sciences, humanities, and fine arts. Special courses and special sections of existing courses may be used in meeting requirements for a bachelor's degree. In recent years special sections of introductory courses in English and Religion have been offered in connection with this Program. In addition, courses in Black Humanities and The Black Urban Community were offered. Finally, certain regular offerings in History, Law, and Urban Studies were particularly appropriate to the Program. This Program includes techniques of instruction and involves students in para-curricular and extra-curricular activities appropriate to the Black Experience.

Inquiries about this Program should be addressed to the Coordinator of Special Programs.

HONORS WORK. Honors work is designed for students of exceptional ability who might benefit by earning a limited number of the credits required for graduation through supervised independent study rather than through regular course work. Students making application for Honors Work should understand that their work will be evaluated according to the highest standards of scholarly achievement. Honors Work may be taken by students of the College of Arts and Sciences only in the humanities, the social sciences, the natural sciences, and religion. It may be taken only by candidates for the degree of Bachelor of Arts or Bachelor of Science.

A student who has completed at least 80 semester 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 3.0 and a grade-point average in the major of at least 3.5 may apply to the Dean's Office for admission to Honors Work with the consent of the chairperson of the major department.

A student making application for admission to Honors Work must present a plan for a major independent study project to be undertaken under the supervision of a member of the major department. This plan must be approved by the chairperson of the major department and submitted to the Committee on Honors no later than the end of the student's junior year. If the proposed independent study project is approved, the student shall enroll in the first semester of the senior year in course numbered 197 of the major department, "Honors Work."

A student who has been admitted to Honors Work must present four (4) copies of a completed draft of the independent study project to the chairperson of the major department at least seven days prior to the beginning of the final examination period of the fall semester. The project will be judged by a committee consisting of the chairperson of the major department, the adviser/sponsor, one departmental reader, and one outside reader appointed by the Committee on Honors. If the work presented is found worthy of Honors by the examining committee, the student will be granted three credits with a grade of A− or A for the independent study project and admitted to candidacy for graduation "With Honors." If the essay is not found worthy of honors, the Dean's Office, upon consultation with the examining committee, may recommend that the student be granted 3 semester credits for Independent Study in the major department with a grade determined by the Committee.

If admitted to candidacy for Honors, the student shall register during the spring semester of the senior year in course 198 of the major department, "Honors Candidacy." A student admitted to Honors Candidacy must complete the initial draft of the independent study project, incorporating additions or revisions suggested by the examining committee to its satisfaction. Six (6) copies of the completed project must be delivered to the chairperson of the major department at least fifteen days prior to the beginning of the final examination period of the spring semester. The original examining 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 Committee. The Honors candidate shall be apprised beforehand of the related matters to be included in the examination. If, in the opinion of the examining committee the candidate is worthy of honors, it shall recommend to the Dean that the student be awarded three (3) credits with a grade of A− or A for course 198, "Honors Candidacy," 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 examining committee, may recommend that the student be granted 3 semester credits for Independent Study in the major department with a grade determined by the Committee.

During the semester or semesters engaged in Honors Work, the student will not be permitted to carry more than 12 credit hours in addition to Honors Work. A student enrolled in "Honors Candidacy" will be excused from all regular final examinations of the last semester of the senior year.

INTERDISCIPLINARY STUDIES.

Interdisciplinary Majors. This major is an option intended for students with clearly defined academic and/or career objectives who may feel that their specific needs are not met by any single department in the College of Arts and Sciences. A student in the College may propose a plan for an Interdisciplinary Major which the Dean of the College may approve providing the following conditions are satisfied:
1. The proposed major must include at least twenty-four credits, chosen from two or more departments (32 for the Bachelor of Science degree), that are not used in meeting general education requirements.

2. The proposed major must include a comprehensive statement by the student justifying the overall major as well as the specific courses listed. (Revisions in the Interdisciplinary Major made subsequent to the original filing must also be approved by the Dean of the College).

3. The proposed major must include a statement by a member of the faculty indicating both support for the proposed major and a willingness to serve as adviser/sponsor.

4. The proposed major must be submitted to the Dean of the College of Arts and Sciences for approval, preferably by the beginning of the junior year, but no later than the deadline for filing for degree candidacy.

The selection of courses for the Interdisciplinary Major should reflect serious deliberation on the part of both student and sponsor. Normally, the Interdisciplinary Major will not include lower division courses or courses of an introductory nature.

The Interdisciplinary Major may be freely substituted for a regular academic major in any of the various combinations available to students in meeting concentration requirements for the Bachelor of Arts or Bachelor of Science degree.

Interdisciplinary Program in Metropolitan Studies. A student with a first major in Economics, Geography, History, Political Science, or Sociology may earn a second major in the area of urban studies. This interdisciplinary program also permits any student to earn a minor or to construct a plan of study for the concentration requirements which uses courses from those listed below. This program is designed essentially to provide students of the social sciences with the tools which are necessary for the conduct of intensive analysis of problems in urban affairs.

Major (See introductory statement for restrictions on the use of this major). A minimum of 24 credits selected from those courses listed below and beyond the minimum credits required in the student's first major field. Courses must include Economics 72, Geography 150, History 137, Political Science 155, Sociology 130 (Topic: Urban Sociology), and a course in statistics.

The Coordinator of the Interdisciplinary Program in Metropolitan Studies shall also serve as the adviser of the students enrolled in the program.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 15 credits selected from the courses listed below (and beyond the minimum credits required in the student's major) constitutes a minor. Courses must include: Economics 72, Geography 150, History 137, Political Science 155, and Sociology 130 (Topic: Urban Sociology).

Courses Approved for the Program in Metropolitan Studies. Further details concerning the courses listed below may be found under the announcements of the individual departments.

Core Courses:
- Economics 72
- Geography 150
- History 137
- Political Science 155
- Sociology 130
- Statistics

- Principles of Economics—Macro
- Urban Geography
- History of the American City
- Problems in State and Local Politics
- Societal Structures: Urban Sociology
- (Specific course to be selected with advice of departmental committee member)

Other Courses:
- Art 111
- Biology 168
- Economics 71
- Economics 174
- Economics 182
- Economics 199
- Geography 70
- Geography 152
- Geography 154
- Geography 195
- Political Science 156
- Political Science 175
- Sociology 130
- Sociology 130
- Sociology 130
- Sociology 140
- Sociology 150

- Modern Design and Architecture
- Human Environmental Biology
- Principles of Economics—Micro
- Public Finance
- Urban Economic Problems
- Problems in Economics
- Current Themes in Geography
- Urban and Regional Planning
- Cartography
- Independent Study in Geography
- Problems in American Politics
- Seminar in Political Science
- Societal Structures: Ethnic Minorities
- Societal Structures: Poverty, Social
- Stratification, or Systems of Justice
- Social Institutions: Medicine
- Social Processes: Juvenile
- Delinquency and Criminology

Interdisciplinary Program in International Economics and Cultural Affairs. This special interdisciplinary program is designed to provide essential background for students considering careers in the fields of international commerce or government service. In pursuance of this goal, it provides background in a modern language and the culture and customs of those who speak it, instruction in international economics, and a survey of appropriate areas of geography, history, and political science. Students interested in pursuing the Interdisciplinary Program in International Economics and Cultural Affairs should contact the Chairperson of the Department of Foreign Languages.

Required Courses: Students completing this 53 credit program will have fulfilled the following General Education requirements for the Bachelor of Arts degree: (1) The 9-credit hour requirement in the Behavioral and Social Sciences category and (2) The History or Philosophy requirement in the Humanities and Fine Arts category.

Students are urged to take, in addition to these courses, a number of recommended elective courses. A list of these recommended courses is available from the Chairperson of the Department of Foreign Languages.
Foreign Language. Students must select one of the following Foreign Language concentrations. Please note that the courses listed are taken beyond the introductory level.

<table>
<thead>
<tr>
<th>Language</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>French</td>
<td>50 Topics in French Literature</td>
<td>Cr. 3</td>
</tr>
<tr>
<td></td>
<td>110 Conversational French</td>
<td>Cr. 2</td>
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<td>111 French Composition and Conversation</td>
<td>Cr. 2</td>
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<td></td>
<td>114 Contemporary French Language and Communication</td>
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<tr>
<td>116 or 117</td>
<td>Professional French or Advanced French Translation</td>
<td>Cr. 2</td>
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<td></td>
<td>130 French Civilization</td>
<td>Cr. 4*</td>
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<td>130</td>
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<td>Cr. 17</td>
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<tr>
<td>German</td>
<td>50 Topics in German Literature</td>
<td>Cr. 3</td>
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<tr>
<td></td>
<td>110 Conversational German I</td>
<td>Cr. 2</td>
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<tr>
<td></td>
<td>112 Written German</td>
<td>Cr. 2</td>
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<td>114 Contemporary German Language in the Mass Media</td>
<td>Cr. 4</td>
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<tr>
<td>116 or 117</td>
<td>Professional German or Advanced German Translation</td>
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<td>130 German Civilization</td>
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<td>130</td>
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<td>Cr. 17</td>
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<tr>
<td>Spanish</td>
<td>50 Topics in Hispanic Literature</td>
<td>Cr. 3</td>
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<tr>
<td>111</td>
<td>Spanish Composition and Conversation</td>
<td>Cr. 4</td>
</tr>
<tr>
<td>114</td>
<td>Contemporary Hispanic Society through Communications</td>
<td>Cr. 4</td>
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<tr>
<td></td>
<td>116 Professional Spanish</td>
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<td></td>
<td>130 Spanish Civilization</td>
<td>Cr. 4</td>
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<tr>
<td>130</td>
<td>or Spanish-American Civilization</td>
<td>Cr. 17</td>
</tr>
<tr>
<td>Economics</td>
<td>71 and 72 Principles of Economics</td>
<td>Cr. 6</td>
</tr>
<tr>
<td>168</td>
<td>Comparative Economic Systems</td>
<td>Cr. 3</td>
</tr>
<tr>
<td>176</td>
<td>International Economics</td>
<td>Cr. 3</td>
</tr>
<tr>
<td>181</td>
<td>Economics of Developing Nations</td>
<td>Cr. 15</td>
</tr>
<tr>
<td>Political Science</td>
<td>Comparative Politics</td>
<td>Cr. 3</td>
</tr>
<tr>
<td>44</td>
<td>or Politics of Industrialized States</td>
<td>Cr. 3</td>
</tr>
<tr>
<td>153</td>
<td>or Politics of Developing States</td>
<td>Cr. 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cr. 6</td>
</tr>
<tr>
<td>Geography</td>
<td>62 Economic Geography</td>
<td>Cr. 3</td>
</tr>
<tr>
<td>101-108</td>
<td>Regional Geography</td>
<td>Cr. 3</td>
</tr>
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<td></td>
<td>Cr. 6</td>
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</tbody>
</table>

*By course intensification.

History
50-51 Origins of Latin American Civilization
115-116 Contemporary Latin American Civilization Cr. 6
or Europe from Biimarck to Lenin: 1870-1919
Europe from World War I to the Present: 1919-
61-61 or Modern East Asian Civilization
History of Modern China Cr. 6

In addition to the above required courses, a special senior research project earning 3 credit hours is required of each student pursuing this interdisciplinary program. The project shall be under the jurisdiction of the department appropriate to the subject selected for research.

Interdisciplinary Program in Criminal Justice. The University has instituted a multi-disciplinary Criminal Justice Program designed to provide students with a well-rounded liberal arts education while permitting students to do concentrated, specific study in areas of relevance to the criminal justice system and the students’ career objectives.

The first two years provide the student with a general introduction to the criminal justice system and the academics underlying the operation of its various components. The second half of the program exposes students to the application of theory in real work situations. At the end of the four-year program, students will have been thoroughly immersed in current research and theory applicable to their particular academic tract, received practical exposure to the system through field experiences and internships, and received a well-rounded liberal arts education consistent with the ideals and general education requirements of the University.

During the student's tenure at the University, he/she will have a wide variety of courses available to him/her. Among the criminal justice/deviance courses offered are:

Introduction to Criminal Justice
Juvenile Delinquency and Criminology
Issues in Social Justice
Introduction to the Legal Process
Sociology of Law
Deviance Theory
Penology
Probation and Parole
Drug Addiction
Sociology of Mental Illness
Sociology of Sexual Deviance

Under most circumstances, students will likely select one of the following areas in which to specialize:

Corrections
Probation and Parole
Prevention
The curriculum of the Criminal Justice Program is, however, flexible. With justification, students can compose their own program of study should the tracts listed above be unsuitable.

Students interested in this Program should contact the Chairperson of the Department of Sociology.

**GENERAL BUSINESS MINOR.** The program in the field of general business, as prescribed below, offered to students with primary majors in the College of Arts and Sciences is designed to provide minimal exposure to fundamental areas within the business field. An offering of this type cannot be expected to supply all the necessary qualifications for specific job or occupational fulfillment.

This General Business Minor is a third option of concentration requirement number 2 for degrees offered in the College of Arts and Sciences. Twenty-four semester credits are required for this minor consisting of the following:

- Accounting 1 and 2: Cr. 6
- Economics 71 and 72: Cr. 6
- Administrative Sciences 21: Cr. 3
- Administrative Sciences 31: Cr. 3
- Administrative Sciences 61: Cr. 3
- Administrative Sciences 62: Cr. 3

At the time Arts and Sciences majors select this minor, they must declare their intention to the Dean, College of Business Administration. Students must meet all course prerequisites. Rules governing required grade-point average and residence requirements are the same for the General Business minor as for academic majors in the College of Arts and Sciences. Courses may not be taken on an S/U basis.

Students who fail to achieve the required 2.00 grade-point average in the General Business minor may not take additional hours in Business Administration courses, but must repeat courses to achieve the required 2.00 average.

**OFF-CAMPUS PROGRAMS.**

**International Studies Semester.** The University conducts an International Studies Program in which a student has the opportunity to study for one semester at one of the University's overseas centers. At the present time, student centers are maintained in Cambridge, England, and Reutlingen, Germany. Each semester approximately twenty undergraduate students may study at each center. These centers offer the students a chance to broaden their knowledge and expand their experience through extensive travel, personal contact, and day-by-day living in a different cultural environment. Inherent in this experience is the development of individual freedom, responsibility, and independence.

*Only 3 credits are applicable toward fulfilling the Behavioral and Social Science area of the General Education Requirements.*

Supervising each center is a director from Valparaiso's faculty who secures residences, enlists faculty members, and instructs in two courses. Each center's curriculum is based upon the geographical and cultural setting of the area. Students are required to take at least twelve credit hours of the fifteen offered at each center, and independent-study projects may also be arranged. The courses are taught by the director and local faculty. All credit hours are considered as residence work applicable to graduation from Valparaiso University. Students register at Valparaiso and pay the normal tuition, room without board, general fees, and an additional travel expense which covers air travel and other transportation costs to and from either the Cambridge or Reutlingen Center.

**Washington Semester Program.** This program, established by an agreement concluded between the American University, Washington, D.C., and Valparaiso University, makes it possible for students to spend one semester of their junior year (or some other semester by arrangement) at the American University. The purpose of the program is to give the selected students an opportunity to see at first hand the intricacies of the operation of the national government and to obtain an intimate contact with the broad range of governmental and political activity through field visits, consultation with officials, and evaluating sessions led by academic instructors. The program includes semesters on National Politics, Urban Politics, Science and Technology, American Cultural Studies, International Development, Foreign Policy, Economic Policy, and Justice. Only students who have had the course Political Science 1 will be considered candidates for this program.

Valparaiso students register at Valparaiso for the Washington Semester and pay to Valparaiso University the usual tuition and other fees of American University. Expenses for travel, meals, and lodging are paid directly by the students. The Washington Semester gives full credit toward graduation from Valparaiso University. Not open to students who have participated in the Semester on the United Nations.

For information concerning the Washington Semester Program Loan Fund, see page 44.

**Urban Affairs Semester Program.** This Program, established by an agreement with the American University, Washington, D.C., makes it possible for selected students to spend one semester of their junior year (or some other semester by special arrangement) at the American University. The program is designed to provide students with a broad introduction to urban problems and programs and to examine the intergovernmental characteristics of policy-making. It has four objectives: (1) to provide a solid academic base upon which a student can develop his/her own unique and personal educational goals, (2) to take advantage of the unique facilities and environment of the nation's Capital, (3) to use the practical to build toward the theoretical, particularly in the writing of integration papers and the research project, and (4) to provide contact in seminars with officials of local, state, and national government, political parties, interest groups, and the press.

Only students who have had the courses in Political Science 1 and 2 will be considered candidates for this program.

Valparaiso students register at Valparaiso for the Urban Affairs Semester and pay to Valparaiso University the usual tuition and other fees of American
University. Expenses for travel, meals, and lodging are paid directly by the students. The Urban Affairs Semester gives full credit toward graduation from Valparaiso University. Not open to students who have participated in the Washington Semester or the Semester on the United Nations.

**Semester on the United Nations.** This Semester, established by an agreement with Drew University, Madison, New Jersey, makes it possible for selected students to spend one semester of their junior year (or some other semester by special arrangement) at Drew University. The curriculum revolves about on-the-scene observations and analyses of the United Nations through direct contact with the United Nations meetings and headquarters. For two days each week of the semester the student will be in the proximity of the United Nations in New York under the supervision of a member of the Drew University faculty.

Valparaiso students register at Valparaiso for the Semester on the United Nations and pay to Valparaiso University the usual tuition and other fees of Drew University. Expenses for travel, meals, and lodging are paid directly by the students. The Semester on the United Nations gives full credit toward graduation from Valparaiso University. Not open to students who have participated in the Washington Semester Program. Only students who have had the course in Political Science 44 will be considered candidates for this program.

For information concerning the Valparaiso Branch of the American Association of University Women Loan Fund, see page 44.

**The Merrill-Palmer Program.** This Program, established by an agreement with Merrill-Palmer Institute, Detroit, Michigan, and Valparaiso University, makes it possible for selected students to spend a part or all of their junior year, or senior year, or a summer session at Merrill-Palmer Institute. The purpose of the program is to give the superior student an opportunity to interrelate knowledge and to foster inter-personal relations through seminars, classroom discussions, and practicums. This experience will provide opportunities for work in social services and nursery schools. This program is available to students with a background in Biology, Economics, Home Economics, Psychology, and/or Sociology.

Valparaiso students register at Valparaiso for the Merrill-Palmer Program and pay to Valparaiso University the usual tuition and other fees of Merrill-Palmer Institute. Expenses for travel, meals, and lodging are paid directly by the students. The Merrill-Palmer Institute gives full credit toward graduation from Valparaiso University.

Students interested in this program should consult the Dean of the College of Arts and Sciences for further details.

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

**The Valparaiso-Indiana Geography and Geology Association (VIGGA).** The purpose of this association is: To provide educational opportunities on the undergraduate level in the geological and geographical sciences to the students enrolled at Valparaiso University and Indiana University Northwest, Gary. Since the school year of 1970-1971, full-time undergraduate students in these academic disciplines have been permitted to enroll in Association courses under the following conditions:

(a) Students may take a maximum of two courses per semester at the other participating institution.
(b) These courses will be treated as part of the student’s normal load at the home institution and tuition and fees will be paid accordingly.
(c) The total number of credit hours to be taken will be determined by the home institution.
(d) Students who wish to take courses at the host institution should obtain the recommendation of the Chairperson of the Department of Geography (V.U.) and the host department.
(e) Grades earned shall be recorded at the home institution.
(f) A C or 2.00 average must be achieved on VIGGA courses to qualify the student to register for courses at the host institution in the following semester.

Association students at Valparaiso University are expected to satisfactorily complete the following curriculum from course offerings at Valparaiso University and Association course offerings at Indiana University Northwest in order to complete the major in geology. (Degrees are to be awarded by the home institution):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Geomorphology Cr. 4 (VU)</td>
<td>2.00</td>
</tr>
<tr>
<td>G-104</td>
<td>Evolution of the Earth Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-221</td>
<td>Introductory Mineralogy Cr. 4 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-222</td>
<td>Introductory Petrology Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-323</td>
<td>Structural Geology Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-334</td>
<td>Principles of Sedimentation and Stratigraphy Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-406</td>
<td>Introduction to Geochemistry Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-411</td>
<td>Principles of Invertebrate Paleontology Cr. 3 (IUN)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-490</td>
<td>Undergraduate Seminar Cr. 1-2 (IUN)</td>
<td>2.00</td>
</tr>
<tr>
<td>3</td>
<td>Meteorology and Climatology Cr. 4 (VU)</td>
<td>3.00</td>
</tr>
<tr>
<td>G-420</td>
<td>Regional Geology Field Trip Cr. 1-3 (IUN)</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Additional Indiana University Northwest Association course offerings open to Valparaiso University students majoring in geology are: G-850, G-410, G-413 (see I.U.N. catalog).

**Adjunct Activities of the College Off-Campus Divisions.** The University maintains an instructional staff in each of the following hospital schools of nursing: Lutheran Medical Center School of Nursing, St. Louis, Missouri; Lutheran Medical Center School of Nursing, Cleveland, Ohio; and the Lutheran Hospital School of Nursing, Ft. Wayne, Indiana. In these schools, as part of cooperative programs, the University teaches certain courses in natural sciences, social sciences, English, and religion. University course work done in these hospital schools of nursing may be used to meet part of the residence requirements of the University, provided that the student meets the University requirements for admission as a fully matriculated student.
LAW ENFORCEMENT EDUCATION PROGRAM. Through a grant received from the Department of Justice and directed by the Sociology Department, financial assistance for "in service" persons is now available to part-time or full-time undergraduate and graduate students interested in police, probation, parole, criminal justice planning, and correctional work. Under the terms of the grant the University may make loans up to $1800.00 and grants up to $600.00 per year to qualified students. Special Activity Fee, $15.00 per semester. The University has conducted Intern Probation Programs during the summer session. Inquiries should be addressed to: Director, Law Enforcement Education Program, Department of Sociology, Valparaiso University, Valparaiso, Indiana.

ART

STAFF: Associate Professor Caemmerer (Chairman); Associate Professors Brauer and Frey; Assistant Professor Strimbu; J. Smith

Degrees. Completion of the degree requirements of the College of Arts and Sciences with a major in art leads to the degree of Bachelor of Arts (B.A.) or the degree of Bachelor of Science in Fine Arts (B.S. in F.A.).

Major. A minimum of 27 credits in art which must include Art 21, 31, 33, 71, 120, 121, and 151. The Bachelor of Science in Fine Arts degree requires 40 credits in art, which in addition to the major requirement must include Art 196.

Majors with professional or graduate school ambitions should complete the Bachelor of Science in Fine Arts degree. See page 84 for the requirements of this degree. Students in this program may earn up to 62 credits in Art in completing minimal degree requirements. Courses may be chosen to provide a specialization in painting, sculpture, design, ceramics, photography, or art history; they may be selected to provide the student with a broad background. A student who wishes to earn this degree must receive approval from the Department of Art of a portfolio presentation. This should occur by the beginning of the junior year.

Further descriptions of the specialized programs as well as suggested curricula are available from the department chairperson. Field trips, Sloan art exhibitions, Visual Arts Council, and related art events are integral parts of the program of the Department of Art. Requirements for art major participation in these and other departmental programs are given in the Art Student Handbook.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 15 credits in art constitutes a minor. Art 21, 31 or 33, and 120 must be included.

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

Undergraduate and Graduate Credit.

THEORY AND HISTORY.

101. Art History I. Cr. 3. A survey of art history from prehistoric times through the Gothic Period. This course may be used to fulfill the Literature or Fine Arts Requirement.

102. Art History II. Cr. 3. A survey of art history from the Renaissance to the present. This course may be used to fulfill the Literature or Fine Arts Requirement.

111. Topics in the Theory and History of Art. Cr. 1-4. An investigation of selected topics central to major developments and purposes of the visual arts. Included may be topics such as: Modern Art since 1945, Primitive Art, and Modern Design and Architecture. May be taken more than once if topics are different. This course may be used to fulfill the Literature or Fine Arts Requirement. Field trips and assessment of a fee are dependent on the needs of the particular topic.

120.  Modern Art. Sem. 2, Cr. 3. A study of the major developments in painting and sculpture in the nineteenth and twentieth centuries. This course may be used to fulfill the Literature or Fine Arts Requirement. Field trip fee, $10.00.

168.  University Course: Art Appreciation. Each sem. Cr. 3. A course of study which acquaints the student with important works of art; helps him/her towards an understanding of visual aesthetics; explains the distinctive characteristics of the major visual arts; indicates the influence of cultural contexts; and guides the student in applying general methods of critical analysis. May be used to fulfill the University Course Requirement. Field trip fee, $5.00.

184.  University Course: European Art and Architecture. Cr. 3. Survey of major cultural periods. May be used to fulfill the University Course Requirement. Offered in Reutlingen Study Center only.

PRACTICE

21.  Drawing. Each sem. 0-1-6, Cr. 3. A basic course in the fundamentals of drawing using various media. Studio fee, $20.00.

22.  Drawing: Advanced Studies. Each sem. 0-1-6, Cr. 3. A study of more advanced techniques and problems involving the drawing media. This course may be repeated for credit. Prerequisite: Art 21. Studio fee, $20.00.

31.  Two-Dimensional Design. Sem. 1. 0-1-6, Cr. 3. A basic course in the fundamentals of forming and organizing visual elements on bounded flat surfaces. Studio fee, $20.00.

33.  Three-Dimensional Design. Sem. 2. 0-1-6, Cr. 3. A basic course in the fundamentals of forming and organizing visual elements in three-dimensional space. Studio fee, $25.00.

51.  Ceramics. Each sem. 0-1-6, Cr. 3. Problems in the design, hand construction, and glazing of functional and sculptural clay forms. Studio fee, $25.00.

52.  Ceramics: Advanced Studies. Each sem. 0-1-6, Cr. 3. Instruction in the use of the potter's wheel with emphasis on technique and form. Prerequisite: Art 51. Studio fee, $25.00.

61.  Photography. Each sem. 0-1-6, Cr. 3. Problems in forming photographic images for expressive aesthetic purposes with instruction in camera and darkroom techniques. Studio fee, $25.00.


71.  Life Drawing. Sem. 2. 0-1-6, Cr. 3. A continuation of Art 21, with emphasis on drawing from the nude model. Prerequisite: Art 21. Studio fee, $20.00.

72.  Life Drawing: Advanced Studies. Sem. 2. 0-1-6, Cr. 3. Special emphasis on the study of the human figure in the context of varying visual ideas. Prerequisite: Art 71, Studio fee, $20.00.

81.  Crafts. Sem. 1 or Sem. 2. Cr. 0-3. Basic workshop experience in selected crafts such as: weaving, jewelry, stained glass. May be taken more than once if topics are different. Studio fees will be assessed based on the needs of the particular course.

121.  Painting. Each sem. 0-1-6, Cr. 3. Problems in painting in oil and other media. Prerequisite: Art 21. Studio fee, $20.00.

122.  Painting: Advanced Studies. Each sem. 0-1-6, Cr. 3. A study of more specialized problems in the painting media, such as composition, glazing, acrylics, dimensional surfaces, etc. Prerequisite: Art 121. Studio fee, $20.00.

131.  Graphic Design I. Each sem. 0-1-6, Cr. 3. Problems in the design of graphic mass communications with instruction in typography, layout, and finished art preparation. Course problems may center on such fields as advertising graphics, publications graphics, or typography and trademarks. This course may be repeated for credit if the problem fields are different. Studio and field trip fee, $25.00.

132.  Graphic Design II. Each sem. 0-1-6, Cr. 3. A continuation of Art 131, dealing with actual graphic communications problems. The student solutions may often be printed and used. Prerequisites: Art 31 and 131. Studio fee, $55.00.

151.  Sculpture. Each sem. 0-1-6, Cr. 3. Problems in forming sculptural statements in various materials and techniques such as concrete casting, metal welding, wood construction, etc. Prerequisites: Art 21 and 33 or consent of the instructor. Studio fee, $25.00.

152.  Sculpture: Advanced Studies. Each sem. 0-1-6, Cr. 3. Advanced problems in the sculpture processes. Prerequisite: Art 151. Studio fee, $25.00.

161.  Printmaking. Each sem. 0-1-6, Cr. 3. An introduction to print techniques and composition. Semester 1 deals with projects in relief and intaglio. Semester 2 deals with projects in serigraphy. May be taken more than once if topics are different. Prerequisite: Art 21, Studio fee, $15.00.

162.  Printmaking: Advanced Studies. Each sem. 0-1-6, Cr. 3. A continuation of Art 161 with special emphasis on color and photo processes. The student may work in any of the printmaking processes previously examined in Art 161. Prerequisite: Art 161, Studio fee, $15.00.

TEACHING

109.  Elementary School Art-Methods and Materials Workshop. Each sem. 0-1-6, 0-1-8, Cr. 3 or 4. A basic course providing the prospective teacher with studio experiences in the selection, organization, and use of two- and three-dimensional art and craft materials for the elementary school. The fourth credit provides opportunities to work in elementary classrooms. This course may not be counted toward a minimum major or a minor in the department. Field trip. Studio fee, $15.00.

110.  Secondary and Middle School Art-Methods and Materials Workshop. Sem. 2. 0-1-6, Cr. 4. A basic course providing the prospective teacher with studio experiences in the selection, organization, and use of two- and three-dimensional art materials for the middle and secondary schools. This course may not be counted toward a minimum major or a minor in the department. Field trip. Studio fee, $15.00.

181.  The Teaching of Art. Sem. 1. Cr. 2. (See Education 191.) A study of the methods of teaching art in the secondary schools. This course may not be counted toward a major or a minor in the department. Prerequisite: admission to Supervised Teaching.

SPECIAL STUDIES

196.  Senior Studies. Each sem. Cr. 3. Independent work in a major's specialized program. This work should contribute to and result in a senior exhibition and portfolio. Participation in departmental meetings, seminars, and special events is considered an integral part of this course. May be repeated for credit. Prerequisites: senior art major standing and consent of the department chairman. Exhibition fee, $5.00.

198 (298). Special Studies. Each sem. Cr. 1-4. (Graduate credit 1-3). Special work in the practice of art or the teaching of art arranged for by a professor and one or more students. Included may be, for example, work in the crafts, in liturgical design, or in areas of the practice of art or the teaching of art offered in the catalog. A satisfactory/satisfactory grade may be given if so stipulated at the beginning of the course. May be repeated for credit. Prerequisite for undergraduates: upperclass major or consent of the instructor. Prerequisite for graduates: undergraduate art major. Studio fee, $8.00 per credit hour.

BIOLOGY

STAFF: Professor Krekeler (Chairman) 1; Professors Bloom, Hanson, F. Meyer, Nichols, and Tan; Associate Professor Marks; Assistant Professor G. Hicks

Major. A minimum of 28 credits in biology. Courses must include Biology 50, 56, 57, 61 (or 62), 63, and 72; one of courses 64, 65, or Biological Topics: Vertebrate Anatomy; at least three of courses 157, 159, 161, 170, 175; and at least two credits in 185, Biological Problems, and/or 193, Seminar in Biology.

 Majors must include General Chemistry and Organic Chemistry 71 in their program. The major's plan of study should also include courses in physics, physiology, and zoology.

1No more than six hours may count toward Master's degree.
mathematics, statistics, and additional chemistry. The most appropriate foreign languages for biology majors are German and French.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 15 credits in biology constitutes a minor.

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

Note: Entering students who test out of the Unity of Life, 50, by taking a departmental examination will be granted 4 credits toward graduation.

Undergraduate and Graduate Credit.

41. Anatomy and Physiology. Sem. 1. 2-1-2, Cr. 3. A course of the structure and function of the organs of the human body. Lectures and laboratory work dealing with the epithelial and connective tissues, the skeleton, muscles, the nervous system, and special sense organs, the circulatory system and the blood; the digestive, respiratory, excretory, endocrine, and reproductive systems; and human development. (Given in St. Louis, Ft. Wayne, and Cleveland Divisions only).

42. Anatomy and Physiology. Sem. 2. 2-2, Cr. 3. A continuation of Biology 41. (Given in St. Louis, Ft. Wayne, and Cleveland Divisions only).

46. Microbiology. Sem. 2. 2-2, Cr. 3. A study of micro-organisms and their relation to health and disease. (Given in St. Louis, Ft. Wayne, and Cleveland Divisions only).

50. Unity of Life. Each sem. 3-3, Cr. 4. An introductory course designed to give the student a broad view of the principles of biology as related to the nature and activities of protoplasm and the structure, physiology, ecology, reproduction, growth and development of organisms. These principles are considered in historical perspective and include examples from microbes, plants, and animals. No prerequisite. Laboratory fee, $5.00.

56. Diversity of Plants. Each sem., first seven weeks. 2-4, Cr. 2. A survey of the plant kingdom. Modern classification systems are considered. Emphasis is on the structures and their functions, possible evolution, life cycles, development, ecology, distribution, and social and economic importance of representative members. This course, together with Biology 57, may be used to fulfill natural science general education requirement. Prerequisite: Biology 50. Laboratory fee, $5.00.

57. Diversity of Animals. Each sem., second seven weeks. 2-4, Cr. 2. A survey of the animal kingdom. Emphasis is on the structures and their functions, possible evolution, life cycles, development, ecology, distribution, and social and economic importance of representative members. This course, together with Biology 56, may be used to fulfill natural science general education requirement. Prerequisite: Biology 50. Laboratory and field trip fee, $5.00.

59. Genetics. Each sem. 2-3, Cr. 3. An introductory study (lecture problems, laboratory) of the basic laws of genetics, the physical and chemical basis of heredity, genes as functional and structural units of heredity and development, and qualitative and quantitative aspects of genetic variation. Prerequisite: Biology 50. Laboratory fee, $5.00. (May not be counted toward the writing General Education Requirement in the Natural Sciences and Mathematics. See Biology 62.)

60. Gene and Ethics. Each sem. 2-3, Cr. 3. Same as Genetics 61 with additional lecture topics on human genetics and social implications. May be used in partial fulfillment of the general education requirement in the Natural Sciences and Mathematics. Prerequisite: Biology 50. Laboratory fee, $5.00.

*Credit for Biology 50 may be earned through the College Level Examination Program (CLEP) subject examination in Biology.

63. Evolutionary Biology. Sem. 2. 1+0, Cr. 1. A study of the theory of organic evolution, especially the mechanisms currently postulated. Emphasis is on population genetics and speciation. Normally accompanied by Biological Topology 64, 65, and/or 101 Biological Topics: Vertebrate Anatomy. Prerequisite: Biology 61 or 62. This will be offered as a short course.

64. Entomology. Sem. 2. 0+6, Cr. 2. Laboratory, field work, and discussions dealing with the systematics and basic biology of insects and their arthropod relatives. Normally accompanied by Biology 63. Prerequisites: Biology 56 and 57. Laboratory fee, $5.00.

65. Systematic Botany. Sem. 2. 0+6, Cr. 2. Laboratory, field work, and discussions dealing with the systematics and basic biology of the seed plants. Normally accompanied by Biology 63. Prerequisites: Biology 56 and 57. Laboratory fee, $5.00.

72. Introduction to Molecular Biology. Sem. 2. 1+0, Cr. 1. Lectures on the chemical nature and behavior of biological macromolecules: polynucleotides, proteins, nucleic acids, and lipids. Prerequisites: Biology 61 (or 62) and Chemistry 71. This will be offered as a short course.

101. Biological Topics. Each sem. Cr. 2-3. A consideration of various topics in biology through lectures, laboratory work, field work, and/or conferences. The topics presented are related to staff and student interests. May be taken more than once if topics are different. A sample of recent offerings is: Ornithology, Experimental Botany, Vertebrate Anatomy, Endocrinology, Mycology, Symboiosis, Microbial Ecology. Prerequisites: Biology and consent of the instructor. Laboratory fee, $10.00, except for topic, Human Anatomy and Physiology.

105 (205). Biochemistry. (Also offered as Chemistry 105-205). Sem. 2. 4-0, Cr. 4. (Graduate credit 3). The chemistry of proteins, carbohydrates, fats, and nucleic acid, and the changes these undergo during processes of digestion and metabolism; stress on physical biochemistry topics and enzyme kinetics. Prerequisite: Chemistry 71 or equivalent.

110. Microbiology. Each sem. 2-5, Cr. 4. A study of bacteria, viruses, and selected fungi. Major emphasis is on understanding infectious disease and Immunology. Prerequisites: Biology 50 and Chemistry 44 or 52. Laboratory fee, $5.00. (May not be credited toward graduation by students who take Biology 159.)

115. Anatomy and Physiology. Each sem. 2-5, Cr. 4. A study of the structure and function of the organs and systems of the human body. Prerequisites: Biology 50 and Chemistry 44 or 52. Laboratory fee, $5.00.

157 (257). Ecology. Sem. 1. 2-5, Cr. 4. (Graduate credit 3). A study of organisms in relation to their physical and biotic environment. There is considerable field work in local terrestrial and aquatic habitats. Prerequisite: Biology 64 or 65. Laboratory and field trip fee, $10.00.

159 (259). Bacteriology. Sem. 2. 2-6, Cr. 4. (Graduate credit 3). A study of the cell biology of bacteria and their viruses including morphology, growth and cultivation, physiology, environmental factors, and genetics. Prerequisites: Biology 61 (or 62) and 72 (may be taken concurrently) and Chemistry 71. Laboratory fee, $5.00.

161 (261). General Physiology. Sem. 1. 3-3, Cr. 4, (Graduate credit 3). A study of the fundamental physiological activities of animals and plants. The course will consist of lectures, assigned readings, and experimental work in nutrition (including synthesis, oxidation, and enthalpy release of nutrients and elimination of waste products), irritability and response, and growth and reproduction. Prerequisites: Biology 50 and Chemistry 71. Laboratory fee, $5.00.

168 (268). University Course: Human Environmental Biology. Each sem. 2-3, Cr. 3. Lectures and conferences on humankind in its various environments. Special emphasis is given to the problems of human population growth, humanity's impact on the natural environment, resources, pollution, and diseases associated with the environment. May be used to meet the University Course Requirement. Prerequisites: completion of general education natural science requirements and junior standing. Field trip fee, $5.00.

170 (270). Cytology. Sem. 2. 2-3, Cr. 3. A study of the experimental cytology of eucaryotes including cell organelles, cellular and molecular basis of cytogenetics, somatic cell genetics, and methods for cytological analysis. Prerequisites: Biology 61 (or 62) and 72 (may be taken concurrently) and Chemistry 71. Laboratory fee, $5.00.
CHEMISTRY

STAFF: Professor Cook (Chairman); Professors J. Deters 1, W. Leoschke, E. Nagel, Schwan, and L. Oliver Smith; Associate Professor Ferguson; Assistant Professor Kosman

Major. A minimum of 24 credits in chemistry. Courses must include Chemistry 51, 52 (or 63), 64, and 108 or 110. Prospective chemistry majors planning to enter the chemical profession or a graduate school should complete not less than 52 credit hours in chemistry beyond the introductory courses. This major must include Chemistry 64, 80, 110, 112, 134, 138, 150, and one other advanced course selected from 160, 195 and 196, or an advanced course in physics or mathematics. German is recommended for meeting the foreign language requirement. This program of courses meets the minimum requirements for certification by the Committee on Professional Training of the American Chemical Society. The Department of Chemistry has the approval of that Committee.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 16 credits in chemistry constitutes a minor. Chemistry 64 and 71 must be included.

Approval of Schedules. All students taking a major or a minor in the department must have their schedules approved by the chairperson of the department at the beginning of each semester. Students who pass the Chemistry Placement Examination and successfully complete Chemistry 63 will be granted 8 credits toward graduation.

Undergraduate and Graduate Credit.

*43. General Chemistry. Each sem. 3+2, Cr. 4. Intended for students who elect chemistry to meet one of the natural science requirements. It is a study of the principles of chemistry. Students taking a major or minor in Elementary Education, Home Economics, Nursing, or Physical Education must take this course to meet their chemistry requirement. (Not open to students who have taken Chemistry 51.) Laboratory fee, $15.00.

*44. General Chemistry. Sem. 2. 3+2, Cr. 4. A continuation of Chemistry 43. It includes the study of organic chemistry and biochemistry. The laboratory work includes organic and biochemical laboratory procedures. (Not open to students who have taken Chemistry 52.) Prerequisite: Chemistry 43 or 51. Laboratory fee, $15.00.

47. General Chemistry. Sem. 1. 3+2, Cr. 4 or 4+2, Cr. 5. This course consists of an introduction to inorganic, organic and physiological chemistry. (Given in St. Louis, Ft. Wayne, and Cleveland Divisions only).

48. Pharmacology. Each sem. 2+0, Cr. 2. Introduces the principles of pharmacology with emphasis on commonly used groups of drugs as a foundation for further study in clinical nursing courses. (Given in St. Louis and Ft. Wayne Divisions only).

*51. General Chemistry. Sem. 1. 3+3, Cr. 4. An introductory course in the fundamental principles of chemistry designed primarily for students who wish to pursue a scientific vocation. It is required of majors and minors in chemistry, and students in the pre-medical, pre-dental, or medical technology curricula except for students who take Chemistry 63. Laboratory fee, $15.00.

51E. General Chemistry. Sem. 1. 3+2, Cr. 4. Same as Chemistry 51 except for laboratory hours. Intended for engineering students. Laboratory fee, $15.00.

*52. General Chemistry. Sem. 2. 3+3, Cr. 4. A continuation of Chemistry 51. Semi-micro inorganic qualitative analysis is included in the laboratory work. Prerequisite: Chemistry 51, Laboratory fee, $15.00.

52E. General Chemistry. Sem. 2. 3+0, Cr. 3. Same as Chemistry 52 except for laboratory hours and more emphasis on organic chemistry. Intended for engineering students. Prerequisite: Chemistry 51E.

55. Physiological Chemistry. (Also offered as Home Economics 65.) Sem. 2. 3+0, Cr. 3. The chemistry of proteins, carbohydrates, and fats, and the changes these undergo during processes of digestion and metabolism; brief consideration of enzymes, vitamins, and the chemistry of food processing. This course may not be counted toward a major or minor in chemistry. Prerequisite: Chemistry 44.

63. General Chemistry. Sem. 1. 3+3, Cr. 4. An accelerated introductory course in the fundamental principles of chemistry for students with a strong background in chemistry. The laboratory includes semi-micro inorganic qualitative analysis. This is the introductory course that would normally be taken by the student planning to enter the chemical profession or graduate work in chemistry. Admittance by special examination. Laboratory fee, $15.00.

64. Quantitative Analysis. Each sem. 3+4, Cr. 4. A study of the theory of chemical equilibrium, electrochemistry and elementary chemical analysis. The laboratory work consists of an introduction to gravimetric, volumetric, and instrumental methods of analysis. Prerequisite: Chemistry 52 or 63. Laboratory fee, $15.00.

71. Organic Chemistry. Each sem. 3+3, Cr. 4. An introductory survey of the nomenclature, reactions, structure, and properties of carbon compounds. Prerequisite: Chemistry 52 or 63. Laboratory fee, $15.00.

80. Electronics and Scientific Instrumentation. (Also offered as Electrical Engineering 80 and Physics 80.) Sem. 2. 2+3, Cr. 3. Modern electronic principles and devices are studied, with applications to scientific instrumentation. Laboratory experience with modern instruments is emphasized and simple troubleshooting techniques are taught. Prerequisite: Physics 77 or concurrent enrollment and sophomore standing. Laboratory fee, $15.00.

*Credit for Chemistry 51 and 52 (or 43 and 44) may be earned through the College Level Examination Program (CLEP) subject examination in General Chemistry.
101 (201). Elementary Physical Chemistry. Sem. 1. 3+3, Cr. 4. (Graduate credit 3). A one-semester course in physical chemistry covering elementary thermodynamics and kinetics, together with their applications to various chemical systems. Prerequisites: Chemistry 64 and 71 or equivalent. Laboratory fee, $15.00. (Not open for credit to students who have taken Chemistry 121.)

105 (205). Biochemistry. (Also offered as Biology 105-205). Sem. 2. 4+0, Cr. 4. (Graduate credit 3). The chemistry of proteins, carbohydrates, fats, and nucleic acid, and the changes these undergo during processes of digestion and metabolism; stress on physical biochemistry topics and enzyme kinetics. Prerequisite: Chemistry 71 or equivalent.

108. Intermediate Organic Chemistry. Sem. 2. 3+3, Cr. 4. A further study of the properties of carbon compounds, including reaction mechanisms and complex organic reactions. Special topics of interest to pre-medical arts students are included. Prerequisite: Chemistry 71, Laboratory fee, $15.00. (Not open for credit to students who have taken Chemistry 110.)

110. Intermediate Organic Chemistry. Sem. 2. 3+3, Cr. 4. A further study of the properties of carbon compounds, including reaction mechanisms and complex organic reactions. This course is recommended for those planning to enter the chemical profession or graduate school in chemistry. Prerequisite: Chemistry 71, Laboratory fee, $15.00. (Not open for credit to students who have taken Chemistry 108.)

121. Physical Chemistry. Sem. 1. 3+3, Cr. 4. A theoretical study of chemistry involving thermodynamics, kinetics and modern structural concepts. Prerequisites: Chemistry 64 and 71 (7 may be taken concurrently), Mathematics 76 or equivalent, and Physics 78, Laboratory fee, $15.00.

122. Physical Chemistry. Sem. 2. 3+3, Cr. 4. A continuation of Chemistry 121. Prerequisite: Chemistry 121. Laboratory fee, $15.00.

130. Chemical Literature. Sem. 2. 1+0, Cr. 1. Discussion and library work on the important sources of chemical information. Experience in the use of Chemical Abstracts, Beilstein, and chemical journals.

134. Analytical Chemistry. Sem. 2. 2+4, Cr. 3. A study of the theory and practice of instrumental and other advanced analytical techniques. Prerequisite: Chemistry 122 (may be taken concurrently). Laboratory fee, $15.00.

138 (238). Inorganic Chemistry. Sem. 1. 3+0, Cr. 3. A systematic study of the elements and their compounds from the standpoint of the periodic law. Special theoretical topics in inorganic chemistry are discussed. Prerequisite: three years of chemistry.

142 Seminar in Chemistry. Each sem. Cr. 0. (Concurrent with 143-144.) Required of all junior forty-credit hour majors. They are expected to participate in discussions but are not required to present a report on a special topic in chemistry. Interested freshmen and sophomores are invited to attend. S/U grade.


150 (250). Advanced Organic Chemistry. Sem. 1. 1+8, Cr. 3. The lecture is devoted to a discussion of physical organic chemistry with experimental methods illustrated by modern organic analysis. The laboratory is devoted primarily to organic analysis by functional groups and by modern instrumental techniques. Prerequisites: Chemistry 110 and 101 or 121 or consent of the chairperson of the department. Laboratory fee, $15.00.

160. Quantum Mechanics. Sem. 1. 3+0, Cr. 3. The fundamental concepts of quantum mechanics are examined. Topics include state functions and their interpretations, the Schrödinger equation, approximation methods, multielectron atoms, and molecules. Prerequisite: Chemistry 122 or consent of the instructor.

168. University Course: Perspectives in Science. Sem. 2. 3+0, Cr. 3. A study of the philosophical and historical basis of scientific theories, and of the methods of scientific research. This course may be used to meet the University Course Requirement.

191. The Teaching of Natural Sciences. Cr. 2. (See Education 191.) A study of the methods of teaching natural sciences in the secondary schools. Lectures, discussions, demonstrations, and projects. This course may not be counted toward a major or minor in this department. Prerequisite: admission to Supervised Teaching.

195. Special Problems in Chemistry. Sem. 1. Cr. 1-2. A course for senior majors in chemistry. Each student attacks a chemical problem by study of the literature and by work in the laboratory. A written report is required. Prerequisite: senior standing in the department, Laboratory fee, $5.00 per credit hour.

196. Special Problems in Chemistry. Sem. 2. Cr. 1-2. A continuation of Chemistry 195. Prerequisite: Chemistry 195. Laboratory fee, $5.00 per credit hour.

ECONOMICS

STAFF: Professor Bernard (Chairman); Associate Professors Heinze and Henderson; Assistant Professors Alliston, R. Nielsen, and O'Toole

This is a department of the College of Business Administration. Students enrolled in the College of Arts and Sciences may, however, take a major or a minor in economics and may count any courses taken in this department towards a degree offered by the College of Arts and Sciences.

For a student majoring in economics the restriction on page 81 does not apply to certain credits earned in general administration. In other respects a major in economics is subject to the restrictions which apply to all students in the College of Arts and Sciences (See page 90 "Restrictions on the Use of Credits").

Major. A minimum of 33 credits in economics. Courses must include Economics 71, 72, 88 or 89, 186, 187, and one from among 177, 178, or 189. In addition to 33 credits in economics, Mathematics 36 or 52 or 72 and Administrative Sciences 22 (or Mathematics 54) are also required.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 18 credits in economics constitutes a minor. Economics 71, 72, and Administrative Sciences 22 must be included.

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

Undergraduate and Graduate Credit.


*Credit for Economics 71 and 72 may be earned through the College Level Examination Program (CLEP) subject examination in Introductory Economics.

1 Study Leave, 1979-1980.
88. Econometrics. Sem. 2. Cr. 3. The application of mathematical and statistical techniques to the analysis of economic problems. This includes the study of nonparametric statistical tests, regression analysis and computer applications. Prerequisites: Economics 71 and 72, Mathematics 36 or 52 or 72, and Administrative Sciences 22 or equivalent.

89. Mathematics for Economists. Sem. 1. Cr. 3. A course which considers economic problems of a mathematical type along with the necessary mathematical analysis. Not open to students with more than a year of calculus. Prerequisites: Mathematics 36 or 52 or 72, Economics 71 and 72, and Administrative Sciences 22 or equivalent.

168. University Course: Comparative Economic Systems. Sem. 1. Cr. 3. A comparative analysis of political theories and the economic systems that derive from those theories. The course will focus on those ideological assumptions that result in capitalism, socialism, fascism, anarchism, etc., as the solution to economic problems. May be used to fulfill the University Course Requirement.


174. Public Finance. Sem. 2. Cr. 3. An analysis of the role of the public sector in a market economy. Public revenues and expenditures, fiscal administration, and taxation are considered as they relate to economic activity. Prerequisites: Economics 71 and 72.

175. Managerial Economics. Sem. 2. Cr. 3. A course in applied economics which emphasizes the use of microeconomics, statistics, and decision-theory in the process of making management decisions. Topics such as market demand, cost and profit analysis, forecasting, capital budgeting, and location analysis will be discussed. Prerequisites: Economics 71 and 72, and Administrative Sciences 22.

176. International Economics. Sem. 2. Cr. 3. A study of the theory underlying and the method of financing international trade, the deviations from and the restoration of equilibrium and the problems associated with foreign investment and indebtedness. Prerequisites: Economics 71 and 72.

177. Modern European Economic History. Sem. 2. Cr. 3. A history of the economic development of Western Europe from 1550 to the present. Emphasis is placed on the role of the industrial revolution and its impact on the modern person. Prerequisites: Economics 71 and 72.

178 (278). Economic History of the United States. Sem. 1. Cr. 3. The history of the economic development of the United States from the colonial period to the present. Prerequisites: Economics 71 and 72.


181. Economics of Developing Nations. Sem. 1. Cr. 3. An analysis of economic variables, both theoretical and institutional, which characterize developing nations. Emphasis is placed on cyclical poverty, allocation of resources and policy planning. Prerequisites: Economics 71 and 72.

182. Urban Economic Problems. Sem. 2. Cr. 3. An examination of the regional and spatial characteristics of cities with an emphasis on policies to correct urban problems. Transportation, housing, poverty, and discrimination plus other substantive urban problems will be analyzed and discussed. Prerequisites: Economics 71 and 72.

183. Economics of Labor. Sem. 1. Cr. 3. The approach of workers and employers to the problems of labor; the development of trade unions and collective government regulation of labor relationships; and an economic analysis of wage-employment problems. Prerequisites: Economics 71 and 72.

185. Money and Banking. Sem. 1. Cr. 3. A study of the institutions, principles and problems of money and banking in the U.S. Special attention is given to the basic elements of monetary theory and policies. Prerequisites: Economics 71 and 72.

186 (286). Intermediate Micro-Economic Theory. Sem. 1. Cr. 3. A study of the theoretical concepts and analytical techniques which economists employ to interpret the process of resource allocation under various systems of economic organization. Prerequisites: Economics 71 and 72.


188. Monetary Theory and Policy. Sem. 2. Cr. 3. An examination of monetary theories and their impact on aggregate economic behavior. Prerequisite: Economics 185.

189 (289). The History of Economic Thought. Sem. 1. Cr. 3. Economic thought in its historical development from the Mercantilists to the present day. Prerequisites: Economics 71 and 72.

189. Independent Study in Economics. Each sem. Cr. 1-3. Independent study to be approved by the chairperson and advising economics professor.

199 (299). Problems in Economics. Each sem. Cr. 1-3. A course in which a special topic in economics will be given intensive study. The topic will vary from year to year. Prerequisites: Economics 71 and 72. Recommended for senior or graduate students.

EDUCATION

STAFF: Professor Speckhard (Chairman); Professors Hillila and Kochendorfer; Associate Professors Reiser, Stiemke, and Swihart; Assistant Professors Anderson, Ballard, Link, and Lucking; Part-time Associate Professor Rusch

Accreditation. Valparaiso University is accredited by the National Council for Accreditation of Teacher Education to prepare elementary and secondary teachers on the undergraduate level. It is a member of the American Association of Colleges for Teacher Education. It is accredited on the undergraduate and graduate levels by the State Board of Education of Indiana as a teacher education institution to meet certification requirements.

Certification. For the purposes of the Teacher-Education Program and supervised teaching, the regulations apply which are in force at the time the student is approved for admission to the Teacher-Education Program. All students who expect to teach and have not been admitted to the Teacher-Education Program should consult with the Pre-education Adviser of this department as early as possible to ascertain that certification requirements will be met.

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

A student holding a bachelor's degree and interested in qualifying for certification should consult with the chairperson of the department.

Major. Only students preparing to meet elementary education certification requirements may major in education.

Minor. Only students preparing to meet secondary certification requirements may minor in education. University degree requirements call for a major outside of the field of education; normally this academic major will be in the teaching major field.

*Credit for Economics 185 may be earned through the College Level Examination Program (CLEP) subject examination in Money and Banking.

1Sabbatical Leave, Spring Semester 1979-1980.
Approval of Schedules. All students preparing to teach must have their schedules approved by the Co-ordinator of Secondary Education or by the Co-ordinator of Elementary Education at the beginning of each semester. Approval of the chairperson of the department is also required for admission to courses numbered above 110.

All professional courses in educational methods listed by other departments in the College of Arts and Sciences are given under the supervision of the Department of Education.

Elementary Education. Undergraduate students who wish to teach in an elementary school should complete the requirements for a Bachelor of Science in Education, a special curriculum in the College of Arts and Sciences. The completion of the requirements for this degree does not in itself qualify a student for a teacher's certificate or license in any given state.

A candidate for the degree of Bachelor of Science in Education must meet all the requirements of the University listed under Degrees and Degree Requirements for the College of Arts and Sciences. Course work must include the following as a minimum:

1. Language Arts: 16 semester hours. Must include six credits in written expression, a course in speech, and a course in children's literature.

2. Science: 12 semester hours. Must include work in at least two of the following areas: biology, chemistry, physical geography, physics.

3. Conservation: 3 semester hours. Must include one course in conservation.

4. Social Studies: 12 semester hours. Must include a course in U.S. History and a course in world civilization and at least six credits from at least two of the following areas: economics, geography, political science, sociology.

5. Mathematics: 9 semester hours. Must include mathematics course work specifically designed for elementary teachers.

6. Arts: 6 semester hours. Must include one course in music and one in art.

7. Other Subjects: 8 semester hours. Must include general psychology, physical education, and learning exceptionalities.

8. General Education Electives: Elect from above to total 70 semester credits in these first eight categories.

9. Religion: 9 semester hours.

10. University Course: 3 semester hours. This course may be counted toward meeting the requirements in conservation, social studies, science, or arts. It may also count toward 70 hour General Education total, if selected from the first seven categories.

11. Education: 36 semester hours. Must include an introductory course in education, psychological foundations of education, methods in elementary education including six hours of reading, and 12 semester credits of student teaching.

12. Electives: In addition to the above requirements, the student must present sufficient electives to achieve the 124 semester credits required for graduation.

Endorsements for teaching the Special Education and Special Subjects may be completed through special programs with requirements in addition to the above. Specific requirements should be obtained from the Department of Education.

Freshman students will be advised by the Pre-education Adviser. A recommended course program is:

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<tr>
<th>First Semester</th>
<th>Cr.</th>
<th>Second Semester</th>
<th>Cr.</th>
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</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>Religion</td>
<td>4</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
<td>Social Science</td>
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<td>Physical Education</td>
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Foreign language may be started in the freshman year for those who wish to concentrate in this area.

Sophomore students will be advised by the Pre-education Adviser. They should complete Foundations of Education during this year. Application for admission to the Teacher-Education Program should be made during the second semester of the sophomore year.

Junior students who are admitted to the Teacher-Education Program will be advised by the Co-ordinator of Elementary Education. Application for admission to supervised teaching must be filed by March 1.

Secondary Education.

Advising. Prior to admission to the Teacher-Education Program, secondary teacher candidates are asked to consult with the Pre-education Adviser of the Department of Education concerning programs leading to recommendation for teacher certification. Once formally admitted to the Teacher-Education Program, the student should consult periodically with the Co-ordinator of Secondary Education concerning his/her program.

Requirements. Undergraduate students preparing to teach in the secondary schools should complete requirements for appropriate degree in their majors.

General Education certification requirements for all secondary teacher candidates, regardless of the degree sought, are given below:

Students must ascertain that they are meeting these General Education requirements as well as the University degree requirements.

I. Humanities—22 semester credits
   Speech ........................................ 3 credits
   English ...................................... 6 credits
      (including 6 credits of written composition)
   Foreign Language or Fine Arts .......... 10 credits
   Religion .................................... 6 credits

II. Life and Physical Sciences—8 semester credits
   The 8 credits are to be selected from at least two of the following areas: biology, chemistry, mathematics, physical geography, and physics.

III. Social and Behavioral Sciences—9 semester credits
   The 9 credits are to be selected from at least three of the following areas and must include general psychology: economics, geography, history, political science, psychology, and sociology. (Since some states require all teachers
to have a course in United States history, it is recommended that prospective teachers take at least one such course.)

IV. Credits from categories II and/or III—3 semester credits

Professional Education requirements include:

1. Foundations of Education (Education 62)—3 credits.
(Preferably taken in the sophomore year)

2. Formal application and admission to the Teacher-Education Program in the first month of the second semester of the sophomore year (see below).

3. Orientation to Secondary Teaching (Education 105)—3 credits. (Preferably taken in the junior year.)

4. Formal application and admission to the Professional Semester before March 1 of the year prior to the academic year in which the Professional Semester is to be taken.

5. Completion of the Professional Semester. Courses included in the Professional Semester are:

   - Ed 156 Psychological Foundations of Secondary Education .......... 4 credits
   - Ed 155 Principles and General Methods of Teaching the
     Academic Subject Areas ........................................ 4 credits
   - Ed 191 Special Methods ........................................ 2 credits
   - Ed 157 Supervised Teaching in the Secondary-School Subjects ....... 8 credits

Teaching Major and Teaching Minor Requirements:

1. A teaching major, or all-grade major, is required of all secondary teacher candidates. A teaching minor or a junior high/middle school certificate is highly recommended. (Students are strongly urged to take or audit the Special Methods course in a teaching minor or a second teaching major.)

Credits earned by passing examinations and noted on transcripts may be used to meet certification requirements.

2. Specific requirements for teaching majors and minors may be obtained from the Pre-education Adviser, the Co-ordinator of Secondary Education, or the major adviser.

Admission to the Teacher-Education Program. To be admitted to this program, a student must submit a written application to the Department of Education. This application should be made in the first month of the second semester of the sophomore year. Applications are accepted only in January and September.

The Teacher Education Committee of the College of Arts and Sciences will take action on the application upon the recommendation of the Department of Education. The action taken (acceptance, conditional acceptance, or denial) will be based on the following criteria:

1. grade-point average—normally an applicant must have established a 2.25 g.p.a. in all course work taken at Valparaiso University (a minimum of 12 semester credit hours must be used in establishing this average), and must have established a 2.00 g.p.a. in all course work taken in the Department of Education. Post-baccalaureate students must establish a 2.75 g.p.a. in all course work (12 hours minimum) taken at Valparaiso University subsequent to earning the bachelor's degree.

2. communication skills—an applicant must have obtained a grade-point average of 2.00 or better in all course work at Valparaiso University used to meet the nine-semester hour General Education requirement in oral and written expression.

3. health—an applicant shall be free of serious mental or physical health problems that might impair future teaching effectiveness.

4. character—an applicant must have shown the social and emotional maturity, moral character, responsibility, and dependability necessary for success in the teaching profession.

5. speech and hearing test—an applicant must complete a speech and hearing screening examination.

6. faculty recommendations—positive recommendations from two faculty members must be obtained by each applicant. One of these must be obtained from the Foundations of Education instructor. Secondary education applicants must obtain the second recommendation from the major adviser.

When applicants are noted as questionable on any of these criteria, they may be asked to meet with a subcommittee of the Teacher Education Committee before final action is taken.

Admission To Program For Special Education Endorsement. Application for admission to this undergraduate program in the area of learning disabilities must be made during the sophomore year and returned to the Education Department before March 30 of that year. This application is in addition to the one required by the Teacher Education Committee of the College of Arts and Sciences for admission to the teacher education program.

Enrollments are restricted to a limited number of junior level students each year. The criteria for admission include a 2.25 cumulative grade-point average, successful experience with exceptional children (paid or volunteer), a minimum of three letters of recommendation (one from a former employer or supervisor who knows a candidate's work with children and two from professors who know the candidate's academic work), and an interview with a faculty admissions committee.

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

Admission to the Professional Semester. Preliminary application for admission to the professional semester (including Supervised Teaching) must be filed and completed in person with the Co-ordinator of Elementary Education or the Co-ordinator of Secondary Education by March 1 of the Spring Semester prior to the academic year in which the student teaching is to be done. To be eligible for supervised teaching, the student:

1. must have been admitted officially to the Teacher-Education Program.
(2) must have maintained a satisfactory grade-point average since his/her admission to the Teaching-Education Program and established a 2.00 g.p.a. in all teaching fields.

(3) must have completed at least 12 credit hours in Valparaiso University of which 3 credit hours must be in education.

(4) must have senior standing and be within two semesters and one summer of graduation.

(5) must have shown the social and emotional maturity, moral character, the responsibility, and the dependability necessary for success in the teaching profession.

(6) Secondary student teaching candidates must have completed General Psychology (Psychology 51 or 52), earned at least a C in Education 105, and received written recommendation to take the Professional Semester from the major adviser. If a teaching minor is to be obtained, written recommendation from the chairperson of the department of the minor must be received. (Students are strongly urged to take or audit the Special Methods course in the teaching minor area.)

(7) Elementary student teaching candidates must have earned at least a 2.00 grade-point average in all course work in Education.

Placement of Student Teachers. The placement and the direction of supervised teaching experiences are the responsibilities of the Co-ordinator of School Field Experience. Approved elementary and secondary student teachers will be assigned to selected schools in Northwest Indiana.

Placement. The Teacher Placement Office gives assistance to beginning and experienced teacher candidates who have completed requirements for certification. All candidates must file their credentials with this office prior to graduation.

Students who complete their undergraduate training at Valparaiso University are entitled to use of the Teacher Placement services at no cost to the student until the end of the Teacher Placement year which comes after graduation or the completion of the professional semester, whichever comes last. (The teacher placement year is from October 1 to September 30.)

A ten dollar fee will be charged each teacher candidate who wishes to use the Teacher Placement service after the expiration of free service time. This will reinstate the student till the end of the then current teacher placement year. This fee will be waived for those students completing Valparaiso University's teacher training program who have not received an offer of an initial teaching position since completion of their program.

Undergraduate and Graduate Credit. Note: No undergraduate student will be admitted to any courses beyond Education 110 unless he/she has completed Education 62, has been admitted to the Teacher-Education Program, and has achieved at least junior standing.

62. Foundations of Education. Cr. 3. A study of the historical, sociological, and philosophical foundations of American education, development of our educational system, relationship of schools and society, and current issues and trends in education. Readings and activities to increase cultural and ethnic awareness. Field activities. Course fee, $10.00.

68. Educational Psychology. Cr. 3. This course applies the principles of psychology and the results of experimental research to the problems of teaching and learning. Prerequisite: Psychology 51 or 52. (Not open to majors or minors in education.)

105. Orientation to Secondary Teaching. 2-3, Cr. 3. A course designed to provide the prospective secondary or middle school teacher with the basic rationale and supportive field experiences for an informed decision about teaching as a career. Academic coursework includes practical experience in secondary school organization, curriculum, statistics, and school law in preparation for taking the professional semester. The field experiences include a minimum of forty hours of practical involvement in activities in a senior high, junior high, or middle school. Prerequisites: Education 62, application for admission to Teacher Education, and advanced course selection. Fee, $35.00.

115. Principles and Methods of Elementary Education. Cr. 9. Study of the organization of instruction, classroom management, legal rights and responsibilities of teachers, measurement and evaluation, and skills of teaching in the elementary school. Includes principles, content, curriculum, methods, and techniques involved in teaching mathematics, social science, and science in the elementary school. Includes directed classroom observation, teaching in a micro setting, operation and use of audio-visual equipment, materials construction, and activities designed to increase ethnic awareness.

116. Psychological Foundations of Elementary Education. Cr. 4. A study based in psychological research and theory to aid teachers in guiding the learning, development, and evaluation of children. Includes physical, mental and emotional development of the child through adolescence and motivation, retention, and transfer of learning. Includes directed classroom observation. Prerequisite: Psychology 51.

117. Introduction to Reading in the Elementary School. Cr. 4. An introductory course in which lectures, demonstrations and discussions place emphasis on the reading process, reading skills, and teaching techniques. Practice in diagnosis and teaching reading.

155. Principles and General Methods of Teaching the Academic Subject Areas. Cr. 4-5. A study of the principles, methods, techniques, and materials involved in teaching in the secondary schools and the development of human relation skills. The fifth credit provides opportunity for all-grade majors (Art, Music, Physical Education) to study general methods, curriculum and organization of the elementary school. This course is restricted to students enrolled in the Professional Semester in Secondary Education.

156. Psychological Foundations of Secondary Education. Cr. 4. The course provides a basis in psychological research and theory to aid teachers in guiding the learning and development of children and adolescents. This course is restricted to students enrolled in the Professional Semester in Secondary Education. Prerequisite: Psychology 51 or 52.

157. Supervised Teaching in the Secondary-School Subjects. Cr. 8. Each student will be assigned to a middle or secondary school for laboratory experiences, which will include at least 9 weeks of full-time classroom observation, classroom teaching, and related activities. Prerequisites: senior standing and concurrent enrollment in the Professional Semester. See special paragraphs on the Professional Semester in the general statement above for conditions of eligibility. Students enrolled in this course may not carry a load of more than 16 credit hours. S/U grade. Fee, $90.00.

163. Methods of Teaching Language Arts in the Elementary School. Cr. 2. A study of the principles, content, curriculum, methods, and techniques involved in teaching the language arts in the elementary school.

164. Methods of Teaching Reading in the Elementary School. Cr. 2. A study of the organization and techniques of teaching reading in the elementary school.

165. Elementary Methods and Techniques of Teaching. Cr. 8. The student is expected to give at least 9 weeks of full-time time for approximately eight weeks of the Professional Semester to a study of the development and organization of the elementary school; including principles, content, curriculum, methods, and techniques involved in teaching the language arts, reading, mathematics, and the social studies. This course is restricted to students enrolled in the Professional Semester in elementary education. (Offered in 1979-1980 only.)

167. Supervised Teaching in the Elementary Grades. Cr. 8. (Cr. 12. 1980-1981 and thereafter) This course gives the student opportunities for observation, actual classroom teaching, and participation in related activities in elementary schools under the directions of the
supervising teacher and the University supervisor. Students are expected to give special paragraph on Supervised Teaching under the general statement above for conditions of eligibility. Students enrolled in this course may not carry a maximum load of more than 18 credit hours. S/U grade. Fee, $90.00.

170 (270). Mathematics in the Elementary School. Cr. 3. Psychological and instructional aspects of arithmetic, elementary algebra, and geometry, including new methods of teaching based on recent scientific studies; diagnostic and corrective measures. Prerequisite (for undergraduates only): basic course in mathematics methods.

171 (271). Science in the Elementary School. 2-1-2. Cr. 3. Analysis of curriculum and instruction in elementary science; methods of presentation, problems, trends, research findings, and instructional resources. Demonstrations and appropriate experiments for elementary schools. Prerequisite (for undergraduates only): basic course in science methods.

172 (272). Language Arts in the Elementary School. Cr. 3. An advanced study of the elementary school language arts curriculum, considering content and skill requirements as evidenced in present practice and current theory. Prerequisite (for undergraduates only): basic course in language arts methods.

173 (273). Social Studies in the Elementary School. Cr. 3. An advanced study of the scope and sequence of curriculum making in elementary school social studies including instructional resources, methods, trends, and problems as viewed by practice, theory, and research. Prerequisite (for undergraduates only): basic course in social studies methods.

174 (274). Reading in the Content Areas. Cr. 3. Lectures and demonstrations cover the reading process as it is involved in the various content areas of junior high, middle school, and secondary school curricula. Specific techniques for developing competencies in diagnosis of reading difficulties and in instruction of reading in the content areas are given emphasis.

176 (276). Foundations of Reading. Cr. 3. A course of lectures and demonstrations which cover the reading process, appraisal of reading needs, directed reading activities and reading skill development.

177 (277). The Elementary School Curriculum. Cr. 3. A study of the composition of today's elementary curriculum, the factors which affect its development, the principles governing curriculum organization, and current curricular patterns.

178 (278). (Formerly 120-220). Kindergarten Education. Cr. 3. This course deals with the kindergarten, the teaching techniques and the materials used in the nursery school and the curriculum, the teaching techniques and the materials used in the kindergarten. Special emphasis will be given to the education needs of the pre-school child.

180 (280). Introduction to Educational Media. 2-1-2. Cr. 3. An introduction into the ways of effective selection and utilization of media, both material and equipment. The course includes laboratory experience in the production and equipment operation in different media. Fee, $10.00.

181 (281). (Formerly 189-289). Educational Guidance and Counseling. Cr. 3. A course dealing with the nature, functions, and organization of student personnel programs in elementary and secondary schools with counseling and guidance services the central feature. Prerequisite (for undergraduates only): Education 182 or the equivalent.

182 (282). Educational Measurement. Cr. 3. A course dealing with theory of measurement, interpretation of measurement data, and testing in relation to pupil achievement and guidance.

184 (284). Reading Disabilities. Cr. 3. Lectures and demonstrations cover the general nature of identification, diagnosis and classification of reading disabilities. Prerequisite: admission to Teacher Education Program for Special Education.

185 (285). The Junior High/Middle School. Cr. 3. A study of the development, organization, and curriculum of junior high and middle schools with emphasis on the unique societal and educational roles played by these institutions.

186 (286). Junior High/Middle School Teaching: Principles and Methods. Cr. 3. A study of the principles, methods and materials involved in teaching in junior high and middle schools. Individualization of instruction and interdisciplinary learning are emphasized.

187 (287). Practicum in Junior High/Middle School. Cr. 3. Each student will be assigned a minimum of 80 hours of supervised field experiences in a junior high or middle school. The experiences will include department/grade level/team planning activities; intramural-athletic activities; home room/home base activities such as peer counseling, instruction and planning as clarification, moral development, exploratory courses, and recreational events; working with students on individualized study projects; teaching study skills to students, individually and in groups. Prerequisites: Education 185 (285) and Education 186 (286) concurrent enrollment.

189 (299). Practicum in Corrective Reading. Cr. 3. A laboratory experience which provides practice with primary, elementary, and middle school/junior high school children whose reading disabilities are mild to severe. Emphasis is given to training in evaluation of reading performance and planning and implementing suitable instructional strategies. Prerequisite: Education 184 or equivalent.

191. Special Methods in the Academic Courses in Secondary Education. Cr. 2. This course is administered by the Department of Education. It is given in the various departments of the College of Arts and Sciences under the following titles:

- The Teaching of the Visual Arts
- The Teaching of the Performing Arts
- The Teaching of Mathematics
- The Teaching of Foreign Languages
- The Teaching of Vocational Home Economics
- The Teaching of Physical Education
- The Teaching of Social Studies
- The Teaching of Journalism

Prerequisites: Education 62, Education 105, and admission to the Professional Semester.

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

199 (299). Current Problems in Education. Cr. 1-3. An intensive study of an area of education. Subtitles, amount of credit, and content will depend on instructor's choice and student interest.

Courses in Special Education.

140 (240). Learning Exceptionalities. Cr. 3. A course designed to introduce the student to the needs of exceptional children and the techniques of educating them. Required of all Elementary Education students.

143. Introduction To Learning Disabilities. Cr. 3. A course designed to give the student fundamentals in the theoretical orientations of learning disabilities with emphasis on the characteristics and educational needs of the learning-disabled child. Prerequisite: admission to Teacher Education Program for Special Education.

144. The Diagnosis Of Learning Disabilities. Cr. 3. This course deals with the development of competencies in the diagnosis of specific learning disabilities. The emphasis is on theoretical, diagnostic, screening, and testing instruments as well as interpretation of education assessment data. Prerequisite: Special Education 143.

145. The Remediation Of Learning Disabilities. Cr. 3. The emphasis of this course is on the development of diagnostic prescriptive models, remediation strategies and teacher-made remediation materials in order to develop competencies in the various approaches to remediation of specific learning disabilities. Prerequisite: Special Education 144.

147. Supervised Teaching in the Special Classroom (Learning Disabilities). Cr. 6. This course gives the opportunity for a half-day experience in the observation and teaching of learning disabled children in a classroom setting. This student teaching experience is designed for one full semester. Prerequisites: Special Education 144 and concurrent registration in Special Education 145. S/U grade. Fee, $90.00.

195. Independent Study in Special Education. Cr. 1-3. Independent work to be done in a specific area of special education as agreed upon by the student and faculty adviser. Proposals must be approved prior to registration by the chairperson of the department.

199 (299). Current Problems in Special Education. Cr. 1-3. An intensive study of an area of special education. Subtitles, amount of credit, and content will depend on instructor's choice and student interest. Prerequisite: consent of the chairperson of the department.
Graduate Credit.

305. Philosophical Foundations of Education. Cr. 3. A course in educational thought designed to explore systems of thought with emphasis upon educational philosophical patterns, their implications for influence upon practice and theory in education.

308. Decision Making in Curriculum and Instruction. Cr. 2-3. The course will study in depth a selected area of elementary or secondary curriculum. The area selected for study will be determined on the basis of interests represented by those taking the course. Prerequisite: consent of the instructor.


315. School and Society. Cr. 3. A study of the relationships of the school, its students and its teachers, to the many forces and agencies of our society. The school as transmitter of heritage and agent of social change.

317. Research in Education. Cr. 3. A course assigned to develop skill in reading, interpreting, and evaluating research in education. Particular emphasis will be given to research findings in educational areas of interest to students.

320. Historical Foundations of Education. Cr. 3. The history of American education in its cultural framework. Special attention will be given to the reform movements of the 20th Century.

323. Research in Reading. Cr. 3. A review of basic research in reading as applied to principles of learning, instructional processes, and curricular organization. Prerequisites: Education 276 or equivalent and a course in statistics or measurement.

326. Diagnosis of Reading Difficulties. Cr. 3. Theory and techniques of testing and evaluation in reading; analysis and interpretation in several areas including physical capacity, mental ability, emotional adjustment and academic achievement. Prerequisite: Education 276 or equivalent.

329. Clinical Practicum in Reading. Cr. 3. Guided experience in clinical practice in reading instruction with emphasis on specific remedial theory and techniques. Prerequisite: Education 326 or the equivalent.

335. Current Educational Thought. Cr. 3. A course designed to familiarize the student with current problems and innovations in the field of education. Extensive reading and discussion of selected essays, articles, and books dealing with issues in education are required. Prerequisite: consent of the instructor.

336. The Supervision of Student Teachers. Cr. 3. A course dealing with the problems of supervising student teaching at the elementary and secondary levels. The historical development of student teaching, current student-teaching programs, and the problems related to the supervision of student teachers in the classroom and the school will be studied. Prerequisites: teaching experience and consent of the instructor.

340. Seminar in Education. Cr. 3. An intensive study of a significant topic in education. Subtopics and course content will depend on instructor's choice and student interest. This course may be repeated for credit if the topics are different.

ENGLISH

STAFF: Professor Phipps (Acting Chairman); Professors Risley and Wegman; Associate Professors Cunningham, Feaster, Hall, Pahl, Sommer, and Spomberg; Assistant Professors Harvey, Juneja, Loeper, Maxwell, Mullen, and Uehling; G. Elfrig, J. Hicks, and J. Lump

Major. A minimum of 24 credits in courses numbered 100 or above. Must include courses 100, 147, and 148. In addition, each student shall complete at least one semester in English 187: Seminar in English.

It should be noted that 24 hours constitutes a minimum academic major. We encourage students to proceed well beyond the minimum major to attain a balanced view of both British and American literature, including ample study of literature before 1800. No later than the first semester of the junior year, each student shall submit a proposed plan of study to the chairperson of the department.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 12 credits in English in courses numbered 100 or above constitutes a minor. Courses must include 100 or 147 or 148.

Plan of Study Option. The English Department now has model Plans in several areas, including: English/Journalism; American Studies; English/Political Science/History (Pre-Law); English/Foreign Languages; English/Speech and Drama; English/Science (Pre-Med); English/Psychology; and English/Philosophy/History.

Approval of Schedules. All students taking a major or a minor in the department must have their schedules approved by the chairperson of the department at the beginning of each semester. Consult English Department Bulletin or Advanced Course Selection bulletin to determine when any course will be offered.

Undergraduate and Graduate Credit.

2. English for Foreign Students. Cr. 4. A course in English grammar and basic compositional skills open only to students whose native language is not English.

3. Fundamentals of Composition I. Cr. 2. Intended to develop the student's skills in sentence and paragraph construction, and in the basics of English usage and punctuation, this course relies heavily on carefully reviewed writing assignments and individual tutorial sessions. It is to be followed by:

4. Fundamentals of Composition II. Cr. 2. Intended as a sequel to English 3, and should be taken in the semester following. The emphasis in English 4 is on coherent organization of themes of varying length, with attention to rhetorical and argumentative strategies, critical reading, research methods, and the preparation of term papers.

5. Exposition and Argument. Cr. 4. 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.

25. Literary Studies. Cr. 4. Readings of poems, plays, and fictional works from various periods, with emphasis upon the understanding and enjoyment of literature gained through close critical analysis. Additional experience in writing complements that of English 5. Prerequisite: English 5 (or 2 or 3-4).

*Credit for English 5 may be earned through the College Level Examination Program (CLEP) general examination in English or the subject area examination in English.
**Credit for English 25 may be earned through the College Level Examination Program (CLEP) subject examination in Analysis and Interpretation of Literature.
INTERMEDIATE COURSES: Prerequisites are English 5 for 2 or 3-4) and 25.

57. Business Communication. Cr. 3. A detailed study of business communication. Includes analysis and practice in a variety of messages used to communicate in business and industry—letters, oral reports, and informal reports. Emphasizes the fundamentals of appearance, style and language, tone and psychology of effective business communication.

65. Studies in Literature.* Cr. 3. (Intended to satisfy the Literature or Fine Arts Requirement of the General Education section, but may also be taken for elective credit.) Special topics in British, American, European, or non-Western literature. Examples of topics which have been prepared are: (1) The Minority Voice in Contemporary American Literature; (2) Southern Letters; (3) The American Novel Since World War II, Southern Letters; 1820 to the Present; and (3) The American Novel Since World War II.

75. Composition for Teachers. Cr. 2. (half course). A course designed for future teachers emphasizing the practical skills and art of writing and examining methods of teaching and evaluating writing.

ADVANCED COURSES: Prerequisites are English 5 (or 2 or 3-4) and 25. Courses labeled 200 and above are open to qualified graduate students; undergraduates may be enrolled in the dual-numbered courses on the "100" level.

100 (200). Methods of Literary Criticism and Research. Cr. 3. 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.

101. American Literature. Cr. 3. A study of selected works of major American writers from the Colonial Period to the Civil War.

102. American Literature. Cr. 3. A study of selected works of major American writers from the Civil War to the present day.

105. Masterpieces of World Literature. Cr. 3. A study of major literary works of the Greek, Roman, and Christian traditions, from ancient times through the Renaissance.

106. Masterpieces of World Literature. Cr. 3. A study of major works of Europe and America from the Neoclassical Period to the present day.

109 (209). Medieval Studies.* Cr. 3. A study of medieval lyrics, narratives, and romances, with lectures on medieval social and intellectual backgrounds. In alternate semesters, this course will deal solely with the work of Chaucer.


120 (220). Renaissance and Seventeenth Century Studies.* Cr. 3. Readings in significant works of selected writers ranging from More to Milton, with attention to the intellectual, religious, and political backgrounds of the Renaissance and earlier seventeenth century.

122. Creative Writing. Cr. 3. A workshop in the various techniques of writing poetry and short fiction. English majors, as well as other students, may take this course on an S/U basis.

130 (230). Restoration and Eighteenth Century Studies.* Cr. 3. An intensive study of several major writers and dominant literary types in England from 1660 to 1780, with attention to the historical and cultural backgrounds of the period.

131. Advanced Composition. Cr. 3. Advanced study of the writing of various kinds of English prose, not including fiction. Considerable writing practice is given, the goal being to develop a lucid, effective style.

141 (241). History of the English Language. Cr. 3. An introduction to the development of modern English from Indo-European with emphasis upon structure and vocabulary.

142 (242). Modern English Grammar. Cr. 3. An introduction to such recent linguistic developments as structural grammar and transformational-generative grammar.

*All courses designated by asterisk (*) may vary in content and in writers assigned, depending upon the instructor and year given. Such courses may be taken twice for credit, provided topic is new, or there is no significant overlapping in the reading lists.
187. Seminar in English.* Cr. 3. Designed chiefly for juniors and seniors interested in active participation, the seminar encourages independent thought and research, and relies upon free discussion rather than lectures. Some recent topics: The Aesthetic Movement from Poe to Yeats and Mann; Some Contemporary British Novelists; Anglo-Irish literature. Enrollment limited to 15 students. Required for English majors.

191. The Teaching of English. Cr. 2. (See Education 191.) A study of the methods of teaching English in secondary school. Prerequisite: admission to Supervised Teaching. This course may not be counted toward a major or minor in English.

194. Independent Study in English. Cr. 3. Designed to provide advanced students an opportunity to do serious research on a topic which is not covered in any regularly scheduled course offered by the English Department. In advance of the semester in which the student plans to undertake the project, he must arrange for a tutor to direct that project and secure approval for it from the English Department Committee on Honors and Independent Study.

195 (295). Topics in Literature.* Cr. 2 (half course) - 3. An open-topical course, which may concern a single writer or a group of writers; a literary type or theme; a contemporary art form (e.g., development of the cinema); or an aspect of modern popular culture (e.g., science fiction and fantasy).

197. Honors Work in English. Cr. 3. See this catalog, p. 92, for current regulations regarding honors work. For other types of independent reading and research, consult with the chairperson of the Department of English.

Graduate Credit.

303. Seminar in Literature for Children. Cr. 3. A study of the great children's literature of the past and the present, of the values that that literature holds for children, and of the criticism of that literature with the aim of developing a set of critical standards for the evaluation of books for children; a study of criteria for selecting books for school use. This course includes a study of basic literary tools as well as the handling of many bibliographical tools.

309. Theory and Practice of Expository Writing. Cr. 3. Readings and lectures in the theory of exposition; practice in analyzing essays and in writing various forms of exposition; study of the principles of teaching expository writing.

310. Studies in Nineteenth Century British Literature.* Cr. 3. Selected writers from the Romantic and/or Victorian Periods are read in considerable depth, from a special critical, historical, or cultural viewpoint.

315. Shakespeare and His Contemporaries.* Cr. 3. A concentrated study of a selection of works by Shakespeare (or by Shakespeare and some of his contemporaries), to reveal both his debts to and his transcendence above the literary, intellectual, and aesthetic conventions of his day. The emphasis is largely, though not exclusively, on dramatic literature.

320. Studies in Nineteenth Century American Literature.* Cr. 3. A study of several important American writers of the nineteenth century, selected on the basis of theme, genre, or relation to a particular literary movement or intellectual background.

325. The Western Tradition I. (Also offered as History 325). Cr. 2. A study of some of the important aspects of the heritage that has come down to us from the ancient Greek, Roman, and Judeo-Christian cultures. This course will be devoted, for the most part, to a close reading of important selected texts.

326. The Western Tradition II. (Also offered as History 326). Cr. 2. A study of some of the more important aspects of the heritage that has come down to us from the Middle Ages, the Renaissance, and the Reformation. This course will be devoted, for the most part, to a close reading of important selected texts.

335. Studies in Modern Literature.* Cr. 3. Topic is open, and determined chiefly by expressions of student interest. Through investigation of a significant theme, intellectual or cultural trend, movement, or school of writers within the past hundred years. Recent topics include: Visionary and Philosophical Literature (Yeats, Lawrence, Eliot, Mann, Kafka; The Existential Novel; The Southern Renaissance).

FOREIGN LANGUAGES

STAFF: Professor Helms (Chairman); Professors Falkenstein, Moulton, and H. Peters; Associate Professors Brent, J. Peters, Petersen, and Stephan; Assistant Professors S. Baglieri, Kumpf, and Toledo-Smith; P. Gomez and S. Johnson; L. Olsen, Director of the Multi-Media Center.

The Department has the following objectives: to give the student in the lower division courses numbered 10, 20, and 30, a sound grammatical foundation and to develop the ability to read moderately difficult prose and poetry. It also aims to provide the student with a basic speaking ability, aural comprehension, and an introduction to a foreign culture in the classroom and through tapes, slides, films, shortwave radio, and television in the Multi-Media Center.

Courses numbered 50 or 51 are designed for the Literature or Fine Arts Requirement. Courses numbered 168 are designed for the University Course Requirement. All of these courses are taught in English.

In the upper division courses, numbered above 100, the objectives are to continue the work begun in the lower division courses, by becoming proficient in the speaking and writing of the languages offered, to study their literatures and civilizations, and to prepare students for the teaching of foreign languages and for graduate studies.

Credit by Examination. A student can receive four (4) hours of credit for level 20, either by passing a special proficiency examination or by completing level 30 in that language.

A student can receive eight (8) hours of credit for levels 20 and 30, either by passing a special proficiency examination or by completing an advanced level course in that language.

The examination will be given by each section of the Department during the first week of each semester.

A student who has completed a second year language course in high school will not be granted credit for level 10 in that language.

Placement. For students who wish to continue with the same language they studied in high school, the following placement is suggested:

After having completed two years of study in high school, register for course 20.

After having completed three years, register for course 30.

After having completed four or more years, register for an advanced course in that language.

Students who do not wish to continue with the same language they studied in high school must register for course 10 of another language.

Concentration Areas. It is recommended that all students study at least one other language and that they take a variety of electives in Art, Economics, English, Geography, History, Mathematics and/or Statistics, Music, Philosophy, Political Science, Psychology, Sociology, or Speech and Drama.

*All courses designated by asterisk (*) may vary in content and in writers assigned, depending upon the instructor and year given. Such courses may be taken twice for credit, provided topic is new, or there is no significant overlapping in the reading lists.
Those wishing to teach must submit a course of study in writing to the chairperson of the department.

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

FRENCH

Major. A minimum of 20 credits in French beyond French 30. (For the plan of study option, a student will be expected to take at least 24 credits in French beyond French 30.)

Interdisciplinary Program in International Economics and Cultural Affairs. See page 95 for details.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 10 credits beyond French 30 constitutes a minor in French.

Undergraduate and Graduate Credit.

10. First Semester French. Cr. 4. A course designed to give the student the essentials of French. Course fee, $5.00. Credit may not be counted for graduation by a student who has completed a second year French course in high school.


50. Topics in French Literature. Cr. 3. A course to meet the Literature or Fine Arts Requirement. Study of a selected form or aspect of French literature in English translation. No knowledge of French required. May not be counted toward a major or minor in French.

Note: French 30 is a prerequisite for all of the following courses:


111. French Composition and Conversation. Cr. 2. Written composition and continued emphasis on conversational skills. Course fee, $3.00.

112. Advanced French Composition and Conversation. Cr. 4. An intensive course in speaking, listening, and writing, from the colloquial to the scholarly. Prerequisite: French 111. Course fee, $5.00.

114. Contemporary French Language and Communication. Cr. 3-4. French newspapers, magazines, radio, television, and films are used as a basis for building more advanced language skills and to familiarize the student with modern-day France. Prerequisite: French 111. Course fee, $5.00.

115. French Phonetics. Cr. 3. A study of the principles of French phonetics with special emphasis upon the difficulties encountered by American students. Much practical training in the laboratory. Laboratory fee, $5.00.

116. Professional French. Cr. 2. A study of the French language as it is used in the international business world, including writing of business letters and general commercial terminology. Prerequisite: French 111. Course fee, $5.00.

117. Advanced French Translation. Cr. 2-4. Instruction in the techniques of translation from and into French of commercial, practical, technical, official, and literary texts. Prerequisite: French 111.

120. Masterpieces through the Centuries. Cr. 3-4. Rapid reading of a few representative works with supplementary lectures and extracts designed to give a broad survey of French literature.

130. French Civilization. Cr. 3. Civilization of France from earliest times to the present. Note: All literature seminars listed below may be repeated several times provided there is no duplication of material. Prerequisite: French 111 or consent of the chairperson of the department.

160 (260). Seminar in French Renaissance Literature. Cr. 3-4. (Graduate credit 2-3). Study of individual genres, authors, movements, or aspects of French literature of the Renaissance. May be repeated.

161 (261). Seminar in French Classical Literature. Cr. 3-4 (Graduate credit 2-3). Study of selected topics in the literature of the seventeenth and early eighteenth centuries. May be repeated.

162 (262). Seminar in French Literature of the Enlightenment. Cr. 3-4 (Graduate credit 2-3). Selected areas of study in the writings of pre-revolutionary France. May be repeated.

163 (263). Seminar in French Literature of the Nineteenth Century. Cr. 3-4 (Graduate credit 2-3). Study of such topics as Romanticism, Realism and Naturalism in the French novel, theatre, or poetry. May be repeated.

164 (264). Seminar in Contemporary French Literature. Cr. 3-4 (Graduate credit 2-3). Study of literary trend-setters in the novel, drama, or poetry of France before and after World War II. May be repeated.

168. University Course: Studies in French Civilization. Cr. 3. A course to meet the University Course Requirement. Study of the arts, history, literature, music, and philosophy of selected periods or aspects of French civilization. No knowledge of French required.

190. Directed Reading in French. Cr. 1-4. Intended for students capable of doing independent study in French language, civilization, and literature. Prerequisite: consent of the chairperson of the department.

191. The Teaching of Foreign Languages. Sem. 1. Cr. 2. (See Education 191). A study of the methods of teaching foreign languages in secondary schools. May not be counted toward a major or a minor in the Department of Foreign Languages. (Given upon sufficient demand.) Prerequisite: admission to Supervised Teaching.

GERMAN

Major. A minimum of 20 credits in German beyond German 30. (For the plan of study option, a student will be expected to take at least 24 credits in German beyond German 30.) Majors are required to take courses both in language and civilization (Courses 110-117, 130) and in literature (remaining courses).

Interdisciplinary Program in International Economics and Cultural Affairs. See page 95 for details.
Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 10 credits beyond German 30 constitutes a minor in German.

The Walther M. Miller Memorial Prize. See page 13 for details.

Undergraduate and Graduate Credit.

10. First Semester German. Cr. 4. A course designed to give the student the essentials of German. Course fee, $5.00. Credit may not be counted for graduation by a student who has completed a second year German course in high school.

20. Second Semester German. Cr. 4. A continuation of German 10. Prerequisite: German 10 or equivalent. Course fee, $5.00.

30. Intermediate German. Cr. 4. Reading, writing, and discussion in German on the intermediate level; review of German grammar. Upon sufficient demand a special reading section will be offered. Prerequisite: German 20 or equivalent.

50. Topics in German Literature. Cr. 3. A course to meet the Literature or Fine Arts Requirement. Study of a selected form or aspect of German literature in English translation. No knowledge of German required. May not be counted toward a major or minor in German.

110. Conversational German I. Cr. 2. Practice in speaking everyday German. This course is also intended for non-majors who wish to increase their conversational fluency. Prerequisite: German 30. May be repeated for credit at Reutlingen Study Center only.

111. Conversational German II. Cr. 2. A continuation of German 110 with work of increased difficulty. Prerequisite: German 110. May be repeated for credit at Reutlingen Study Center only.

112. Written German. Cr. 2. Practice in writing everyday German. This course is also intended for non-majors who wish to increase their writing ability. Prerequisite: German 30.

113. Advanced German. Cr. 2. A course intended primarily for students who plan to teach German, attend German universities, or to do graduate work in German. Writing, stylistics, and presentation of academic papers. Prerequisite: German 110 or 112.

114. Contemporary German Language in the Mass Media. Cr. 4. The contemporary German language as used in radio broadcasts, newspapers, magazines, and other sources from German-speaking countries. Prerequisite: German 111 or 112. Course fee, $5.00.

115. History of the German Language. Cr. 2-4. A survey of the development and phonetics of the German language. Prerequisite: German 110 or 120.

116. Professional German. Cr. 2. A study of the German language primarily for participants in the Interdisciplinary Program in International Economics and Cultural Affairs. The course will be adjusted to the career needs of the individual class. Prerequisite: German 110 or 112. Course fee, $5.00.

117. Advanced German Translation. Cr. 2. Exercises in the translation of practical and literary texts from and into German. Prerequisite: German 112.

120. Introduction to German Literature. Cr. 4. A study of the basic forms of German literature. Reading and discussion of at least one tragedy, one comedy, one Novelle, and selections from various types of poetry. Prerequisite: German 30.

125. The German Lyric. Cr. 2. A survey of German lyric verse from its beginning to modern times. Class reading, lectures, independent reading and phonograph recordings. Prerequisite: German 110 or 120.

126. The German Novelle and Short Story. Cr. 2. Systematic and historical study of the Novelle and the short story. Class reading and discussion of representative Novellen and short stories; lectures, independent reading, and class reports. Prerequisite: German 110 or 120.

128. The German Drama. Cr. 2. Development of the German drama from its beginning to modern times. Reading of representative plays of each period, lectures, and discussion. Prerequisite: German 110 or 120.
HEBREW

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 16 credits in Hebrew constitutes a minor.

Undergraduate Credit.

10. First Semester Hebrew. Cr. 4. Elements of Hebrew grammar stressing oral and reading ability. (Offered in alternate years.) Laboratory fee, $5.00. Credit may not be counted for graduation by a student with more than one year of high school credit in Hebrew.

20. Second Semester Hebrew. Cr. 4. A continuation of Hebrew 10, with reading of simpler prose sections of the Old Testament. (Offered in alternate years.) Laboratory fee, $5.00. Prerequisite: Hebrew 10 or equivalent.

30. Intermediate Hebrew. Cr. 4. Selected reading of Old Testament prose and poetry, with attention to increased vocabulary and linguistic structure. (Offered in alternate years.) Prerequisite: Hebrew 20 or equivalent.

120. Selected Readings in Hebraic Literature. Cr. 2-4. Readings for advanced students from the Old Testament and rabbinic literature. Prerequisite: Hebrew 30 or consent of the chairperson of the department.

LATIN

Major. A minimum of 20 credits in Latin beyond Latin 30.

Majors are expected to study at least one other foreign language. Recommended courses in other departments are: Art 101; English 110, 143; History 101, 102; Music 103; Philosophy 51; Speech and Drama 40.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.
RUSSIAN

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 16 credits in Russian constitutes a minor.

Undergraduate Credit.

10. First Semester Russian. Sem. 1. Cr. 4. An introduction to Russian stressing elementary grammar, pronunciation, and reading of simple texts. Course fee, $5.00. Credit may not be counted for graduation by a student who has completed a second year Russian course in high school.

20. Second Semester Russian. Sem. 2. Cr. 4. A continuation of Russian 10, with increased emphasis on reading and speaking. Prerequisite: Russian 10 or equivalent. Laboratory fee, $5.00. Offered in alternate years.

30. Intermediate Russian. Sem. 1. Cr. 4. An intermediate course in Russian, completing the basic grammar presentation, and reading of Russian and Soviet cultural material. Prerequisite: Russian 20 or equivalent. Offered in alternate years.

50. Topics in Russian Literature. Cr. 3. A course to meet the Literature or Fine Arts Requirement. Study of a selected form or aspect of Russian literature in English translation. No knowledge of Russian required. May not be counted toward a minor in Russian.

111. Russian Composition and Conversation. Cr. 4. Advanced study of Russian grammar. Written and oral reports. Conversation based on contemporary situations. Prerequisite: Russian 30 or equivalent.

112. Russian Composition and Conversation. Cr. 4. A continuation of Russian 111. Prerequisite: Russian 111 or equivalent.

153. Nineteenth-Century Russian Literature. Cr. 3. A study of nineteenth-century Russian literary trends through representative works of Pushkin, Lermontov, Gogol, Turgenev, and Dostoevsky. Prerequisite: Russian 30 or consent of instructor.

154. Late Russian and Early Soviet Literature. Cr. 3. A study of late nineteenth-century and early twentieth-century Russian and Soviet literary trends through representative works of Tolstoy, Chekhov, and Bunin, and of Gorky and Sholokhov. Prerequisite: Russian 30 or consent of instructor.

168. University Course: Studies in Russian Civilization. Cr. 3. A course to meet the University Course Requirement. Survey of major trends and influences in Russia and the Soviet Union. No knowledge of Russian required.

SPANISH

Major. A minimum of 20 credits beyond Spanish 30. Courses must include 111, 120, one course in civilization and one literature course numbered above 120. (For the plan of study option a student will be expected to take at least 24 credits in Spanish beyond Spanish 30.)

Interdisciplinary Program in International Economics and Cultural Affairs. See page 95 for details.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 10 credits above Spanish 30 constitutes a minor in Spanish.

Undergraduate and Graduate Credit.

10. First Semester Spanish. Cr. 4. An introduction to basic grammar, simple conversation and composition, and elementary comprehension. Emphasis is given to the culture of Spain. Course fee, $5.00. Credit may not be counted for graduation by a student who has completed a second year Spanish course in high school.

15. Refresher Course in First Semester Spanish. 7 weeks. Cr. 0. S/U grade.

20. Second Semester Spanish. Cr. 4. A continuation of Spanish 10 which completes the study of basic grammar. Students read simple to intermediate works, improve writing skills, Prerequisite: Spanish 10 or equivalent. Course fee, $5.00.


30. Intermediate Spanish. Cr. 4. A course in which the student will perfect grammar skills, deepen his understanding of Hispanic culture, and be expected to read uncomplicated works of literature, write compositions, and be able to sustain a general conversation. Prerequisite: Spanish 20 or consent of the chairperson of the department.

50. Topics in Hispanic Literature. Cr. 3. A course to meet the Literature or Fine Arts Requirement. Study of a selected form or aspect of Hispanic literature in English translation. No knowledge of Spanish required. May not be counted toward a major or minor in Spanish.


114. Contemporary Hispanic Society Through Communications. Cr. 4. Utilization of newspapers, magazines, radio, television, and essay as a basis for conversation, composition, and grammar study. Prerequisite: Spanish 111. Course fee, $5.00.

116. Professional Spanish. Cr. 2-3. An intensive study of the Spanish language and customs as applied to vocational situations. Offered alternately for service-oriented professions and business-oriented professions, Prerequisite: Spanish 111.

118. The Spanish Language. Cr. 2-3. An introduction to the development and usage of the Spanish language through the study of linguistics, particularly phonetics and philology. Prerequisite: Spanish 111.

120. Selected Readings in Hispanic Literature. Each sem. Cr. 4. The reading and discussion of works of Hispanic literature representative of various literary genres, with emphasis on the techniques of literary criticism and the problems of analyzing literature in a second language. Prerequisite: Spanish 111.

130. Spanish Civilization. Cr. 3-4. A course intended to further the student's knowledge of the varied elements of Spanish history and culture. Lectures and individual oral participation in Spanish. Prerequisite: Spanish 111.

131. Spanish-American Civilization. Cr. 3-4. A course intended to further the student's knowledge of the varied elements of Spanish-American history and culture. Lectures and individual participation in Spanish. Prerequisite: Spanish 111.

Note: All literature courses listed below have as their prerequisite Spanish 120, and will offer varying area sub-topics under the general headings listed below. All literature courses are taught entirely in Spanish. Certain of these courses may be repeated provided there is no duplication of material.

160. Themes in Hispanic Literature. Cr. 2-4. The examination of literary themes that cross the boundaries of either epoch or nation.

161. Topics in Golden Age Spanish Literature. Cr. 2-4. Selected areas of study concerning individual genres, authors, movements, or aspects of Spanish literature of the Golden Age. May be repeated, see note above.

162. Topics in Nineteenth Century Spanish Literature. Cr. 2-4. Selected areas of study concerning individual genres, authors, movements, or aspects of Spanish nineteenth century literature. May be repeated, see note above.

163. Topics in Spanish-American Literature. Cr. 2-4. Selected areas of study concerning individual genres, authors, movements, or aspects of Spanish-American literature. May be repeated, see note above.
164 (264). Topics in Contemporary Hispanic Literature. Cr. 2-4. (Graduate credit 2-3.) Selected areas of study concerning individual genres, authors, movements, or aspects of contemporary Hispanic literature. May be repeated, see note above.

168. University Course: Studies in Hispanic Civilization. Cr. 3. A course to meet the University Course Requirement. Study of the arts, history, literature, music, and philosophy of selected periods or aspects of Hispanic civilization. No knowledge of Spanish required.

190. Directed Reading in Spanish. Cr. 1-4. Intended for students capable of doing independent study in Spanish language, civilization, or literature. Research paper required. May be repeated, see note above.

191. The Teaching of Foreign Languages. Cr. 2. (See French 191 and Education 191.) Prerequisite: admission to Supervised Teaching.

GEOGRAPHY

STAFF: Professor Rechlin (Chairwoman); Professors Kaille, and Strietelemeier; Assistant Professors Hanss and Janke; K. Keilheim and J. Lyons

The Department has two major objectives: (1) to provide students with a fundamental knowledge of human behavior as it relates to the earth's physical and cultural environments; and (2) to equip students with marketable skills for employment in jobs related to the discipline, or to prepare them for graduate programs leading toward advanced degrees.

Student interest in geography outside of the classroom is encouraged through the Geographic Honor Society. The Alpha Xi Chapter of the Geographic Honors Society was installed at Valparaiso University on April 24, 1950.

Valparaiso University, with more than 125,000 maps, is one of the map repositories of the Army Map Service and United States Geological Survey from which the department currently receives thousands of national, regional, and topographic maps of all continents.

Social Science Credit is given for all geography courses EXCEPT 3, 4, and 5, which yield natural science credit.

General Major. A minimum of 30 credits in geography. Courses must include 1, 2, 3, 4, 62, at least one course from the 100-108 series, and one course numbered 150 or above.

Professional Major. Offered to students who are contemplating professional or graduate work in geography. Students with a professional major must take at least 35 hours in the department. They are required to take 1, 2, 3, 4, 62, and 154, and at least four of the following systematic or technical courses: 150, 152, 156, 160, 161, 166, 178, 195.

Professional Concentrations. The department emphasizes four professional career phases of the field: Environmental Management/Land Use Analysis; Meteorology/Weather Forecasting; Urban/Regional Planning; Cartography/

Map Making. In addition to specified courses to be taken within the Department of Geography, certain cognate courses from the natural sciences and the behavioral and social sciences, which most closely correlate with each program of geographic concentration, are recommended.

Minor. Although a minor is not required for graduation from the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 18 credits in geography constitutes a minor. Geography 1, 2, 3, and 4 must be included.

The Valparaiso University-Indiana University Northwest Geography and Geologic Association (Major in Geology). See page 101 for details.

Approval of Schedules. All students taking a major or a minor in the department, and all students planning to teach geography must have their schedules approved by the chairperson of the department at the beginning of each semester.

Undergraduate Credit (Offering Natural Science Credit).

3. Meteorology and Climatology. Each sem. 2-4, Cr. 4. An introduction into the causes of weather and associated climatic characteristics of each continent, as well as problems associated with the physical environment and forecasting weather conditions. Laboratory fee, $15.00. Geography 3 and 4 are complementary studies of the physical environment but need not be taken in sequence.

4. Geomorphology. Each sem. 2-4, Cr. 4. An introduction to the study of landform development. Geologic structure and the processes of erosion and deposition are analyzed. Laboratory fee, $12.00. Geography 3 and 4 are complementary studies of the physical environment but need not be taken in sequence.

5. Physical Geography of North America. 3-4, Cr. 4. An analysis of the landform, climate, vegetation, and soil regions of North America. Field trip optional. Prerequisite: Geography 3 or 4. Laboratory fee, $12.00.

Undergraduate and Graduate Credit (Offering Behavioral and Social Science Credit).

1. Introduction to Human Geography. Each sem. Cr. 3-4. A study of the physical and cultural environment. No knowledge of Spanish required. One hour of three books to read and evaluate under the direction of the instructor. Geography 1 and 2 are complementary but need not be taken in sequence.

2. Introduction to World Patterns. Each sem. Cr. 3-4. A survey of the world's great physical-cultural regions with special emphasis upon geographic theories, principles, and concepts. For a fourth hour of credit students must successfully complete a program of extra work under the direction of the instructor. Geography 1 and 2 are complementary but need not be taken in sequence.

60. Conservation of Natural Resources. Each sem. Cr. 3. A study of the nature of American resources, current problems in their development, attitudes that led to the creation of the Environmental Protection Agency, and the behavioral and social sciences, which most closely correlate with the physical environment may be considered. A student may repeat the course for credit as each new theme is investigated. The three-credit course will extend throughout the full semester and the two-credit course will extend through one-half semester. Prerequisite: sophomore standing or above.
72. Communicating with Maps. Cr. 3. Maps are analyzed as a form of communication. Various types of maps are studied and their techniques for communicating information are examined. Prerequisite: sophomore standing or above.

74. Geography of the North American Indian. Cr. 3. Regional treatment of the past and current conditions of North American Indian land use and settlement from the Columbian to the Reservation period. Special attention will be given to the regional analysis of native cultural areas and the impact of federal policy on contemporary social issues. Prerequisite: sophomore standing or above.

100-108. Regional Geography. Each sem. Cr. 3. A geographic interpretation of the physical, social, political, industrial and commercial processes and patterns of a particular region. Prerequisite: sophomore standing or above. Several regional courses may be offered each semester from the following:
100. United States and Canada. Cr. 3.
101. Latin America. Cr. 3.
102. Europe. Cr. 3. Recommended for students planning to participate in the Overseas Study Program.
103. Africa. Cr. 3.
104. Asia. Cr. 3.
105. Soviet Union. Cr. 3.
106. Near East. Cr. 3.
107. Australia-Oceania. Cr. 3.
108. Field Study in European Geography. Cr. 3. Overseas Study Program only.

150. Urban Geography. Cr. 3. A course treating urban settlements as distinct geographic units. Topics which will be covered include the history of urban settlement, economic classification of cities, and patterns of urban land use. Prerequisite: junior or senior standing.

152. Urban and Regional Planning. Cr. 3. A course treating the nature, purposes, and objectives of modern community planning for the promotion of social and economic well-being. Prerequisite: junior or senior standing. Field trip fee, $10.00.

154. Cartography. 0-6, Cr. 3. An introduction to cartographic techniques, compilation, construction, and reproduction. Prerequisite: junior standing. Laboratory fee, $15.00.

155. Air Photo Interpretation and Remote Sensing. 2-2, Cr. 3. An introduction to aerial photographs and data from remote sensors, including their use for land use planning. Prerequisite: Geography 4 or consent of instructor. May be of interest to students in biology, political science, and civil engineering. Laboratory fee, $12.00.

160. Statistical Analysis in Geography. Cr. 3. A course designed to teach the techniques of data collection and quantitative analysis. Prerequisite: junior or senior standing. Laboratory fee, $5.00.

161. Research Design. Cr. 3. Each time this course is offered a different topic will be selected for examination through which the methods of research are taught. Normally topics will deal with current problems in northwestern Indiana. The results of the class research frequently contribute to the solution of the problem studied. Prerequisite: junior or senior major or permission of the instructor. Laboratory fee, $10.00.

164. The Profession of Geography. Cr. 2. The nature of geography as a professional field of endeavor will be treated in the context of the ethical responsibilities of the practicing geographer. Opportunities to explore various aspects of geographic professionalism will be offered. Laboratory or field trip fee, $15.00. Open to junior or senior majors and minors.

166. History of Geography. Cr. 3. Readings, papers, and discussion on the development of geographic thought especially in the nineteenth and twentieth centuries; on basic concepts of the field; on the place of geography within thought and value systems; and on the contributions of major geographers, past and present, to the discipline and to the large world of thought. Prerequisite: junior or senior standing.

168. University Course: The Geography of Contemporary World Issues. Cr. 3. A course designed to introduce the non-geographer to the ways geographers analyze current world problems. May be used to fulfill the University Course Requirement.

170 (270). Political Geography. Cr. 2. An investigation of the relations among political activities, organizations and the geographic conditions within which they develop. Political power will be discussed in terms of spatial, human, cultural and ethnic geography. May be of interest to political science majors.

171 (271). Selected Topics in Physical Geography. Cr. 2-3. Advanced studies in physical geography. Such topics as weather forecasting, applied climatology, landform analysis, and the development of environmental impact statements will be considered. May be repeated with a change in topic. Prerequisites: Geography 3 or 4 or the equivalent and consent of instructor. Laboratory and/or field trip fee, $15.00.

174 (274). Historical Geography of the United States. Cr. 3. A regional treatment of the exploration, colonization, territorial expansion, migration, transportation, settlement, and economic development of our country in relation to the physical environment. The course is primarily designed for students majoring in one or another of the social sciences. Prerequisite: junior or senior standing. May be of interest to history majors.

176 (276). The Geography of World Affairs. Sem. 2. Cr. 2. A workshop course to develop the technique of interpreting current world events in the geographic framework in which such events occur. Prerequisite: junior or senior standing.

178 (278). Field Study. 0-4, Cr. 2. A laboratory and field course designed to develop insight into the purposes and techniques of geographic field work. Laboratory and field trip fee, $10.00. Prerequisite: consent of instructor.

185 (Formerly 168). Independent Study. Cr. 2-3. Individual research or readings on a topic in geography agreed upon by a student and a faculty member of his/her choice from within the departmental staff. Prerequisites: junior or senior standing and consent of the chairperson of the department.

196. Internship in Geography. Cr. 2-6. The students will gain practical experience by work in public or private agencies, such as planning firms, national parks, map companies, etc. Prerequisites: application for an internship must be made with the chairperson of the department. Open only to junior and senior geography majors.

Graduate Credit.

305. Geographic Thought. Cr. 3. A survey of the main strands of geographic thought from antiquity to the present. Emphasis is upon contemporary ways of knowing and interpreting the data of geography. Particular attention is given to the ideas, principles, and concepts which have been contributed by recent and contemporary scholars in the field. Opportunity is offered for consideration of the ethical, pedagogical, and vocational implications of geography.


315. Cultural Geography of the Non-Western World. Cr. 3. A geographic appraisal of the cultural regional patterns of the non-Western world.

320. American Resources. Cr. 3. A study of the development of thought with respect to the nature and function of natural resources of the United States in the context of prevailing physical and cultural conditions.
HISTORY

STAFF: Assistant Professor Schoppa (Chairman); Professors Boyd, Kautz, Krodel, and Staritt; Associate Professors Berg1, Engelder, Kohlhoff2, and Schaefer

Major. A minimum of 30 credits in history. Courses must include History 1, 2, 170, 196, one three-credit research seminar, and one course in non-Western history.

Students planning on graduate work are strongly urged to acquire reading proficiency in at least one modern foreign language.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 18 credits in history constitutes a minor. History 1 and 2 must be included.

Plan of Study Option. Students who intend to pursue the plan of study option to fulfill the concentration requirements for graduation (see page 83) should consider the following suggestions: It is recommended that students whose field of interest lies in the Humanities attain the ability to read a foreign language. In the cast of a modern language, it is further recommended that they develop a basic writing ability and sufficient oral ability to maintain a sustained conversation. It is also recommended that they take a year of philosophy and a considerable number of literature and fine arts electives. For students whose field of interest lies in the Social Sciences, or who will be teaching on the secondary level, it is recommended that they take a variety of geography, political science, economics, sociology, and psychology electives, and either a semester of philosophy, or a year of mathematics and/or statistics. Such students also might consider taking a course or courses in Computer Science.

Pre-Law Students. Pre-law students who are majoring in history should consult with their adviser about appropriate course selections and about the possible selection of a second major or minor.

Approval of Schedules. Students taking a major or minor in the department must have their schedules approved by the chairman at registration each semester. In addition, all majors above the freshman level are requested to select a member of the department for general advising of any nature.

Undergraduate and Graduate Credit.

SURVEY.

*1. History of Western Thought and Society. (Formerly Western Civilization I.) Cr. 3. A study of the thought and social development that has characterized Western Society from ancient to modern times. Special attention will be given to identifying the basic traditions of Western Culture and to examining the process of historical change.

*2. Introduction to the Contemporary World. (Formerly Western Civilization II.) Cr. 3. A survey of modern Western and non-Western history. Particular emphasis will be placed on the development of the various world civilizations in recent centuries and on the interaction that has occurred among them.

1Sabbatical Leave, Spring Semester 1979-1980. 2Sabbatical Leave, Fall Semester 1979-1980. *Credit for History 1 and 2 may be earned through the College Level Examination Program (CLEP) subject examination in Western Civilization.

*30. United States History to 1865. Cr. 3. A study of the various aspects of American civilization from the age of discovery to the end of the Civil War, with emphasis on the development of democratic ideas and institutions.

*31. United States History Since 1865. Cr. 3. A study of various aspects of American civilization from the Civil War to the present, with emphasis on the development of industrial and world power against a background of social and cultural tensions.

50. Origins of Latin American Civilization. Cr. 3. A survey of the major periods of Latin American history to 1825, with emphasis on the pre-Columbian Indian cultures, Africa's contribution, and the Iberian heritage.

51. Contemporary Latin American Civilization. Cr. 3. A survey of the republics from independence to the present, relating contemporary Latin American problems to underdevelopment and unrest in the current world scene.

60. Traditional East Asian Civilization. Cr. 3. A survey of the traditional cultures of China, Japan, and Korea prior to the impact of Western civilization.

61. Modern East Asian Civilization. Cr. 3. A survey of the modern history of China, Japan, and Korea, with emphasis on the meeting of East and West and the struggle for development and self-expression in our times.

EUROPEAN HISTORY.

Prerequisite: sophomore standing or consent of the chairperson of the department.

101. Ancient Mediterranean World I. Cr. 3. A study of the Eastern Mediterranean peoples from the earliest times to Alexander the Great.

102. Ancient Mediterranean World II. Cr. 3. A study of Hellenistic and Roman civilization to the 5th century A.D.

105 (205). Topics in Medieval and Early Modern European History. Cr. 3. An examination of individual periods and topics in European history from 600 to 1700, such as: the early Middle Ages, the later Middle Ages, the Age of the Renaissance, the Age of Absolutism, the Protestant Reformation, the Roman Catholic Reformation, the Age of Absolutism. Varied listings must be announced each semester. The course may be repeated for credit if the topics are different.

110 (210). French Revolution and Napoleon. Cr. 3. A study of the background, development, and significance of the French Revolution and Napoleonic Era.

115 (215). Europe from Bismarck to Lenin: 1870-1919. (Formerly Modern Europe I 1870-1919.) Cr. 3. A study of Europe emphasizing themes of nationalism, political evolution, militarism, industrialism, and Western World predominance to the close of World War I.

116 (216). Europe from World War I to the Present: 1919-. (Formerly Modern Europe II 1919-. ) Cr. 3. A study of Europe during the last half century emphasizing the aftermath of World War I, the Nazi Revolution, the road to World War II, and the post 1945 European setting.

120. History of England I. Cr. 3. A study of main currents in the evolution of the cultural, social, and constitutional institutions of England, and their importance for understanding American history.

121. History of England II. Cr. 3. A study of main currents in modern British history.

122. Modern Britain. Cr. 3. An examination of modern British history emphasizing selected problems. Cambridge Study Center only.

125. History of Germany. Cr. 3. A study of the German people since the 17th century, with emphasis upon the unique factors shaping their history to the present time.

126. Germany During the Sixteenth Century. Cr. 3. A study of the political, social, economic, and religious movements in Germany during the age of the Reformation. Reutlingen Study Center only.

*Credit for History 30 and 31 may be earned through the College Level Examination Program (CLEP) subject examination in American History.
127. Modern Germany. Cr. 3. An examination of modern German history emphasizing selected problems. Reutlingen Study Center only.

129. British Empire and Commonwealth. Cr. 3. A study of the Empire emphasizing its evolution in the nineteenth and twentieth centuries. Particular attention will be given to an introduction of the Old Dominions (Canada, Australia, New Zealand, and South Africa), to the British in India, and to interpretations of imperialism.

HISTORY OF THE AMERICAS.
Prerequisite: sophomore standing or consent of the chairperson of the department.


131 (231). The Founding of the Nation 1763-1815. Cr. 3. A study of the events leading to the American Revolution and the working out of new directions in the young United States.

132 (232). The Federal Union 1815-1860. Cr. 3. A study of the major problems that beset the American people from the close of the War of 1812 to the eve of the Civil War.

133 (233). Civil War and Reconstruction. Cr. 3. A study of the great watershed conflict in American history, with special emphasis on the problems of Black Americans.

134 (234). Modern America I 1869-1929. Cr. 3. An intensive study of recent United States history, emphasizing such themes as continental expansion, industrial development, political reform, immigration and urbanization, minority peoples, imperialism, and world power status.

135 (235). Modern America II 1929- . Cr. 3. An intensive study of recent United States history from the great depression and New Deal of the 1930's to the present.

137. History of the American City. Cr. 3. A study of urban life in America from the colonial town to the late 20th century megalopolis, with emphasis on industrialization, social class, ethnic and race relations, social and criminal violence, and urban ecology. The city of Chicago serves as a paradigm for much of American urban history, and students will investigate it in print and on a weekend field trip.

139 (239). Indiana History. Cr. 3. A survey of Indiana history from prehistoric times to the present. Beginning with a general geographical overview, the course will cover the Indian, French, and English periods and on through the American territorial and state development to the present.

140 (240). Constitutional History of the United States. Cr. 3. An examination of the growth of the American constitution with emphasis upon its formation and leading cases which determined its development.

150 (250). History of Mexico. Cr. 3. A study of the struggle for political, economic, and cultural identity in America's southern neighbor.

NON-WESTERN HISTORY.
Prerequisite: sophomore standing or consent of the instructor.

160. Traditional Chinese Civilization. Cr. 3. A study of the political, economic, social, and cultural development of traditional China from the earliest times to the 19th century.

161. History of Modern China. Cr. 3. A study of the decline of traditional civilization resulting from domestic crisis and foreign pressures, and the search for a new orthodoxy in the Chinese Revolution.

SPECIALIZED OFFERINGS.

168. University Course: The Making of Modern Society. (Formerly The Experience of History.) Cr. 3. This course is designed to consider the processes of modernization. It is an introduction to the development of contemporary society in its social, cultural, and political perspective. Emphasis will be placed on themes such as technological advance, the changing role of the family and the growth of centralized government. The course will be comparative when possible and will underscore the emergence of modern cultural values. This course may be used to fulfill the University Course requirement.

170. Introduction to Historical Research. Cr. 3. This course will examine the discipline of history, the sources of historical knowledge, and the problems and procedures of historical method. Prerequisite: 6 hours of history.

172. Reading and Discussion Seminars. Cr. 2-3. These are full- or half-semester courses covering a variety of subject areas with subtitles and content dependent upon student interest and instructor choice. Examples recently offered include Slavery in the Americas, the Jim Crow Era, and Social Reform Movements in United States History, and seven-week examinations of Russian, German, and Irish revolutionary movements in 19th and 20th century Europe. This course may be repeated for credit if the topics are different. Prerequisite: junior standing or consent of the chairperson of the department.

175. Research Seminars. Cr. 3. These are full-semester courses designed for majors, but open to other students with junior-senior standing also. They offer intensive research in both primary and secondary sources, and instruction in historical methodology. A major paper constitutes the largest part of the semester's work. This course may be repeated for credit if the topics are different. Prerequisite: junior standing or consent of the chairperson of the department.

180. Selected Readings in Historical Literature. Cr. 2-3. An opportunity for students to read extensively under the guidance of a member of the department a number of significant works on a given topic in history. Open to students who have taken at least eighteen hours of history and who have the prior consent of the instructor and the department chairperson. This course can only be taken once from a given instructor, only once per topic, and only once for a thirty-hour major.

191. The Teaching of Social Studies. Cr. 2. (See Education 191.) A study of the methods of teaching social studies in secondary schools. Prerequisite: admission to Supervised Teaching. This course may not be counted toward a major or minor in the department.

196 (296). The Interpretation of History. Cr. 2. An introduction to selected major historians and their approaches to problems of interpretation faced by students of history. Prerequisite: six hours of history.

Graduate Credit.

325. The Western Tradition I. (Also offered as English 325.) Cr. 2. A study of some of the important aspects of the heritage that has come down to us from the ancient Greek, Roman, and Judeo-Christian cultures. This course will be devoted, for the most part, to a close reading of important selected texts.

326. The Western Tradition II. (Also offered as English 326.) Cr. 2. A study of some of the important aspects of the heritage that has come down to us from the Middle Ages, the Renaissance, and the Reformation. This course will be devoted, for the most part, to a close reading of important selected texts.

335. Problems in European History. Cr. 3. An intensive study of a significant period or movement in European history. Subtitles and content will depend upon instructor's choice and student interest. Normally, this course will require a major paper.

336. Problems in United States History. Cr. 3. An intensive study of a significant period or movement in American history. Subtitles and content will depend upon instructor's choice and student interest. Normally, this course will require a major paper.

337. Problems in East Asian History. Cr. 3. An intensive study of a significant period or movement in East Asian history. Subtitles and content will depend upon instructor's choice and student interest. Normally, this course will require a major paper.

340. Stuart England. Cr. 3. A concentration upon the religious, political, economic, and social problems of 17th century England, involving civil war, regicide, political experimentation, restoration, and a resolution of the basic problem of sovereignty.

356. Latin America in the 20th Century. Cr. 3. A study of the Latin American peoples since 1900, their internal problems, policies, and foreign relations. Attention will be centered upon Mexico and the Caribbean.
HOME ECONOMICS

STAFF: Associate Professor Shabowich (Chairwoman); Assistant Professors G. Evans and Manning; R. Adgate and P. Sampson

Courses offered by the Department are designed to develop students intellectually and to prepare them professionally. In order to fulfill requirements for the major, students must complete basic competency requirements in one of the following emphases. (Students should consult their advisors to determine additional requirements, if any, for professional certification.)

General Home Economics. A minimum of 32 credits in home economics is required which must include 5, 7 or 45, 8, 11, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Psychology 51; Sociology 51; Speech/Drama 45.

General Dietetics. A minimum of 32 credits in home economics is required which must include 5, 8, 45, and 140. In addition, students must complete Chemistry 43, 44, 55; Economics 71; Sociology 1; Biology 50; Psychology 51; and English 57.

Students entering this program after their freshman year may find an additional semester(s) required to complete the requirements of the program. The dietetics program meets the American Dietetics Association requirements for undergraduate studies. In addition, it is necessary to complete the experience component and pass the registration examination to become a registered dietitian. Details may be obtained from the program adviser.

Teacher Education. A minimum of 49 credits in home economics is required which must include 6, 8, 45, 104, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Sociology 51; Speech/Drama 45; Psychology 51. (For education requirements see page 115.)

Students entering this program after their freshman year may find an additional semester(s) necessary to complete the program requirements. Upon completion of all the requirements, the student may apply for a consumer/homemaking vocational license.

Child Development. A minimum of 32 credits in home economics is required which must include 5, 8, 11, 45, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Psychology 51; Sociology 51; Speech/Drama 45.

Students planning careers in child development and/or preschool education may wish to consider completing a program of one or two semesters with the Merrill-Palmer Institute, Detroit, Michigan. (See page 100 for further information.) This program should be entered no later than the second semester of the sophomore year.

Interior Design. A minimum of 32 credits in home economics is required which must include 5, 7, 8, 11, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Psychology 51; Sociology 51; Speech/Drama 45.

Fashion Merchandising. A minimum of 32 credits in home economics is required which must include 5, 7, 8, 11, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Psychology 51; Sociology 51; Speech/Drama 45. From the College of Business, the following courses must be completed: Accounting 1; Economics 71; Administrative Sciences 21, 31, 132 or 133, 41 or 137.

Foods Merchandising. A minimum of 32 credits in home economics is required which must include 5, 8, 11, 45, 140. In addition, students must complete Chemistry 43, 44; Biology 50; Psychology 51; Speech/Drama 45. From the College of Business, the following courses must be completed: Accounting 1; Economics 71; Administrative Sciences 21, 31, 132 or 133, 41 or 137.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 15 credits in home economics constitutes a minor. Courses must include 7 or 45, 8, and 168.

Other Plans. The department offers plans in several areas: Home Economics/Journalism; Home Economics/social work; Home Economics/business minor.

Departmental Organizations. The Valparaiso University Student Home Economics Association (SHEA) is affiliated with the national and state professional home economics organizations. Membership is open to all students. Professional programs are presented once a month. The Student Diatetic Association is open to all students interested in the dietetics profession.

The Gamma Tau Chapter of the national home economics honor society, Kappa Omicron Phi, was installed at Valparaiso in 1975. Students with outstanding scholarship and membership in SHEA are invited to membership in their junior or senior year.

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

Undergraduate Credit.

4. Elementary Graphics. (Also offered as General Engineering 4.) Sem. 2. 1+3, Cr. 2. A course of study designed to acquaint the student with the graphic language-techniques (lettering and line work), scale drawing and size description, orthographic projection, sectional representation, and other conventional methods, graphic theory involving lines and plane relationships, and pictorial representation (perspective and isometric). Emphasis on blue-print reading and interpretation of plans and elevations. Brief survey of methods, practices, and techniques of home construction. (Not open to engineering students.) Prerequisite: sophomore standing. Laboratory fee, $5.00. (Given in alternate years.)

5. Foods. Sem. 1. 3+0, Cr. 3. A course covering the history of food from ancient times to modern, the food marketing structure, food sanitation and those factors which affect human food habits.

6. Principles of Food Preparation. Each sem. 2+4, Cr. 3. Emphasis on the application of scientific principles to the preparation of food and the ability to evaluate quality of prepared food. Laboratory fee, $35.00.

7. Fundamental Nutrition. Sem. 2. 3+0, Cr. 3. A study of the basic principles of human nutrition and their application to the development of good food habits for individuals and families.
8. Art in Daily Living. Sem. 2. 3+0, Cr. 3. A study of the elements and principles of design in relation to our human environment. The goal is the development of aesthetic awareness and evaluation skills. Field trip may be arranged. Laboratory fee, $5.00.

11. Interdisciplinary Aspects of Clothing. Sem. 2. 3+0, Cr. 3. An interdisciplinary approach to the study of the social, psychological, historical, cultural, economic, and aesthetic forces that affect clothing behavior.

12. Basic Clothing Construction. Sem. 2. 1+4, Cr. 2. The purpose of this course is to enable the student to understand elementary principles of clothing construction and learn basic skills. Laboratory fee, $5.00.

20. Clothing Construction and Flat-Pattern Design. Each sem. 1+6, Cr. 3. Principles of designing with the flat pattern and fitting garments. Evaluation of various construction methods in relation to construction, and end use. Study of construction and care. Field trip arranged. Laboratory fee, $5.00. Prerequisite: Home Economics 12 or consent of the chairperson of the department.

45. Human Nutrition. Sem. 1. 3+0, Cr. 3. A study of the principles of human nutrition, metabolism of nutrients, nutrient requirements, and nutrient composition of foods. Prerequisite: Chemistry 44 or 71.

51. Meal Management. Each sem. 1+6, Cr. 4. A study of the economic and nutritional problems involved in buying and utilizing food and of the managerial aspects of meal planning and meal service. Guest meals which are planned, prepared and served by the students throughout the semester are followed by product and performance evaluation. Prerequisites: Home Economics 6 and 7 or 45. Laboratory fee, $40.00.

52. Tailoring. Sem. 1. 1+6, Cr. 3. Custom and speed tailoring techniques used in the construction of suits and coats. Field trip arranged if time permits. Prerequisite: Home Economics 20 or consent of the department chairperson. Laboratory fee, $5.00.

65. Physiological Chemistry. (Also offered as Chemistry 55.) Sem. 1. 3+0, Cr. 3. The chemistry of proteins, carbohydrates, and fats, and the changes these undergo during processes of digestion and metabolism; brief consideration of enzymes, vitamins, and the chemistry of food processing. This course may not be counted towards a major or minor in chemistry. Prerequisite: Chemistry 44.

101. Family Health. (Also offered as Physical Education 47.) Each sem. 2+0, Cr. 2. A study of health concerns as they relate to the needs of the family. Offered as a short course.

102. Interior Design. Sem. 1. 3+0, Cr. 3. Application of the principles of art to the design of the home and its furnishings as demonstrated in historic and contemporary dwellings. Field trip arranged. Prerequisites: Home Economics 6 and junior standing or consent of the chairperson of the department.

104. Textiles. Sem. 2. 3+0, Cr. 3. An advanced course in textile fibers, yarns, fabric constructions and finishes in relation to satisfactory performance for consumer end uses. Textile selection and care, consumer protection and objective textile testing are included. Field trip arranged. Laboratory fee, $5.00. Prerequisites: Home Economics 11 and junior standing or consent of department chairperson.

105. Housing and Equipment. Sem. 2. 4+0, Cr. 4. A study of family housing needs as influenced by family life cycle, geographic location, and income. Problems concerning the choice of house plans, exterior designs, and home construction practices are included. Home equipment including purchasing, operation, care, and servicing will also be considered. Field trip arranged. Prerequisite: junior standing.

125. Experimental Foods. Sem. 1. 1+5, Cr. 3. An advanced course in food science theory and preparation using sensory and objective testing methods for evaluating products. Recipe development and applications to the food industry are included. Prerequisites: Home Economics 6 and Chemistry 44. Laboratory fee, $35.00.

126. Cultural Aspects of Food. Sem. 2. 2+3, Cr. 3. A study of the historical, social, psychological, economic, religious and aesthetic significance of food in various cultures. Prerequisite: junior standing or consent of the chairperson of the department. Fee, $40.00.

131. Clothing Design Through Draping. Sem. 2. 1+4, Cr. 3. Principles of apparel design by draping fabric on a dress form to create original designs and an understanding of the interrelationships of material, design and form. Prerequisites: Home Economics 8 and 20. Laboratory fee, $5.00.

135. The Fashion Business. Sem. 1. 3+0, Cr. 3; 3+2, Cr. 4. A study of the fashion industry as it relates to fashion merchandising. An additional credit may be earned through a guided work experience program. Field trip arranged. Prerequisites: Home Economics 11, Administrative Sciences 31, and senior standing.

140. Child Care and Development. Sem. 1. 3+2, Cr. 4. A study of factors affecting the physical, social, mental, and emotional development of young children in the home and fundamental principles in the care and guidance of children. An observation of a pre-school or family situation for two hours per week and three pre-school visitations of two hours each are assigned. Prerequisites: Psychology 51 and junior standing.

149. Quantity Food Service. Sem. 1. 2+4, Cr. 3. A study of quantity food production and service. Consideration is given to menu planning, production and service methods, storage facilities, equipment, and sanitation necessary for institutional food service. Field trips and laboratory arranged to observe and study various types of food service operations. Prerequisite: Home Economics 51.

150. Organization and Management of Food Services. Sem. 2. 3+0, Cr. 3. A study of the organization and administration of the food service industry including the principles of management and the role of the manager, as well as the structure of the organization. Consideration is given to the control of personnel, costs, and safety. Prerequisites: Home Economics 149 and Accounting 1 or consent of the chairperson of the department.

152. Home Management Theory. Sem. 2. 3+0, Cr. 3. A study of the principles and concepts of home management. Resource use as affected by values, goals, and standards will be studied; consideration will be given to decision making skills. Prerequisite: junior standing.

155. Home Management Practicum. Sem. 1. 3+0, Cr. 3. The application of management principles to resource use. Students will be assigned individual and group projects and must develop their ability to use their resources effectively to reach their goals. Prerequisite: Home Economics 152.

162. Advanced Nutrition. Sem. 2. 3+0, Cr. 3. An advanced study of the metabolism of nutrients and nutrient requirements during the life-cycle. Techniques for the evaluation of nutritional status are emphasized. Research techniques and current research results will receive attention. Prerequisites: Home Economics 45, Biology 115, and Chemistry 44.

164. Diet Therapy. Sem. 2. 3+0, Cr. 3. Application of the principles of nutrition to the dietary treatment of acute and chronic illnesses. Prerequisites: Home Economics 46, Biology 115, and Chemistry 44.

166. University Course: Consumer Economics. Each sem. 3+0, Cr. 3. The study of various consumer products, services, legislation, and agencies. May be taken to fulfill University Course Requirement.

168. Principles and Philosophy of Vocational Education. Sem. 2. 3+0, Cr. 3. A study of the fundamental philosophy and principles of vocational education as related to the needs of the beginning vocational educator. Consideration is given to the organization and coordination of vocational education. Field trip arranged.

190. Organization and Coordination of Vocational Education. Sem. 1. 3+0, Cr. 3. A study of vocational education as it deals with local, area, state, regional and federal relationships. Consideration is given to the foundations and principles of vocational education needed by the Home Economics Consumer/Homemaking Teacher. Field trip arranged. Prerequisite: senior standing or consent of the department chairperson.

191. The Teaching of Vocational Home Economics. Sem. 2. Cr. 2. (See Education 191.) A study of the problems and methods of teaching vocational home economics. This course may not be counted towards a major or minor in this department. Prerequisite: admission to Supervised Teaching. Laboratory fee, $5.00.

195. Independent Study. Each sem. Cr. 1-3. Independent work in a specialized area of home economics as agreed upon by the student and faculty adviser. Proposals for 2 or 3 credits must be approved by the department chairperson. Guidelines are available from the faculty. Prerequisite: junior or senior standing.

196. Professional Seminar and Field Experience in Dietetics. Each sem. Cr. 2. Field
work in hospitals or other health care facilities arranged with registered dietitians to provide experience in both clinical and management dietetics. Seminar discussions and presentations will be based on field experiences and focus on broadening professional preparation. Prerequisite: junior or senior standing.

JOURNALISM

STAFF: Associate Professor Galow (Chairman); K. Wall

Major. 30 credits in journalism and related fields. Courses must include Journalism 130, 131, 132, 134 or 135, 136 or 137, and 6 credits in 170 (at least 3 credits in internship).

In addition to the above, the student must earn 9 credit hours selected from the following: Art 61, 62, or 65; Art 131 or 132; Speech and Drama 42, 142, or 143; Journalism 133, 134 or 135, 136 or 137, 170, 172, 173, or 175; 142, or 143; Journalism 133, 134 or 135, 136 or 137, 170, 172, 173, or 175.

In certain instances and with consent of the chairperson of the department, the student may substitute courses in other departments for those on the list. A plan of study should be submitted to the chairperson of the department for the first semester of the junior year.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on the student's transcript.

A minor in journalism consists of 18 credit hours which must be earned in the following courses: Journalism 130, 131, 132, and 170; and two courses selected from Art 61, 62, 65, 131, and 132; Speech and Drama 42, 142, and 143; and Journalism 133, 134, 135, 136, 137, 170, 172, 173, and 175.

Teaching Minor. A teaching minor consists of 24 credit hours which must be earned in the following courses: Journalism 130, 131, 132, 134, 170, and 176; and 6 hours of elective credit from the following: Speech 42, 142, 143; Art 61, 62, 65, 131, 132; English 57, 122, 131; and Journalism 133, 135, 170, 172, 173, 175.

Approval of Schedules. All students majoring or minoring in journalism must have their schedules approved by the chairperson of the department at the beginning of each semester.

Undergraduate and Graduate Credit.

130. Introduction to Mass Communications. Cr. 3. A course in the history, development and function of mass media in society. Analysis and evaluation of the performance of the media and their relationship to society and government. Ethical and legal decisions affecting the First Amendment. Laboratory practice. Prerequisite: English 2, 3-4, or 5.

131. Newswriting. Cr. 3. A course in the fundamentals of news writing and news gathering. Practice in writing various types of news stories; problems of in-depth writing and reporting; introduction to newspaper organization and methods. Laboratory and field work. Prerequisite: English 2, 3-4, or 5.

132. Newsediting. Cr. 3. A course in copy editing, headline writing, and newspaper make-up. Basic principles of news evaluation; photo editing; introduction to layout. Laboratory practice. Prerequisite: Journalism 131 or consent of the chairperson of the department.
Major. A minimum of 28 credits in mathematics. Courses must include those in one of the following programs.

Program I (Emphasis on Mathematical Analysis): 71 or 75, 72 or 76, 77, 102, 114 or 139, 177 or 184, 193, 194 or 196, and one additional course numbered above 100.

A student seeking the Bachelor of Science degree in mathematics must complete Program I and include Mathematics 107 in the 32 credits in mathematics required for this degree.

Program II (Emphasis on Finite Mathematics): 51, 52, 54, Computer Science 60 and 23 or 25, 102, 132 or 163, 193, 194 or 196, and two of the following: Computer Science 62 or 64, 114 or 139, 163 or 132.

A mathematics major will not be completing a second major in another department, then at the beginning of the junior year, he/she must submit a detailed program for his/her field of concentration, subject to approval by the chairperson of this department. The plan of study should include at least 40 credits in mathematics and related fields and it must include at least one course which applies mathematics to a related field (e.g., Mathematics 163).

A student in Program II who files a Plan of Study should include a minor in biology, computer science, economics, geography, political science, psychology, or sociology.

A student having a major in view should begin mathematics in the freshman year. A mathematics major should elect French, German, or Russian to satisfy the foreign language requirement of the College of Arts and Sciences. Anyone planning to do graduate work in mathematics should complete Program I and include Mathematics 114 and 177.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 12 credits in mathematics, including one of the courses 36, 52, 72, or 76, constitutes a minor. No computer science course numbered less than 62 may be counted toward a minor. At least four credits are required in two courses other than the following: 31, 33, 35, 36, 51, 52, 70, 71, 72, 75, 76.

Placement Examination. Any student who expects to take a pre-calculus course (35 or 51), a calculus course (71 or 75), or a computer science course (60, 23, or 25) should take the Mathematics Placement Examination during Orientation Week. The Department of Mathematics will provide guidance prior to registration to any student who is unsure as to which of the courses 35, 51, 71, or 75 he/she should take.

Approval of Schedules. All students taking a major or minor in the department and all students planning to teach mathematics must have their schedules approved by the chairperson of the department (or representative) at the beginning of each semester.

Undergraduate Credit.

14. Mathematical Ideas. Each sem. Cr. 4. A one semester course intended primarily for students majoring in the humanities. Important concepts in mathematics will be studied from a non-technical point of view. Prerequisite: restricted to students who have not previously completed a college mathematics course.

31. Matrix Algebra. Each sem. 7 weeks. Cr. 2. (Not offered after Fall Semester 1979.) A course for students not majoring in mathematics or the physical sciences. Topics include elementary matrix theory, solution of systems of linear equations, and an introduction to linear programming. Prerequisite: consent of the chairperson of the department.

33. Elementary Functions. Each sem. 7 weeks. Cr. 2. (Not offered after Fall Semester 1979.) For students not majoring in mathematics or the physical sciences, this is a course on the basic concepts of functions and a study of the elementary functions. Topics include relations, inequalities, functions and their graphs, composition, inverses and their properties; polynomial, exponential, and logarithmic functions. Prerequisite: consent of the chairperson of the department.

35. Finite Mathematics and Elementary Functions. Each sem. Cr. 4. A course for students not majoring in mathematics or the physical sciences. Topics include elementary matrix theory, solution of systems of linear equations, an introduction to linear programming, relations, inequalities, functions and their graphs, composition, inverses and their properties, and polynomial, exponential, and logarithmic functions. Prerequisite: satisfactory score on the Algebra Section of the Mathematics Placement Examination.

36. Intuitive Calculus of One Variable. Each sem. Cr. 4. This course is an intuitive treatment of the calculus for students not majoring in mathematics or the physical sciences. Topics include sequences, mathematics of finance, differential and integral calculus, and applications. Prerequisite: one of the following: Mathematics 33, 35, 51, 70, 71, or the equivalent.

40. Laboratory in Elementary Mathematics. Sem. 1. 0+2, Cr. 1. This course is designed to provide an opportunity for the prospective elementary teacher to learn certain mathematical concepts in an active, materials-centered situation. Enrollment is restricted to students in the special curriculum in elementary education. Prerequisite: concurrent registration in Mathematics 43, S/U grade.

42. Elementary Mathematics I. Sem. 1. Cr. 4. This course is restricted to students majoring in elementary education. Topics include elementary logic, sets, numeration systems with their historical backgrounds; elementary number theory; mathematical systems, the whole number system, and the rational number system.

44. Elementary Mathematics II. Sem. 2. Cr. 4. This is a continuation of Mathematics 43. Additional topics include intuitive geometry, non-metric and metric approaches to geometry, geometric figures of the plane and space, the axiomatic approach; elements of probability and statistics; concepts of algebra, functions, and graphs. Prerequisite: Mathematics 43.

51. Finite Mathematics and Precalculus. Sem. 1. Cr. 4. 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 elementary functions—polynomial, rational, algebraic, exponential, and logarithmic—absolute value and inequalities, matrix algebra and linear programming, finite probability and progressions. Not open to students who have completed Mathematics 31 or 33 or 35. Prerequisite: good scores on the Algebra and Elementary Functions Sections of the Mathematics Placement Examination.

52. Intuitive Calculus of One or More Variables. Sem. 2. Cr. 4. 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 an introduction to trigonometric functions, limits, continuity, derivatives and their applications, integrals and their applications, and selected topics in multivariate calculus. Prerequisite: Mathematics 51 or the equivalent.

*Credit for Mathematics 56 may be earned through the College Level Examination Program (CLEP) subject examination in Introductory Calculus.
54. **Statistical Analysis.** Each sem. Cr. 3-4. A course in statistical methods for students not majoring in mathematics. Topics include probability, empirical and theoretical distributions, sampling, decision and regression, testing hypotheses, estimation of parameters. Emphasis will be placed on illustrations and application of these techniques to the field. Prerequisites: Mathematics 54 or the equivalent.

57. **Quantitative Methods.** (Also offered as Administrative Sciences 23.) Each sem. Cr. 3. A course covering operations research models in the field of management science. Topics such as Bayesian decision-making, inventory analysis, linear programming, queuing theory, and simulation are included. Prerequisites: Mathematics 54 and 36 or 52.

70. **Precalculus.** Sem. 1. Cr. 1-3. A course for students who plan to take the calculus sequence. Topics include sets and numbers, relations and functions, circular and trigonometric functions, exponential and logarithmic functions. Prerequisite: proficiency in algebra. It is recommended that students take Mathematics 70 and computer programming concurrently. (Not offered in 1979-1980.)

71. **Analytic Geometry and Calculus I.** Sem. 1. Cr. 5. A course designed for students who plan to major in mathematics, engineering, or a physical science. Topics include sets and numbers, relations and functions, algebraic and trigonometric functions, inequalities and absolute value, limits, continuity, derivatives, and an introduction to the theory of the integral. Time is devoted to the precalculus roots of each topic as it is encountered in order to help the student better to learn the calculus. Prerequisite: a satisfactory score on the Algebra section of the Mathematics Placement Examination. It is recommended that students take Mathematics 71 and Computer Science 23 or 25 or General Engineering 20 concurrently.

71a. **Analytic Geometry and Calculus II.** Sem. 2. Cr. 5. A continuation of Mathematics 71. Topics include analytic geometry, area, applications of the definite integral, techniques of integration, exponential, logarithmic, and inverse trigonometric functions, indeterminate forms and improper integrals. Prerequisites: Mathematics 71 or 75 and some computer programming ability.

**75. Calculus I.** Each sem. Cr. 4. This course is designed for students who plan to major in mathematics, engineering or a physical science. Topics include a brief review of set theory, induction and the real number system; algebraic and trigonometric functions, inequalities and absolute value; limits, continuity, limits and derivatives; and an introduction to the theory of the integral. Prerequisite: proficiency in precalculus mathematics. (It is recommended that students take Mathematics 75, Computer Science 23 or 25 or General Engineering 20 concurrently.)

76. **Calculus II.** Each sem. Cr. 4. A continuation of Mathematics 75. Topics include area; techniques of integration; exponential, logarithmic and inverse trigonometric functions; topics from analytical geometry, indeterminate forms and improper integrals. Prerequisites: Mathematics 75 and some computer programming ability.

77. **Calculus III.** Each sem. Cr. 4. A continuation of Mathematics 76. Additional topics include sequences, series, polynomial approximation to functions, and multiple integration. Prerequisite: Mathematics 76 or 72.

81. **Topics in Mathematics I.** Sem. 1. Cr. 1-2. A course designed for students who plan to major in mathematics, engineering, or a physical science. Topics such as combinatorics and probability will be studied. Prerequisite: concurrent enrollment in Mathematics 75 or consent of the instructor.

82. **Topics in Mathematics II.** Sem. 2. Cr. 1-2. A course designed for students who plan to major in mathematics, engineering, or a physical science. Topics such as ways in which the computer can be applied to analytic computation will be included. Prerequisite: concurrent enrollment in Mathematics 76 or consent of the instructor.

102. **Linear Algebra and Its Applications.** Each sem. Cr. 4. Matrices and linear transformations; eigen values, eigen vectors and characteristic polynomials; minimum polynomial and canonical forms; applications to differential equations and other areas. Prerequisites: Mathematics 52 or 72.

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**104. Differential Equations with Linear Algebra.** Each sem. Cr. 4. Matrices and systems of linear equations; vector spaces and linear transformations; elementary and linear differential equations; introduction to systems of linear differential equations. Prerequisite: Mathematics 72 or 76.

**107. Differential Equations with LaPlace Transforms.** Sem. 1. Cr. 3. Elementary and linear differential equations; series solutions including the method of Frobenius; LaPlace transforms. Prerequisites: Mathematics 77 and 102 or 104.

114. **Abstract Algebra I.** Each sem. Cr. 4. This course provides an introduction to modern abstract algebra. Topics include: relations, operations, and set algebra; congruences and number systems; properties of groups, rings and fields. Prerequisite: Mathematics 52 or 72 or 76.

115. **Introduction to Operations Research.** Sem. 2. Cr. 3. A survey of deterministic and probabilistic models used in Operations Research and Management Science. Topics include linear programming, inventory models, networks, queues, Markov chains, dynamic programming and simulation. Prerequisites: Mathematics 102 or 104 and 54 or 145. (Offered upon sufficient demand.)

137. **Numerical Methods.** Sem. 1. Cr. 3. The analysis and implementation of basic numerical techniques: matrix methods for the solution of systems of equations, interpolating polynomials, finite differences, numerical differentiation and integration, numerical solution of differential equations, zeros of non-linear equations and error analysis. Students are expected to solve problems using a digital computer. Prerequisites: Mathematics 77 and either 102 or 104 and proficiency in an algorithmic computer language. (Offered upon sufficient demand.)

139. **Applied Algebra.** Sem. 1. Cr. 3. A course in algebraic structures from the perspective of computational mathematics. Graphs, semi-groups, groups, Boolean algebras, lattices, rings, fields, and modules. Students are expected to solve problems using a digital computer. Prerequisites: Mathematics 52 or 72 or 76 and proficiency in an algorithmic computer language. (Offered upon sufficient demand.)

145. **Probability and Statistics.** Each sem. Cr. 3-4. An introduction to probability and statistics, including probability spaces, random variables, classical discrete and continuous probability distributions, correlation and regression, the Central Limit Theorem, and the elements of applications of these topics to statistical inference. Prerequisite: Mathematics 77.

146. **Mathematical Statistics.** Sem. 2. Cr. 3. A continuation of Mathematics 145. New topics include sampling theory, estimation, tests of hypotheses, analysis of variance, and non-parametric statistics. Prerequisite: Mathematics 145. (Offered upon sufficient demand.)

154. **Elements of Geometry.** Sem. 2. Cr. 4. Logic, axiom systems, and models; consistency, independence, and completeness; consideration of the foundations of Euclidean geometry; incidence, separation, congruence; an introduction to non-Euclidean geometry; topics from projective geometry. Prerequisite: Mathematics 36 or 52 or the equivalent.

163. **Mathematical Models in the Life and Social Sciences.** Sem. 2. Cr. 3. Topics will be chosen according to the interests of the class. These may include: utility and measurement, graph theory, game theory, learning models, models of growth processes, and simulation. Prerequisites: Mathematics 54 and one of the following: 56, 62, 72, 76. (Offered upon sufficient demand.)

166. **History of Mathematics.** Sem. 2. Cr. 3. A survey of the development of mathematics from the earliest time to the present. Special emphasis on topics in geometry, algebra, and elementary calculus which are related to secondary school mathematics. This course may not be counted toward a minor in mathematics. Prerequisite: Mathematics 36 or 52 or the equivalent. (Given in alternate years. Offered in 1979-1980.)

177. **Analysis.** Sem. 1. Cr. 4. Differentiation and convergence in real n-space; implicit function theorems; topology of the real line and metric spaces; theory of the integral; multiple integration and the Jacobian; uniform convergence. Prerequisite: Mathematics 77.

182. **Introduction to Complex Variables.** Sem. 2. Cr. 3. Analytic functions; derivatives; power and Laurent series; integrals; residues; conformal mapping; complex inversion formula for the LaPlace transform; applications to partial differential equations. Prerequisite: Mathematics 104. (Offered upon sufficient demand.)

186. Vector and Tensor Analysis. Either sem. Cr. 3. Curvilinear co-ordinates, divergence, curl, line and surface integration, vector integration theorems and cartesian tensors. Prerequisite: Mathematics 77. (Offered upon sufficient demand.)

189. Topics in Mathematics. Each sem. Cr. 3. An advanced course for mathematics majors. The topic studied, which may change from year to year, will ordinarily be one of the following: number theory, advanced abstract algebra, differential geometry, partial differential equations, measure and integration or functional analysis. This course may be repeated for credit. Prerequisite: consent of the chairperson of the department. Specific course requirements will depend on the content. (Offered upon sufficient demand.)

190. The Teaching of Mathematics. Sem. 1. Cr. 2. (See Education 191.) A study of the mathematics of teaching mathematics in secondary schools. Prerequisite: admission to Supervised Teaching. This course may not be counted toward a major or a minor in mathematics.

193. Mathematics Colloquium. Each sem. Cr. 0. Students are required to attend the sessions of Mathematics 194 and participate in the discussion of topics presented by faculty and students. Prerequisites: junior standing and Mathematics 102 or 104, S/U grade.


195. Readings in Mathematics. Each sem. Cr. 1-3. Students study advanced topics in mathematics under the supervision of a faculty member. Written work is required. Prerequisite: consent of the chairperson of the department.

196. Independent Study in Mathematics. Each sem. Cr. 3. Each student must undertake a research problem in mathematics under the direction of a faculty member. Written and oral reports are required. Prerequisite: consent of the chairperson of the department.

Graduate Credit.

243. Structures of Number Systems. Cr. 3. Vocabulary and symbolism of sets, language and the nature of deductive reasoning, number theory and numeration systems, number systems and their properties, modular number systems and groups, postulational method and the search for structure. This course is intended for teachers in the elementary schools. Not open to students who have had a year of calculus.

244. Topics in Mathematics for Elementary Teachers. Cr. 3. Non-metric and metric approaches to number, geometric figures of the plane and space, proof and structure as exemplified in geometry; topics in algebra, probability, and statistics. This course is intended for teachers in the elementary school. Not open to students who have had a year of calculus. Prerequisite: Mathematics 243 or equivalent.

COMPUTER SCIENCE

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minor in computer science consists of 62 or 64, 124, 127, 128, and one of the following: Computer Science 121, Mathematics 137, or Electrical Engineering 143. In addition, the student must have a background in mathematics equivalent to at least Mathematics 36 or 52 and 54.

Lectures. The Academic Computer Center periodically offers lectures on computer programming languages and procedures. Students in computer science courses will be expected to attend some of these lectures as directed by their instructors.

Undergraduate Credit.

Note. A student may apply Computer Science 60, 23, and 24 or Computer Science 60, 25, and 26 as 4 credits toward the Natural Science and Mathematics requirement for graduation in the College of Arts and Sciences, but may not use any of the Computer Science courses 23-29 without Computer Science 60. At most, 4 credits from the courses 23-29 may be applied toward degree requirements.

23. BASIC Programming I. Each sem. 7 weeks. Cr. 1. An introduction to computer problem-solving techniques using the BASIC language. Prerequisite: proficiency in algebra. Laboratory fee, $5.00.

24. BASIC Programming II. Each sem. 7 weeks. Cr. 1. A continuation of Computer Science 23 with emphasis on files, program segmentation, debugging techniques and compilation. Prerequisite: Computer Science 23 or the equivalent. Laboratory fee, $5.00.

25. FORTRAN Programming I. Each sem. 7 weeks. Cr. 1. An introduction to computer problem-solving techniques using the FORTRAN language. Prerequisite: proficiency in algebra. Laboratory fee, $5.00.

26. FORTRAN Programming II. Each sem. 7 weeks. Cr. 1. A continuation of Computer Science 25 with emphasis on formatted I/O, program segmentation, character manipulation and files. Prerequisite: Computer Science 25 or the equivalent. Laboratory fee, $5.00.

28. Topics in Computer Programming. Each sem. 7 weeks. Cr. 1. The content of this course may change from semester to semester, but will ordinarily be a study of a computer programming language not covered in other Computer Science courses. This course may be repeated for credit. Prerequisite: usually Computer Science 24 or 26—specific requirements will depend on course content. Laboratory fee, $5.00.

29. System Operation and Management. Sem. 2. 7 weeks. Cr. 1-2. Cr. Cr. 1. This course includes both training in the operation of a computer system and an introduction to the management of a time-shared system. Prerequisites: Computer Science 24 or 26 and consent of the instructor. Laboratory fee, $5.00.

60. Introduction to Computer Science. Each sem. Cr. 2. The uses and limitations of computers, organization and characteristics of computer systems, an introduction to algorithms and a survey of applications. Prerequisite: Computer Science 23 or 25 (should be taken concurrently during the first seven weeks) or the equivalent.

62. Algorithms for Computing. Each sem. Cr. 3. An intermediate level course on the construction of algorithms for computation and the manipulation of elementary data structures. The implementation of these algorithms using an algorithmic computer language. Prerequisites: Computer Science 60 and 24 or 26 or the equivalent. Laboratory fee, $5.00.

64. Algorithms for Data Processing. Each sem. Cr. 3. The construction of algorithms for file organization, manipulation and maintenance. The implementation of these algorithms using a business oriented computer language. Prerequisites: Computer Science 60 and 24 or 26 or the equivalent. Laboratory fee, $5.00. (Offered upon sufficient demand.)

121. Data Structures. Sem. 1. Cr. 3. The design and manipulation of data structures. The structures studied include arrays, stacks, linear lists, queues, graphs, trees and multi-linked structures. Some of the manipulation techniques to be examined are searching, sorting, re- $5.00. (Offered upon sufficient demand.)


*A student who is formally registered for this course and subsequently withdraws from the course ordinarily will not take the course the semester immediately following the term in which withdrawal occurred.

128. Independent Study in Computer Science. Sem. 2. Cr. 2. The student is expected to exhibit ability in computer usage by defining a suitable computer application, developing necessary software using appropriate techniques, and preparing documentation for the use and support of the completed system. Prerequisite: Computer Science 127 and consent of the instructor.

129. Seminar in Computer Science. Each sem. Cr. 1. Student-staff presentation of selected topics in computer science arising from journal reading and research. Prerequisite: consent of the instructor. (Offered upon sufficient demand.)

MUSIC

STAFF: Professor Telschow (Chairman); Professors W. Elfrig, P. Gehring, Powell, and R. Winternhorst; Associate Professors Balko, N. Hannewald, Kroeger, and McCall; Assistant Professors Lewis and C. R. Rose; J. Klein

Admission. A student who wishes to enroll in any of the degree programs in music must meet all the general requirements for admission to the College of Arts and Sciences (see page 61 of this bulletin). In addition, he/she must pass an entrance test in musicianship and applied music. Information concerning this test, which will be given prior to matriculation, may be obtained from the chairperson of the department.

Approval of Schedules. All candidates for the Bachelor of Arts degree taking a major or a minor in this department and all candidates for the Bachelor of Music and the Bachelor of Music Education degrees must have their schedules approved by the chairperson of the department at the beginning of each semester.

A student planning to teach in a particular state should consult the appropriate adviser of the Department of Education before deciding in which music curriculum to enroll.

Departmental Requirements. Regulations concerning student performance, concert attendance, ensemble participation, and other matters which concern majors and minors within the department are given in the Department of Music Student Handbook, available in the departmental office.

Special Seminars and Workshops. Visiting artists and lecturers are brought to the campus from time to time to conduct seminars and workshops in various fields of music. The Church Music Seminar, the High School Choral Festival, the High School String Festival, the Wind Clinic, and other such events give added breadth to the student's musical education through his/her observation of a skilled artist or conductor at work.

Bachelor of Arts. A candidate for this degree with a major in music must meet all the general requirements for the degree.

Bachelor of Music. A minimum of 36 credits in music. Courses must include Music 13, 14, 57, 58, 63, 64, 103, 104; Keyboard Skills 9, 10, 11, 12; and 4 credits on the student's principal instrument. For the plan of study option, a student must complete at least 8 credits on his/her principal instrument (in addition to keyboard skills). The student must pass all the performance tests set for him/her by this department.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 18 credits in music constitutes a minor. Courses must include Music 13, 14, 57, 58, and six credits of applied music, including Keyboard Skills 9 and 10. In addition, the student must pass all performance tests set for him/her by this department.

Bachelor of Music. To be eligible for this degree, a student must complete the required curriculum for the major area of concentration. In addition, he/she must pass all performance tests set for him/her by this department. He/she must earn a total of 134 credit hours for a major in church music and 128 credit hours for the remaining programs. He/she must have a standing of two (2.00) in all the work. The curricula are outlined below.

Two areas of concentration are offered the student majoring in church music: organ and voice. Each student will be expected, however, to acquire enough skill in the organ and choir training to assume a post as a qualified parish organist and choir director.

A. GENERAL EDUCATION REQUIREMENTS:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>9</td>
</tr>
<tr>
<td>Freshman English</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language (Course 20 or 30)</td>
<td>8</td>
</tr>
<tr>
<td>Literary Studies</td>
<td>4</td>
</tr>
<tr>
<td>History or Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral and Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Natural Sciences and Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>University Course</td>
<td>3</td>
</tr>
</tbody>
</table>

43 Credits

B. MUSIC REQUIREMENTS:

1. Core Curriculum (for all students):
   - Survey of Music Literature 57, 58 .................................................. 4
   - Music Theory 13, 14, 63, 64 .................................................. 16
   - History and Literature of Music 103, 104 ..................................... 8
   - Basic Conducting 113 .................................................. 2
   - Music Theory 135, 136 .................................................. 6
   - Ensemble .................................................. 8

44 Credits
2. Other Requirements:

<table>
<thead>
<tr>
<th>Program:</th>
<th>Church Music</th>
<th>History &amp; Literature</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Instrument:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organ or Harpsichord:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choral Conducting 114</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Language Diction 110, 111</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Pro-Seminar in Pedagogy of Music 123</td>
<td>8</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Organ (or harpsichord)</td>
<td>24</td>
<td>24**</td>
<td>2</td>
</tr>
<tr>
<td>Voice (may include Voice Class 39)</td>
<td>4</td>
<td>24**</td>
<td>2</td>
</tr>
<tr>
<td>Instruments</td>
<td>47</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>C. ELECTIVES</td>
<td>0</td>
<td>4 requiring</td>
<td>13</td>
</tr>
<tr>
<td>Total required for graduation</td>
<td>134</td>
<td>134</td>
<td>128</td>
</tr>
</tbody>
</table>

***A University Course must be included in the Social Science category.

†Bachelor of Music Education. To be eligible for this degree, a student must complete the curriculum described below. In addition, he/she must pass all performance tests set for him/her by this department. Four areas of concentration are offered: the student majoring in music education; a vocal concentration, a general concentration, an instrumental concentration, and an area concentration. The area concentration is designed for students who wish to prepare themselves for teaching in both the vocal and instrumental fields. A student must earn a total of 134 credit hours if the area of concentration is either vocal or general or instrumental, and he/she must earn a total of 138 credit hours to complete the area concentration. He/she must have a standing of at least a 2.00 in all the work.

A. GENERAL EDUCATION REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>9</td>
</tr>
<tr>
<td>Freshman English</td>
<td>4</td>
</tr>
<tr>
<td>An Intermediate Level Course in Writing</td>
<td>4</td>
</tr>
<tr>
<td>Literary Studies</td>
<td>2</td>
</tr>
<tr>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>Survey of Music Literature 57, 58</td>
<td>4</td>
</tr>
<tr>
<td>Social Sciences (to include General Psychology 51 and at least one history course)</td>
<td>9*</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Electives from Social or Natural Sciences</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Total required for graduation</td>
<td>48</td>
</tr>
</tbody>
</table>

B. PROFESSIONAL EDUCATION REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Academic Subject Areas: Principles and General Methods 155</td>
<td>4</td>
</tr>
<tr>
<td>Foundations of Education 62</td>
<td>3</td>
</tr>
<tr>
<td>Orientation to Secondary Teaching 105</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Foundations of Secondary Education 158</td>
<td>4</td>
</tr>
<tr>
<td>High School Music Methods 101</td>
<td>2</td>
</tr>
<tr>
<td>Reading in the Content Areas 174</td>
<td>3</td>
</tr>
<tr>
<td>Supervised Teaching 157</td>
<td>8</td>
</tr>
<tr>
<td>Total required for graduation</td>
<td>27</td>
</tr>
</tbody>
</table>

C. MUSIC REQUIREMENTS:

1. Core Curriculum (for all majors)
   - Keyboard Skills 9, 10, 11, 12
   - Music Theory 12, 13, 63, 64
   - History of Music 103, 104
   - Basic Conducting 113
   - Ensemble
   - 38

To include Keyboard Skills 9, 10, 11, 12.
**Recommended: a second foreign language, a course in non-Western studies.
†This curriculum is designed primarily for students graduating in 1981. Students graduating in 1980 can obtain certification under this curriculum provided that new courses required in the curriculum are available. Students graduating before 1980 must follow the curriculum as outlined in the 1975-1977 catalog.
### 2. Other Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Licensing</th>
<th>Choral Areas</th>
<th>General Areas</th>
<th>Instrumental Areas</th>
<th>Area Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principal Performing Area</strong></td>
<td>8'-12</td>
<td>8'-12</td>
<td>8'-12</td>
<td>8'-12</td>
<td></td>
</tr>
<tr>
<td>(Instrument or Voice)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>only if piano or organ is the principal.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choral Conducting 114</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Instrumental Conducting 125</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Orchestration 112</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Elementary School Music Methods 109</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Jr./Hi/Middle School General Music 105</td>
<td>1-3</td>
<td>1-3</td>
<td>4</td>
<td>2-4</td>
<td></td>
</tr>
<tr>
<td>Secondary Instruments or Voice*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*must include Voice Class 39 If Voice is principal performing area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives (may not include principal performing area)</td>
<td>3-5</td>
<td>3-5</td>
<td>1-5</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>Total for graduation</td>
<td>154</td>
<td>134</td>
<td>134</td>
<td>138</td>
<td></td>
</tr>
</tbody>
</table>

**Master of Arts in Liberal Studies.** The requirements for this degree are given on page 51 of this catalog. Within this framework, the Department of Music offers a concentration in the field of music. While the details of the program for a music concentration are worked out in a conference between the student and the advisor, the following guidelines are announced:

1. Each student will be expected to take the Seminar in Music History 308 at least twice (six credits).
2. No more than ten credits in applied music are ordinarily counted toward degree requirements. This restriction does not apply to credits in composition.
3. No more than fifteen credits in a combination of applied music and composition are ordinarily counted toward degree requirements.
4. Any student who has had no more than sixteen credits of undergraduate theory will be expected to take Theory 235 or 236.

**Undergraduate and Graduate Credit.**

**THEORY, HISTORY, AND METHODS.**

1. **Introduction to Music.** Each sem. Cr. 3. A study of the materials of music and their use in the basic forms and styles of musical art. This course may be used to fulfill the Literature or Fine Arts Requirement.

13. **Music Theory.** Sem. 1. 3+2, Cr. 4. A course in the fundamentals of music which includes an introduction to sight singing, dictation, creative writing, counterpoint, part writing, form and analysis, instrumentation, and orchestration. Prerequisite or concurrent registration: Keyboard Skills 9.

14. **Music Theory.** Sem. 2. 3+2, Cr. 4. A continuation of Music 13. Prerequisites: Music 13, Keyboard Skills 10 (Keyboard Skills 10 may be taken concurrently).

57. **Survey of Music Literature.** Sem. 1. Cr. 2. An introduction to the literature of music. Examples demonstrating various forms and styles are heard and discussed. This course, together with Music 58, may be used to fulfill the Literature or Fine Arts Requirement. Prerequisite: Music 14.

58. **Survey of Music Literature.** Sem. 2. Cr. 2. A continuation of Music 57. This course, together with Music 57, may be used to fulfill the Literature or Fine Arts Requirement. Prerequisite: Music 14.

63. **Music Theory.** Sem. 1. 3+2, Cr. 4. A continuation of Music 14 with special emphasis on the harmonic developments of the Classic and Romantic periods. Prerequisites: Music 14, Keyboard Skills 11 (Keyboard Skills 11 may be taken concurrently).

64. **Music Theory.** Sem. 2. 3+2, Cr. 4. A continuation of Music 63 with special emphasis on tonal counterpoint. Prerequisites: Music 63, Keyboard Skills 12 (Keyboard Skills 12 may be taken concurrently).

103. **History and Literature of Music.** Sem. 1. 3+2, Cr. 4. The development of musical thought from the ancient world through the early Christian era, the Middle Ages, the Renaissance, and the Reformation to the middle of the 17th century. This course may be used to fulfill the Literature or Fine Arts Requirement. Prerequisites: Music 57, 58, 14, and junior standing.

104. **History and Literature of Music.** Sem. 2. 3+3, Cr. 4. The development of musical thought and literature from the middle of the 17th century to the present. This course may be used to fulfill the Literature or Fine Arts Requirement. Prerequisite: Music 103.

105. **Junior High/Middle School General Music.** Cr. 2. A study of materials, methods of procedure, supervision, and psychological and physical aspects of teaching general music in the junior high/middle school. Field trips are a requirement of this course.

107. **Music Methods for The Elementary Teacher.** Cr. 3. A study of methods, techniques, and procedures of general classroom music for the primary grades. This course is open only to elementary education majors and may not be counted toward a major or minor in this department.

109. **Elementary School Music Methods.** Sem. 1. Cr. 2-3. A study of materials, methods of procedure and supervision for primary grades. Field trips are a requirement of this course. This course may not be counted toward a major or minor in this department. Prerequisite: Music 14.

110. **Language Diction.** Sem. 1. Cr. 1. This course gives the student a practical knowledge of pronunciation used in singing the four principal languages in music literature: Italian (Latin), French, German, and English. (Offered in 1979-1980 and in alternate years thereafter.)

111. **Language Diction.** Sem. 2. Cr. 1. A continuation of Music 110. Prerequisite: Music 110. (Offered in 1979-1980 and in alternate years thereafter.)

112. **Orchestration.** Sem. 1. Cr. 2. The technique of scoring for orchestra and band. Prerequisite: Music 14.

113. **Basic Conducting.** Sem. 1. Cr. 2. An introduction to conducting including a study of score reading, beat patterns, acoustics, and interpretive principles. Prerequisite: Music 14 or consent of the instructor.


115. **Service Playing.** Sem. 1. Cr. 1. A practical course in the function of the organ in the church service emphasizing the playing of hymns, accompanying of the music of the liturgy, and improvisation. Prerequisite: at least two years of organ study.

121 (221). **Pro-Seminar In Music.** Sem. 1. Cr. 2-3. An intensive study of a limited area in the history or theory of music. This course may be repeated for credit. Prerequisite: consent of the chairperson of the department.

123 (223). **Pro-Seminar in Pedagogy of Music.** Sem. 1. Cr. 2. A consideration of the problems of teaching basic musicianship at all levels. Special attention will be given to the adapting of basic principles to the media of most interest to the members of the pro-seminar. Prerequisite: consent of the chairperson of the department. (Offered in 1980-1981 and in alternate years thereafter.)

125 (225). **Instrumental Conducting.** Sem. 2. Cr. 2. A study of instrumental scores, conducting techniques, and materials. Prerequisite: Music 113.


127 (227). **Advanced Choral Conducting.** Sem. 2. Cr. 2. A course for school musicians and professional church musicians dealing with advanced problems in choral conducting. Prerequisite: Music 114 or the equivalent.

128 (228). **Advanced Choral Conducting.** Cr. 2. A continuation of Music 127. Prerequisite: Music 127.
A. Workshop in Music Education. Cr. 1-2. A study of current topics in music education in seminar and workshop sessions of one or two weeks.


136 (236). Music Theory. Sem. 2. Cr. 3. A study of 20th-century music techniques. Creative projects and analysis form an integral part of the course. Prerequisite: Music 64.

141 (241). Advanced Keyboard Harmony and Improvisation. Sem. 1. Cr. 2. Practical keyboard work including harmonization of melodies, realization of figured basses, transposition, modulation, and improvisation. Open only to organ and piano majors with at least junior standing.


168. University Course: Music in History. Sem. 2. Cr. 3. A study of music as a cultural expression in the history of Western civilization. The major stylistic traditions of musical art. This course may be used to fulfill the University Course Requirement.

171 (271). Hymnology. Sem. 2. Cr. 2. A study of the Christian hymn from its earliest sources to the present day. Prerequisites: junior standing and consent of the chairperson of the department.

174 (274). History of Church Music. Sem. 1. Cr. 2. A study of the development of church music from the earliest history of the Church in the Old Testament to the present, with special emphasis on the period from Luther to Bach. Prerequisites: junior standing and consent of the chairperson of the department.

191. High School Music Methods. Sem. 2. Cr. 2. (See Education 191.) Principles of planning, organizing, and teaching the various kinds of music courses and activities in high school. Prerequisite: admission to Supervised Teaching.

194. Independent Study in Music. Each sem. Cr. 1-3. A course of study arranged by the student with the consent of and under the supervision of a faculty adviser. The study will result in a written essay on a topic approved by the adviser. Prerequisites: Music 64 and 104.

Graduate Credit.

306. Seminar in Music History. Cr. 3. A study in depth of a specific period or problem in the history of music. Topics covered will change from semester to semester. This course may be repeated for credit. Prerequisites: Music 64 and 104.

310. Problems in Music Education. Cr. 3. A concentrated study of specific areas of music education. Topics to be covered will change from semester to semester. This course may be repeated for credit if the topics are different. Prerequisite: consent of the chairperson of the department.

Applied Music.

A. PRIVATE INSTRUCTION.*

One semester hour of credit provides one-half hour per week of private instruction and presumes at least three hours of practice per week for a period of one semester. Two semester hours of credit provides one-half hour per week of private instruction and presumes at least six hours of practice per week for a period of one semester. Three semester hours of credit provides forty-five minutes of private instruction per week and presumes at least nine hours of practice per week. Private instruction is supplemented by repertoire classes in the various media that meet one 50-minute class period per week.

*See page 23 for appropriate fees.
C. INSTRUCTION IN ENSEMBLE MUSIC.

Note: Non-music majors who are candidates for degrees in the College of Arts and Sciences are restricted to 16 credits toward graduation in applied music, of which no more than 4 may be in ensemble music.

Instructor in one of the following ensembles for a period of one semester gives one semester credits. All credits are graded on a Satisfactory/Unsatisfactory basis.

- University Band: Admission by audition only. This credit may be earned by participation in the Collegium Musicum.
- University Orchestra: Admission by audition only.
- Opera Workshop: Admission by audition only.
- Chamber Music: Admission by approval of the chairperson of the department. This credit may be earned by participation in the Collegium Musicum.
- University Choir, Schola Cantorum, Chamber Choir, and Lucernarium Choir: Admission by audition only.
- Master Workshop: Admission by audition only.
- University Wind Ensemble: Admission by audition only.

All ensemble courses are available for graduate credit on either the 200 or 300 level. Enrollment is limited to students who have specialized training and background to participate in the ensemble in some special capacity (such as assistant conductor, sectional leader, or project director) to be determined by the instructor of the ensemble and with approval of the chairperson of the department.

Undergraduate and Graduate Credit.

150, 250, 350. Choir. Admission by audition only. This includes University Choir, University Choral Society, Schola Cantorum, Chamber Choir, and Lucernarium Choir.
152, 252, 352. University Band. Admission by audition only.
154, 254, 354. University Orchestra. Admission by audition only.
156, 256, 356. Opera Workshop. Admission by audition only.
158, 258, 358. Chamber Music. Admission by approval of the chairperson of the department.

PHILOSOPHY

STAFF: Associate Professor J. L. Smith (Chairman); Professors K. Klein, Schellmann, and Schnabel

Major. A minimum of 27 credits in philosophy. Courses must include Philosophy 3, 51, 53, and 127. The remainder of a student's study of philosophy will be selected in consultation with the chairperson of the department, taking into account one's total academic program and plan for the future. The department recommends specific plans of study for those preparing for entrance into law school, theological seminary, or graduate philosophy. Majors who are preparing to study philosophy in graduate school are advised to complete a minimum of 36 hours in philosophy. Recommended plans of study are available at the departmental office, Meier Hall 114.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 12 credits in philosophy constitutes a minor. Courses must include Philosophy 3, 51, and any one of the following: 52, 53, 54.

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

Prerequisites. Courses numbered under 100 have no prerequisites. Courses numbered over 100 have, as prerequisite, any one of the courses numbered under 100 or Philosophy 101 taken in Christ College or consent of the chairperson of the department. The department urges, but does not require, that majors and others planning to take 100-level courses take Logic (Philosophy 3) and at least one of the History of Philosophy courses (51, 52, 53, or 54) prior to taking upper division courses.

Undergraduate and Graduate Credit.

1. Introduction to Philosophy: Social Philosophy. Each sem. Cr. 3. A philosophical introduction to problems of social thought and action. The course will emphasize the problem of relating one's individual moral values to those of society through a study of some of the major works in social philosophy.

2. Introduction to Philosophy: Fundamental Questions. Sem. 1 or 2. Cr. 3. A general introduction to philosophy in which the most fundamental questions raised by both ordinary persons and philosophers are examined and explored. Some of the topics usually discussed are the nature of reality, the foundation of knowledge and values, the nature of humankind and the relationship between faith and reason.

3. Introduction to Philosophy: Logic. Each sem. Cr. 3. An introduction to formal logic in which truth-functional logic and elementary quantification theory are the primary topics. The traditional logic of the syllogism will be studied as one part of contemporary logic. Some consideration will be given to the application of logic in the formal analysis of arguments.

51. History of Ancient Philosophy. Sem. 1. Cr. 3. An approach to the philosophies of ancient Greece and Rome which emphasizes their systematic character and their current relevance. Primary documents will be read throughout.

52. History of Medieval Philosophy. Sem. 2. Cr. 3. A tracing of basic themes in the great philosophies of the Western world from Plotinus to William of Ockham. Primary documents will be read throughout.

53. History of Early Modern Philosophy. Cr. 3. An introduction to basic themes in European philosophy from Hobbes through Hume. Primary documents will be read throughout.

54. Studies in the History of Modern Philosophy. Cr. 3. A study of one or more philosophical traditions in the 18th, 19th and 20th centuries beginning with Kant. Topics will be announced prior to preregistration and may include studies such as Kant and his interpreters. German and British idealism, positivism and the analytic tradition, or American philosophy. This course may be taken more than once if the topics are different.

55. Non-Western Philosophy. Cr. 3. An introduction to some themes in the great philosophies of the non-Western world. A major part of the semester will be devoted to the analysis of important documents.

121. Metaphysics. Cr. 3. An examination of traditional and contemporary metaphysical topics, such as ontology, appearance and reality, persons, the mind-body problem, the analytic-synthetic distinction, the private-language problem.

123. Ethics. Cr. 3. A study of the most significant and influential ethical theories which have been advocated in the modern era with special emphasis given to the important problems which have been debated by ethicists such as the distinction between facts and values, the meaning of moral statements, and the nature of moral rules.

127. Theory of Knowledge. Cr. 3. An examination of some topics in traditional and contemporary theories of knowledge such as skepticism, perception, memory, belief, and truth.

129. Symbolic Logic. Cr. 3. A study of quantification theory, including the concepts of proof, consistency, and completeness, and topics in logical theory. (Note: Philosophy 3, or its equivalent, will be presupposed.)

144. Existentialism. Cr. 3. An examination of some of the major works of 19th and 20th century existentialists and their approach to philosophical problems.

146. Analytic Philosophy. Cr. 3. An examination of some of the works of contemporary British and American "analytic philosophers" and their approach to philosophical problems.
the beginning of each semester, beginning with their freshman year.

courses may be made to the department.

tain when any subscription of each course 193.

Minor.

Consult the Philosophy Department Bulletin published by the department each semester or the University's Advanced Course Selection Guide to ascertain when any particular course will be offered. The bulletin lists departmental offerings for the succeeding two semesters and gives detailed descriptions of each course listed for preregistration. Copies are available at the departmental office and at every registration.

PHYSICAL EDUCATION

STAFF: Professor R. E. Brown (Chairwoman); Professors Koenig and Steinbrecher; Associate Professor Amundsen; Assistant Professor Koch; Part-time Assistant Professor Rochlitz; M. Gelfman

Degree: Completion of the degree requirements of the College of Arts and Sciences with a major in physical education leads to the degree of Bachelor of Science in Physical Education.

Major. A minimum of 24 credits in physical education. Majors must also complete Biology 50 and 115 and Chemistry 43. Substitution for any of these courses may be made only with the permission of the chairperson of the department.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 12 credits in physical education constitutes a minor.

Plan of Study. Students may elect to select a plan of study which may lead to a specialty in other areas related to physical education.

Approval of Schedules. All students taking a major or minor in the department and all students planning to gain certification in physical education must have their schedules approved by the chairperson of the department at the beginning of each semester, beginning with their freshman year.

*Basic Courses in Physical Education. Two credit hours in physical education earned in course 10 are required for a bachelor's degree offered by the University. Not more than four credits earned in course 10 may be counted toward any degree. Courses are presented in various combinations and organizational structures. One full credit hour is offered for each full semester of class work. S/U grades are optional in all classes.

Undergraduate and Graduate Credit.

10. Activities. Each sem. 0-2, Cr. 1. Individual, dual, team physiological stress activities are presented in various combinations. May be repeated but the activity offerings within the course may not be repeated for credit. An independent study may be taken in this area with permission of the chairperson of the department. Activity fee, $7.00, which covers all equipment, supplies, and classroom material.

ADVANCED PROGRAM.

30. Independent and Group Study. Each sem. Cr. 1. A student or group of students may elect to develop a plan of study to investigate in greater depth any area of physical education or any related discipline. May be repeated for credit.

ACTION NATURE OF HUMAN EXISTENCE.

The study of human, physical, psychological, sociological development from the perspective of ACTION—the significance of movement as a facet of growth and development.

PHYSIOLOGICAL-STRUCTURAL BASIS OF MOVEMENT.

40. The Structure and Function of Movement. Each sem. 2+2, Cr. 3. A study of the structure and function of the body—how it affects and is affected by movement.

41. The Body and Stress. Each sem. 2+2, Cr. 3. A study of the effects of stress and injury on the body and the significance of body function in relation to stress.

42. Practicum in Body and Stress. Each sem. Cr. 1. The practical application of techniques useful in dealing with stress situations which occur in activity. Prerequisite: Physical Education 41.

45. Physiology of Exercise. Each sem. Cr. 2-3. A study of the physiology of the body under active conditions.

47. Health and Safety. (Also offered as Home Economics 101.) Each sem. Cr. 2. A study of the prevention and the treatment of illnesses and injuries. This leads to Standard American Red Cross Certification. This will be offered as a short course.

PERFORMANCE TOOLS OF MOVEMENT.

51. Individual and Team Activities. Each sem. Cr. 1. This course will be presented in a number of one-credit sections. No section may be repeated for credit. Tennis, volleyball, track, fencing, dance, and other areas will be presented.

55. Gymnastic Activities. Each sem. 1+1, Cr. 1. This course will consist of two sections: Section A, Fundamentals of Stunts and Tumbling; Section B, Fundamentals of Apparatus.

60. Officiating in Sports. Each sem. Cr. 1. This course will be divided into a number of one-credit sections dealing with a specific sport. Among the officiating areas presented will be basketball, volleyball, gymnastics. Short courses.

63. Advanced Lifesaving. Sem. Cr. 1. Analysis and practice of skills in swimming and lifesaving. This course leads to the American Red Cross Advanced Lifesaving Certificate.

64. Dance Patterns and Forms. Sem. Cr. 2. Basic forms of folk, square, ethnic, and social dance.


*Anyone who has served in the Armed Forces for at least one year is exempted from this requirement, except a National Guard member.
69. Water Safety Instruction. Sem. 2. 1+1, Cr. 1. Techniques of teaching swimming and lifesaving. This course leads to the American Red Cross Water Safety Instructor’s Certificate. Prerequisite: an American Red Cross Senior Lifesaving Certificate.

COMPETITIVE EXPERIENCE IN MOVEMENT.

91. Specialized Topics in Coaching. Each sem. Cr. 1. A number of sections devoted to the study of basic coaching procedures and techniques in specific sports. Offered as a short course.

92. Implications of Competitive Sports Experiences. Sem. 2. Cr. 3. An introductory class in coaching with an emphasis on conditioning principles, discussions of the psychological problems involved in the competitive experience, and an overview of philosophical beliefs concerning the nature and value of the competitive sports experience.

96. Advanced Theories of Coaching. Each sem. Cr. 1-2. A number of sections will be presented which will deal with the in-depth study of the advanced strategies and coaching techniques of specified sports. Offered as a short course.

HISTORICAL-PHILOSOPHICAL-PSYCHOLOGICAL IMPLICATIONS OF MOVEMENT.

110. The Historical and Philosophical Nature of Activity. Each sem. Cr. 1. The exploration and study of the historical and philosophical implications of activity. Offered as a short course.

112 (212). Movement and Learning. Each sem. 2+2, Cr. 3. The study of the place of movement in the life of the child. Ways in which various types of activity can affect the development of the child.

113. The Learning Potentialities of the Out-of-Doors. Sem. 1. 1+2, Cr. 2. Offered as a short course. Learning opportunities as provided by camping and out-door education.


120. Philosophy, Theory, and Technique of Recreational Programs. Cr. 3. A basic course designed to explore all aspects of recreational programs. Offered in alternate years.

121. Physical Education Programs for Special Children. Cr. 2-3. Study of the needs and abilities of special children in movement activities. Offered in alternate years.

168. University Course: Sports and Society. Sem. 2. Cr. 3. A study of the role of sport in society—and the effects of culture and society on sport. May be used to fulfill the University Course Requirement.

191. The Teaching of Physical Education. Each sem. Cr. 2. (See Education 191.) This course will deal with observation and assisting in physical education classes and will be presented in various organizational structures. This course may not be counted toward a major or minor in physical education. Prerequisite: admission to Supervised Teaching.

PHYSICS

STAFF: Professor Koetke (Chairman); Professors Naumann and Shiler.

Major. A minimum of 28 credits in physics. Courses must include Physics 76, 102, 110, 111, 121, 122, 151, 193, and 195.

One year of chemistry is strongly recommended. Students preparing for graduate work should also take Physics 107, 130, 183, 187, and Mathematics 184. It is assumed that students majoring in physics will acquire minimum competency in computer programming in BASIC and/or FORTRAN.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 16 credits in physics constitutes a minor. Physics 110 and 111 must be included.

Approval of Schedules. All students taking a major or minor in the department and all students planning to teach physics must have their schedules approved by the chairperson of the department at the beginning of each semester.

Undergraduate Credit.

47. Essentials of Physics. Sem. 1. 3+3, Cr. 4. The development of the basic concepts of physics emphasizes intuition, logic and experiment rather than mathematical analysis. Specific topics included are: space, time, and motion; energy; conservation laws; heat; electricity; and magnetism. Laboratory fee, $15.00. Not open to students who have taken Physics 77 or 78.

48. Essentials of Physics. Sem. 2. 3+3, Cr. 4. This course is a continuation of Physics 47. Specific topics include the continuation of the study of electricity and magnetism, wave phenomena, optics, atomic and nuclear physics. Laboratory fee, $15.00. Not open to students who have taken Physics 77 or 78. Prerequisite: Physics 47 or consent of the instructor.

69. Musical Acoustics. Sem. 1. 3+2, Cr. 4. A study of the physical nature of sound waves, the production and measurement of sound, and the physical and psychophysical basis of hearing and music. Although this course is of general interest, it is also suitable for music or other arts majors toward the fulfillment of their natural science requirement. Laboratory fee, $15.00.

76. Electrical Measurements. Sem. 1. 0+3, Cr. 1. Laboratory training in the use of modern electronic and electrical measuring instruments. Laboratory fee, $15.00.

77. Principles of Physics. Sem. 1. 3+3, Cr. 4. An introductory course in mechanics and heat designed for pre-medical, physics, and chemistry students, including a study of the classical laws of motion and energy transfer as well as an introduction to the theory of relativity. The mathematical level of this course is primarily that of simple algebra, but relations between physics and calculus are discussed when appropriate, so a student should have taken a course in differential calculus or be taking one concurrently. Laboratory fee, $15.00. Not open to students who have taken Physics 47 or 48.

78. Principles of Physics. Sem. 2. 3+3, Cr. 4. A continuation of Physics 77 which treats electricity, magnetism, wave motion, light and sound. Prerequisite: Physics 77 or concurrent enrollment and sophomore standing. Laboratory fee, $15.00.

80. Electronics and Scientific Instrumentation. (Also offered as Chemistry 80 and Electrical Engineering 80.) Sem. 2. 2+3, Cr. 3. Modern electronic principles and devices are studied, with applications to scientific instrumentation. Laboratory experience with modern instruments is emphasized, and simple troubleshooting techniques are taught. Prerequisites: Physics 77 or concurrent enrollment and sophomore standing. Laboratory fee, $15.00.

81. Descriptive Astronomy I. 2+0, Cr. 2. A study of the principles of astronomical observation, the tools and methods employed by the modern astronomer to gain information and knowledge concerning the solar system. Lecture time will occasionally be used for observation of the planets and predominant constellations. Only elementary mathematics is required. This course, together with Physics 82, may be used to fulfill natural science general education requirements.

82. Descriptive Astronomy II. 2+0, Cr. 2. A continuation of Physics 81. Topics will include a study of the stellar system, stellar classification, the content and evolution of stars, galaxies, and the universe. Some emphasis will be placed on the methods used to obtain information necessary to construct a model universe. As in Physics 81, lecture time will occasionally be replaced by observation. Only elementary mathematics is required. Physics 81-82 may be used to fulfill natural science general education requirements.
83. **Observational Astronomy.** Each sem. 0+3, Cr. 1. Practical experience in the application of photographic and photometric techniques to astronomical problems, stellar magnitudes, spectral classification, variable stars and satellites. Prerequisites: Physics 81 and 82. Laboratory fee, $15.00.

102. **Analytical Mechanics.** Sem. 4+0, Cr. 4. A course utilizing vectors and the calculus to study the forces and fields of mechanics on a mathematically rigorous basis. Among the specific topics covered are: Newton's laws of motion; linear and point motion of a mass; the central force law; dynamics of the planar motion of a rigid body. Prerequisites: Physics 78 and Mathematics 72 or 76 or advanced placement by the chairperson of the department.

107. **Optics.** Sem. 3+0, Cr. 3. This course covers the physics of geometrical and physical optics. Topics may include: lenses, geometrical and physical optics, interferometry, diffraction, polarization, double refraction, radiometry, light scattering, lasers, and holography. Prerequisite: Physics 78.

110. **Introductory Modern Physics.** Sem. 1. 3+0, Cr. 3. An introduction to the following topics: classical theory of relativity, physics of the atom, the hydrogen atom, Schrödinger wave mechanics, the theory of the nucleus including radioactive decay, and elementary particle physics. Prerequisite: Mathematics 77 or concurrent enrollment.

111. **Introductory Modern Physics Laboratory.** Sem. 2. 0+3, Cr. 1. Selected experiments in atomic and nuclear physics. Laboratory fee, $15.00. Prerequisite: Physics 110 or consent of instructor.

121. **Experimental Physics.** Sem. 1. 0+3, Cr. 1. Experiments in radiation detection and analysis employing modern detection and analysis equipment and a 300 keV positron ion accelerator. Several experiments are done at Argonne National Laboratory. Laboratory fee, $15.00. Prerequisites: Physics 110 and 111 and Mathematics 77.

122. **Experimental Physics.** Sem. 2. 0+3, Cr. 1. Students are required to perform, and to pursue the theory for, selected experiments in advanced mechanics, optics, heat, spectroscopy, electromagnetism, etc. Prerequisites: Physics 110 and Mathematics 77. Laboratory fee, $15.00.

130. **Thermal Physics.** Sem. 3+0, Cr. 3. A lecture and problem course covering the basic principles of thermodynamics, quantum and statistical mechanics. Among the topics included are: equations of state; laws of thermodynamics; concepts of temperature, entropy, and energy; kinetic theory; transport phenomena; introductory probability theory; statistical description of systems of particles. Prerequisite: Physics 78.

151. **Electricity and Magnetism.** Sem. 1. 3+0, Cr. 3. A study of electric and magnetic fields, their sources and interactions in empty space and in dielectric and magnetic media. Prerequisites: Physics 102 and Mathematics 102 or 104 or concurrent placement by the chairperson of the department.

152. **Electromagnetic Fields and Waves.** Sem. 2. 3+0, Cr. 3. The study of Maxwell's equations and electromagnetic fields using vector analysis and potential theory, with applications to electromagnetic, gravitational, thermal and acoustic wave motion. Prerequisites: Physics 151 and Mathematics 102 or 104 or consent of the instructor.

181. **Nuclear and Reactor Physics.** Sem. 2. 3+3, Cr. 4. Nuclear and reactor physics for students with physics or engineering background. Topics include nuclear models, nuclear structure, nuclear reactions, fission, neutron diffusion, neutron moderation, nuclear reactors, reflected reactors, heterogeneous reactors and an introduction to neutron transport theory. Laboratory work in neutron detection, slowing down and diffusion, subcritical reactor studies and pulsed neutron methods using the physics department's natural uranium light water moderated subcritical neutron reactor and neutron generator. Prerequisite: Physics 121, Laboratory fee, $15.00.

183. **Introduction to Quantum Mechanics.** Sem. 1. 3+0, Cr. 3. The fundamental concepts of quantum physics are examined, with applications to atomic, nuclear and solid state physics. Prerequisites: Physics 102 and Mathematics 102 or 104. Topics may include: the Schrödinger equation, the hydrogen atom, angular momentum and electron spin, identical particles, multielectron atoms, and collision theory. Prerequisite: Physics 110 or consent of the instructor.

185. **Radioactivity and Reactor Physics.** Sem. 1. 3+3, Cr. 3. This course is designed for those in the industrial field who wish to gain knowledge of the properties of radioactive materials and the fundamentals of reactor physics. The course content will be adjusted to the needs of the class and will basically cover the following topics: nuclear structure, nuclear stability, natural and induced radioactivity, laws of radioactive decay, neutron activation, energy levels of nuclei, neutron cross-sections, the fission cross-section, and fissionable materials.

186. **Radioactivity and Reactor Physics.** Sem. 2. 3+0, Cr. 3. A continuation of Physics 185 covering the following topics: nuclear reactors and their classification, calculations for homogeneous and heterogeneous reactors, reactor periods and control, and health physics. This material will be covered by lecture and laboratory demonstrations. Prerequisite: Physics 185.

187. **Theoretical Physics.** 3+0, Cr. 3. The application of advanced mathematical methods to physical problems. Topics may include: Lagrange's methods, small oscillation theory including coupled oscillators, generalization of rotation, the theory of relativity, numerical methods, perturbation theory and group theory. Prerequisites: Physics 102 and Mathematics 102 or 104. (Physics 151 may be taken concurrently.)

191. **The Teaching of Natural Sciences.** Cr. 2. (See Education 191.) A study of the methods of teaching natural sciences in the secondary schools. Lectures, discussions, demonstrations, and projects. This course may not be counted toward a major or minor in this department. Prerequisite: admission to Supervised Teaching.

193. **Physics Colloquium.** Each sem. Cr. 0. All physics majors except freshmen and sophomores must register for this course.

195. **Special Problems in Physics.** Each sem. Cr. 1-2. Each student undertakes a special 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 chairperson of the department. Laboratory fee, $15.00 per credit hour.

**POLITICAL SCIENCE**

**STAFF:** Professor Trost; Associate Professors Balkema1 and Combs; Assistant Professors Bass and Frei

The Department offers courses which provide the student with an understanding of the basic concepts, methods of study, and traditions of politics. In consultation with the Chairperson, the student may wish to concentrate in areas within the discipline such as executive processes, judicial behavior, comparative politics, and the like.

Student excellence is recognized through membership in Pi Sigma Alpha, a national political science honorary organization. The Beta Nu chapter of Pi Sigma Alpha was installed in February 1953.

**Major.** A minimum of 30 credits in political science. Courses must include Political Science 1, 2, 41 or 44 or 65, 53 or 54, and 196.

**Minor.** Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 18 credits in political science constitutes a minor. Political Science 1, 2, and 41 or 44 or 65 must be included.

**Approval of Schedules.** Students taking a major or a minor in the department must have their schedules approved by the chairperson of the department at the beginning of each semester.

For information concerning the Washington Semester Program see page 99. For information concerning the Urban Affairs Semester Program see page 99. For information concerning the Semester on the United Nations see page 100.

1 Sabbatical Leave, Spring Semester 1979-1980.
1. Introduction to Political Science. Each sem. Cr. 3. An introduction to some basic concepts, approaches, and methods in the discipline of political science.

2. The Government of the United States. Each sem. Cr. 3. A study of the structure and function of the federal system, with emphasis on the national government. (Recommended for general education requirement.)

10. The Field of Law. Sem. 1. Cr. 1. A course designed to help students prepare for the professional study of law. Open to all students. (This course may not be counted toward a major or minor in political science.)

41. State and Local Politics in the United States. Each sem. Cr. 3. Comparative analysis of state and local political systems in the United States. Emphasis to be placed on the contemporary role of states and localities in the development and implementation of public policies.

44. Comparative Politics. Each sem. Cr. 3. Comparative study of Western and non-Western political systems, including examination of conceptual frameworks for comparative analysis.

Note: The following courses are not open to freshmen.

53. Classical Political Theory. Sem. 1. Cr. 3. An intensive investigation of the major formulations and problems of politics as developed by political philosophers from the Greeks through the nineteenth century.

54. Contemporary Political Theory. Sem. 2. Cr. 3. An intensive investigation of the major, empirical and normative formulations of politics in the twentieth century.

60. Strategies of Inquiry. Each sem. Cr. 3. An examination of the philosophy, methods, and techniques of political inquiry. Recommended to be taken in sophomore year.

65. International Relations. Sem. 1. Cr. 3. The fundamentals of international politics and international organizations, particularly the United Nations and its specialized agencies.

153. Politics of Industrialized States. Sem. 2. Cr. 3. A study of political systems in the Western industrialized world. Attention will primarily be directed at Western and Eastern Europe, alternately. Prerequisite: Political Science 44 or consent of the chairperson of the department.

154. Politics of Developing States. Each sem. Cr. 3. A study of the governments and political problems of selected newly-independent, under-developed states. Areas given in a semester will vary across Africa, Latin America, the Middle East, and the Far East. Prerequisite: Political Science 44 or consent of the chairperson of the department.

155 (255). Problems in State and Local Politics. Sem. 1. Cr. 3. A study in depth of important contemporary problems on the state or municipal levels in the United States. Given in cooperation with the Community Research Center. Prerequisite: Political Science 41 or consent of the chairperson of the department.

156 (256). Problems in American Politics. Either sem. Cr. 3. An intensive study of topics in American politics, policy, and functions of the American political system (e.g., Political Parties). Prerequisite: Political Science 2 or consent of the chairperson of the department.

157. Problems in International Relations. Sem. 2. Cr. 3. An intensive study of topics in international relations (e.g., International Organizations). Prerequisite: Political Science 65 or consent of the chairperson of the department.

158. Problems in Political Philosophy. Each sem. Cr. 3. The study of one or more specific problems or philosophers in modern political philosophy. Prerequisites: Political Science 53 and 54 or consent of the chairperson of the department.

159. Problems in the Judicial Process. Sem. 2. Cr. 3. The study of selected topics relating to the judicial process, Constitutional Law, and other socio-legal problems. Generally the course will focus on issues relating to the courts as a political system, influences on judicial decisions, and the import of court decisions. Prerequisite: Political Science 2.

*Credit for Political Science 2 may be earned through the College Level Examination Program (CLEP) subject examination in American Government.
departmental adviser so appropriate courses from related disciplines may be taken to enhance their preparation for graduate training.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 18 credits in psychology constitutes a minor. Courses 51 or 52, and 100 must be included. All programs must be developed with the assistance of an assigned department faculty adviser. Consult with the department chairperson for additional information.

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

Undergraduate and Graduate Credit.

*51. General Psychology. Each sem. Cr. 3. An introduction to the general field of psychology with special emphasis upon the scientific study of behavior. (For behavioral and social science credit only. Not open to students who have taken 52.)

52. General Experimental Psychology. Each sem. 3+2. Cr. 4. Identical with Psychology 51, with the exception that laboratory work is conducted in selected problem areas. (For natural science credit only. Not open to students who have taken 51.)

Note: Psychology 51 or 52 is a prerequisite for all of the following courses.

53. Abnormal Psychology. Each sem. Cr. 3. An analysis of psychopathology within the framework of theory and research.

54. Social Psychology. Each sem. Cr. 3. A study of social influences on the psychological functioning and behavior of the individual.

55. Industrial Psychology. Sem. 1. Cr. 3. This course deals with applications of psychological principles, techniques, and theories to the worker and work environment. Special emphasis is placed on issues of satisfaction, motivation, and productivity.

56. Psychology of Personality. Sem. 2. Cr. 3. An introduction to various theories of personality, with emphasis on their implications for current psychological applications and research.


132. Physiological Psychology. Sem. 1. 3+0, Cr. 3, or 3+3, Cr. 4. A study of the structure and function of the nervous system in relation to perception, learning and emotion. Supervised individual experimentation. Laboratory optional. Laboratory fee, $10.00.

135. Sensation and Perception. Sem. 2. 3+0, Cr. 3, or 3+3, Cr. 4. A study of mechanisms and models underlying visual perception. Supervised individual experimentation. Laboratory optional. Prerequisite: Psychology 100 or consent of instructor. Laboratory fee, $10.00.

136. Conditioning and Learning. Sem. 1. 3+0, Cr. 3, or 3+3, Cr. 4. An introduction to the basic principles of conditioning and learning. Focus is on empirical data and theories of reinforcement, extinction, memory, etc., with representative laboratory experiments in selected areas. Prerequisite: Psychology 100. Laboratory fee, $10.00.

140. Human Growth and Development. Each sem. Cr. 3. Life-span approach to human growth and development involving maturational, cognitive and behavioral changes with age. Major empirical findings will be reviewed with attention to current theoretical, methodological and practical issues.

141. Adolescent Psychology. Sem. 1. Cr. 3. Analysis of the maturational, cognitive and behavioral changes associated with adolescent development, with special attention to social relations.

*Credit for Psychology 51 may be earned through the College Level Examination Program (CLEP) subject examination in General Psychology.

142. (242). Psychology of Childhood. Each sem. Cr. 3. Study of the maturational, cognitive and behavioral changes associated with the development of the child, with special attention to social relations. Prerequisite: 6 hours of psychology or consent of the instructor.

152. (252). Behavior Modification. Each sem. Cr. 3. The application of learning principles to the modification of human behavior. Discussions will include ethical issues and current research relating to behavior management techniques as utilized in self control, educational institutions, business, social, personal and family interventions. Prerequisite: 6 hours of psychology or consent of department chairperson. Course intensification option to undergraduate: 1 credit.

153. (253). The Exceptional Child. Each sem. Cr. 3. Analysis of the impact of various perceptual, cognitive and physical handicaps upon the child. Attention will also be given to the study of the gifted, creative child. Prerequisite: one of the developmental psychology courses (140-149) or educational psychology or consent of the instructor.


155. (255). Methods of Clinical Psychology. Sem. 2. 2+2, Cr. 3. A study of the techniques of diagnosis and therapy employed in the clinical setting. Supervised practice in testing and evaluation. Prerequisite: Psychology 53 or consent of the chairperson of the department. Laboratory fee, $5.00. Course intensification option for undergraduate students: 1 credit.

161. Contemporary Theories. Sem. 1. Cr. 3. A systematic analysis of contemporary psychological theories with special reference to their historical origins in science, philosophy, and the classical systems of psychology. Prerequisite: 6 hours of psychology.

162. Psychology Practicum. Sem. 2. Cr. 3. A small number of students may participate in psychological laboratory research or work in a social agency under the supervision of a specified faculty member involving that particular faculty member's area of expertise. Practicum will concentrate in such areas as experimental psychology, developmental psychology, clinical-counseling, and behavior modification. Prerequisites will vary depending upon the practicum area announced. Consent of Instructor required.

165. (265). Special Topics in Psychology. Each sem. Cr. 2-3. Selected topics based on the special interest areas of students and faculty. These topics have included aging, sex differences, drugs and behavior, counseling and interpersonal communication, altered states of consciousness. Topics and descriptions will be announced in advance. Prerequisite: consent of instructor or chairperson of the department.

168. University Course in Psychology. Sem. 2. Cr. 3. The study of current topics in psychology of interest to faculty and students. Frequently these topics may require the student to have specific prerequisites. Topics will be announced in advance. This course may be used to fulfill the University Course Requirement.

195. Independent Research in Psychology. Each sem. Cr. 1-3. Individual research projects under staff supervision. A written report is required. Prerequisite: advanced laboratory course in psychology or consent of the chairperson of the department. Laboratory fee, $10.00. This course may be repeated for credit. Maximum: 6 credit hours.

Graduate Credit.

300. Seminar in Psychology. Cr. 3. The analysis, assessment, and discussion of current topics in psychology. This course may be taken more than once for credit if the topics are different. Prerequisite: 6 hours of psychology or consent of the chairperson of the department.

301. Learning and Motivation. Cr. 3. The study of the basic principles of learning and motivation with systematic treatment of major learning theorists.

303. Cognitive Processes. Cr. 3. Analysis of various cognitive processes, such as concept formation, reasoning, problem solving, creativity, and language. Prerequisite: 6 hours of psychology or educational psychology.

310. Principles of Psychotherapy. Cr. 3. Representative theoretical approaches to the process of personality change and to the techniques used in treating neurotic and psychopathic disturbances. Prerequisite: 3 hours of psychology at the graduate level.

315. Problems in Personality Theory. Cr. 3. Problems focus on relationships among central concepts in personality theory, including the self-concept, basic motives, emotional conflicts, mechanisms of adjustment, and personality integration. Prerequisite: 3 hours of psychology at the graduate level.
SOCIAL WORK

STAFF: Associate Professor Walton (Chairwoman); Professor Neal; Associate Professors Franzen and Rivers


Also required are Psychology 51 and 100, Sociology 1 and 51, one course in political science, and one of the following courses: Economics 71 or 72, Geography 62, or Home Economics 168. Biology is recommended in meeting the general education requirement.

A student's formal admission into the department as a major requires completion of Social Work 51 and departmental approval.

Students wishing to move beyond a generic base, may elect to concentrate in one of the following areas: aging, church social services, criminal justice, and urban studies.

Each social work major is assigned a permanent faculty adviser. Students may participate in the Student Social Work Organization and also select their representative to department meetings.

A Department of Social Work manual is available to all majors.

The department is fully accredited by the Council on Social Work Education. It offers a professional curriculum, the completion of which leads to the Bachelor of Social Work degree.

The primary task of this department is to prepare its graduates for entry into the profession at the beginning level of practice. Secondarily, some majors may seek graduate education in social work. Finally, selection of courses from this department will enhance the preparation of students who anticipate a career in one of the various helping professions, such as the field of ministry, health care, education, law, and behavioral sciences.

The curriculum is a strong liberal arts program with a sequence of carefully selected courses from this department and other departments of the College of Arts and Sciences.

The majority of both full-time and part-time faculty hold the ACSW credential, as do many of the field instructors.

Approval of Schedules. All students taking a major in the department must have their schedules approved by the chairperson of the department at the beginning of each semester.

Undergraduate Credit.

51. Introduction to the Profession of Social Work. Cr. 3. The major objective of this course is to familiarize the student with the basic issues, concepts, and systems encountered by the social work practitioner in the helping process with the community. This course is required for all social work majors; it can be of great benefit to students pursuing a career in such fields as corrections, education, ministry, law, nursing, medicine, and church work. Community volunteer and observational experience are required. Course fee, $5.00.

110. Social Welfare: Policy and Services. Each sem. Cr. 3. The major focus (objective) of the course includes an historical survey and review of social welfare policies and programs. A descriptive analysis is made of various private, voluntary, and governmental welfare programs and agencies. Values, attitudes, political and economic forces are explored in viewing the American response to the needs of welfare consumers. Prerequisite: Social Work 51 (may be taken concurrently by juniors and seniors) or consent of the chairperson of the department. Course fee, $10.00.

120. Human Behavior and Social Environment. Each sem. Cr. 3. This course explores the human developmental life cycle and its interplay with societal values and community functioning. Theoretical approaches to human development and societal influences are critically examined. Prerequisite: Social Work 51 or consent of the chairperson of the department. Course fee, $10.00.

130. American Minority Lifestyles and Human Rights. Each sem. Cr. 3. This course offers a study of the social needs of American minority groups in relationship to their human rights. Patterns of human development and analysis of social change provide the framework for study of minority rights and lifestyles. This material prepares the student for an understanding and appreciation of current minority issues. Prerequisite: sophomore standing. Course fee, $10.00.

140. Professional Intervention and Human Services. Each sem. 3-4, Cr. 4. A course that both introduces a student to human systems theory (individual, group, and community) and to the variety of social work interventions. There is an experimental laboratory for class members. Prerequisites: Social Work 51, 110, and 120. Laboratory fee, $15.00.

155. Social Work Practice I. Sem. 1. Cr. 6. The generic social methods and field instruction course is designed to establish a common base for direct service to people—individuals, families, and groups. The community—and institutional segments of society. The central theme of the semester is that the problems with which the social worker are involved dictate particular social work intervention. The substantive concentration of the sequence, therefore, is on the integration of theories, principles, skills, and processes of the various social work disciplines, clients. A professionally directed field practicum is offered each semester. The student works on each Thursday in a community social service agency. Prerequisites: senior standing and a major in social work. Course fee, $15.00.

166. Social Work Practice II. Sem. 2. Cr. 7. In this second semester course the student experiences an intensification of the required field practicum which will include work days on Tuesday and Thursday. Prerequisite: Social Work 155. Course fee, $25.00.

165. Introduction to Methods of Social Research. Cr. 3. This course is an introductory overview of the basic processes in scientific inquiry in the social sciences, particularly social work. Major topics to be covered are: problem formulation, research design, measurement, data collection, analysis and interpretation, and reporting results.

171. Current Issues in Social Work. Cr. 1. This seminar is jointly designed by senior majors and faculty to deal with those issues of concern which currently face clients and practitioners in the Social Services Delivery System. Prerequisite: senior standing or consent of the chairperson of the department.

182. Analysis of Social Policy: Housing, Income Maintenance, and Health Care Services. Cr. 3. An intensive study of Social Welfare programs, principally in the United States, and an historical review of the contemporary forces, primarily social and economic, that have shaped their development. Prerequisite: senior standing or consent of the chairperson of the department. Course fee, $10.00.

SPECIALIZED OFFERINGS.

170. Social Work Colloquium. Cr. 2-3. A study of selected topics of contemporary concern for the social worker, such as adulthood, clinical methods and techniques for the helping professions, housing, independent study, juvenile delinquency, poverty, and urban minority life. Varied topics to be announced. Prerequisites: Social Work 51, 110, and junior standing or consent of the chairperson of the department. Course fee, $10.00, dependent on selection of topic.

180. Advanced Seminars in Social Work. Cr. 1-3. These are full- or half-semester courses specializing in particular areas of social work practice or methodology such as, Administration,
A Study of Federal Agency Structures, Current Issues in Group Services, Family Therapy, New Techniques for Solving Community Problems, Research, Supervision, and Children's Services. Prerequisites: successful completion of the basic course(s), junior or senior standing, and consent of the chairperson of the department. Course fee, $10.00.

SOCILOGY

STAFF: Professor J. Johnson (Chairman); Associate Professors Martinson and Westermann; Assistant Professors Schuster and Williams

Major. A minimum of 29 credits in sociology. Courses must include Sociology 1, 101, and 102. No more than one course from the group numbered 5, 11, and 12 may be included within the minimum requirements. Students are encouraged to take an independent study project, such as Sociology 185.

A course in statistics is recommended. Most majors should elect Psychology 101. Prospective graduate students with an adequate mathematical foundation should elect Mathematics 54. Computer Science 80 and 23 or 25 are also valuable in preparing for graduate study.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript.

A minimum of 16 credits in Sociology constitutes a minor. Sociology 1 and 101 must be included, the latter to be taken during the junior or senior year. No more than three (3) credits earned from courses, 5, 11, 12, and 185 may be applied to the 16-credit requirement.

Approval of Schedules. All students taking a major or minor in the department should have their schedules approved by the designated departmental adviser at the beginning of each semester. Normally, Sociology 101 and 102 will be taken in the junior year.

Students who test out of Introductory Sociology by taking a departmental examination will be permitted to take upper-division courses in the department. However, credit toward graduation requirements must be met via course work.

Undergraduate and Graduate Credit.

1. Introductory Sociology. Each sem. Cr. 3. A study of the primary elements of sociological analysis, emphasizing the nature of social organization, the basic social structures within which humans live, the forces which hold groups together, and lead to social change, and the scientific method as applied to social behavior. Laboratory fee, $10.00.

5. Cultural Anthropology. Each sem. Cr. 3. The study of the principles of physical and cultural development with a comparison of selected cultural areas of the world. Field trip fee, $5.00.

11. Social Problems. Each sem. Cr. 3. Analysis of major social problems in the United States which arise from the operation of social systems. Possible topics include urbanization, crime and delinquency, mental illness, sexual deviance, race prejudice and discrimination, drug addiction, and poverty. Prerequisite: Sociology 1 or consent of the chairperson of the department.

12. Black Studies: Black Urban Communities. Each sem. Cr. 3. A study of selected topics such as leadership, change, relationship to dominant society, and power relationships. Prerequisite: Sociology 1 or consent of the chairperson of the department.

51. The Family. Each sem. Cr. 3. A study of the family as a basic social unit and institution, emphasizing the various forms and functions of the family in a cross-cultural perspective. Special consideration of modern influences upon the interaction and organization of the American family. Prerequisite: Sociology 1 or consent of the chairperson of the department.

52. Culture and Personality. Cr. 3. The organization and content of culture and its significance for individual personality, considered from the anthropological, sociological, and psychological viewpoints. Prerequisite: Sociology 1 or consent of the chairperson of the department.

101 (201). Sociological Analysis I, Sem. 1. Cr. 4. (Graduate credit 3.) A study of the historical development of sociological thought and the theoretical contributions of major orientations in contemporary sociology, along with an introduction to the philosophy of social science and the logic of theory construction. Required of junior majors. Prerequisite: Sociology 1 or consent of the chairperson of the department. Offered upon sufficient demand.

102 (202). Sociological Analysis II, Sem. 2. Cr. 4. (Graduate credit 3.) The construction of testable hypotheses and basic techniques for testing them. Required of junior majors. Prerequisite: Sociology 101 or consent of the chairperson of the department. Offered upon sufficient demand.

*120 (220). Social Collectivities. Each sem. Cr. 1-3. (If for graduate credit, must be taken for 3 credits.) Studies of social phenomena which can effectively be analyzed with an emphasis on group-type structure. Possible topics include small groups, work organizations, or voluntary associations. Prerequisite: Sociology 1 or consent of the chairperson of the department. This course may be taken more than once for credit if the topics are different.

*130 (230). Societal Structures. Each sem. Cr. 1-3. (If for graduate credit, must be taken for 3 credits.) Studies of relatively stable, large-scale social phenomena which can effectively be analyzed with an emphasis on the interplay among groups, processes, and sets of beliefs. Possible topics include social stratification, poverty, ethnic minorities, population analysis, urban sociology, occupations, political sociology, systems of justice, or human sexuality. Prerequisite: Sociology 1 or consent of the chairperson of the department. This course may be taken more than once for credit if the topics are different.

*140 (240). Social Institutions. Each sem. Cr. 1-3. (If for graduate credit, must be taken for 3 credits.) Studies emphasizing socially shared beliefs and practices developed to deal with the major problems of societies. Possible topics include law, medicine, religion, sports, or education. Prerequisite: Sociology 1 or consent of the chairperson of the department. This course may be taken more than once for credit if the topics are different.

*150 (250). Social Processes. Each sem. Cr. 1-3. (If for graduate credit, must be taken for 3 credits.) Studies of social phenomena which can effectively be analyzed with an emphasis on processes of influence, development, or change. Possible topics include socialization, juvenile delinquency and criminology, societal change, mass communications, sociology of knowledge, collective behavior, face-to-face interaction, aging, life cycle stages, adolescence, sociology of death. Prerequisite: Sociology 1 or consent of the chairperson of the department. This course may be taken more than once for credit if the topics are different.

168. University Course in Sociology. Cr. 3. A study of selected topics of contemporary concern such as the role of women in society, addictive living, war, and power. Subjects will be approached from the sociological perspective, but the findings by physical sciences, social sciences other than sociology, and the humanities will be utilized where appropriate in an attempt to integrate knowledge in these areas. May be used to fulfill the University Course Requirement.

185. Special Problems in Sociology. Cr. 1-4. The investigation of a specialized topic in sociology, either individually or in a scheduled course. This course may be taken more than once for credit if the topics are different or if the topics are to be continued. Prerequisite: Sociology 1 or consent of the chairperson of the department.

190. Senior Seminar in Sociology. Cr. 3. A one-semester reading and discussion seminar covering topics and issues in current sociological literature. Prerequisites: Sociology 1 or consent of the chairperson of the department and senior standing.

*Assessment of laboratory fee dependent on selection of topic.
Graduate Credit.

301. Seminar in the Family. Cr. 3. Analysis of the development of current theory and the nature of contemporary research problems on the family. Prerequisite: consent of the chairperson of the department.

302. Seminar in Criminology and Penology. Cr. 3. Critical review of current theory, practice, and research in criminology and penology. Prerequisite: consent of the chairperson of the department.

310. Seminar in Sociology. Cr. 3. An investigation of selected problems and concepts within sociology from the standpoint of sociological theory and current research. Topics may include religious systems and institutions, contemporary educational systems and structures, social systems and social change, ethnic systems and structures, juvenile delinquency and delinquency, organized crime, stratification, mental health, poverty, life cycles. Prerequisite: consent of the chairperson of the department. This course may be taken more than once for credit if the topics are different.

SPEECH AND DRAMA

STAFF: Professor Sitton (Chairman); Professor Kussrow; Associate Professors Dallmann and Pick; Assistant Professor Guse; J. Paul, R. Robison, and B. Wiehardt.

Major in Speech and Drama. A minimum of 30 credits in one of the following areas:

Speech Pathology. It is recommended that courses be chosen from the following: 20, 21, 22, 23, 24, 45, 120, 121, 122, 123, 124, 125.

Theatre. It is recommended that courses be chosen from the following: 30, 31, 32, 33, 41, 45, 131, 132, 133, 134, 135, 136, 137, 138, 139, 198.

Communication. It is recommended that courses be chosen from the following: 20, 40, 41, 42, 44, 45, 136 or 137, 138 or 139, 140, 141, 142, 143, 144, 146. Majors are also required to complete a 3 credit Senior Independent Project.

Speech-Drama. A major for teaching certification determined by the State Department of Education relative to rules 46 and 47. Areas of study will be determined by State requirements, Education Department, and Speech-Drama requirements.

Minor. Although a minor is not required, a student may request that a minor be listed on the transcript. A minimum of 15 credits constitutes a minor. Minor in one of the following will be directed by the advisers: Speech Pathology, Theatre, Communication, and Speech-Drama.

Plan of Study Options. The department offers plans in several areas: Drama/English; Political Science/Communications; Speech Pathology/Psychology; Communication/Journalism.

The University Theatre. Additional training and experience in acting and in dramatic production are provided by the University Theatre. (Further information concerning the University Theatre may be found on pages 15 of this bulletin.) Since the University Theatre serves as a laboratory for courses in theatre, majors and minors are required to work a minimum number of hours on productions each year. The hours are to be determined by the departmental faculty.

The Speech Clinic. It is a service offered by the department to persons with communication disorders in the University and community and to foreign students. It also serves as a laboratory for the courses in speech pathology. Anyone interested in remedial speech work should consult the director of the clinic.

Forensics. Qualified students may participate in a variety of communication experiences. Students may participate in intercollegiate debate, individual speaking events, and interpretation events. Students participate in major Midwestern tournaments.

Approval of Schedules. All students majoring or minoring in speech and drama must have their schedules approved by the chairperson of the department at the beginning of each semester.

Undergraduate and Graduate Credit.

SPEECH PATHOLOGY.

20. Introduction to Speech Science and Phonetics. Sem. 1. Cr. 3. A study of the international phonetic alphabet, an introduction to the processes of respiration and phonation, acoustics, the acoustic theory of articulation, and speech perception.

21. Anatomy and Physiology of Speech. Sem. 2. Cr. 3. A study of the neurology of speech, the systems of respiration, phonation, articulation, and hearing, the endocrine and circulatory systems as related to speech. Offered in even-numbered years.

22. (Formerly 150.) Introduction to Speech Pathology. Sem. 1. Cr. 3. A study of the nature and treatment of disorders of speech and language.

23. (Formerly 52.) Observation of Clinical Practice. Each sem. 0+2. Cr. 1. Students observe and study actual therapy. This course is an orientation in procedures of the Speech and Language Clinic and preparation for Clinical Practice. It should be taken in the semester immediately preceding Speech and Drama 125.

24. (Formerly 154.) Introduction to Audiology. Sem. 2. Cr. 3. A study of basic techniques of pure-tone and speech audiometry, anatomy and physiology of hearing, pathologies of the ear, and acoustics. Offered in odd-numbered years.


121. (Formerly 156.) Language Development and Delay. Sem. 1. Cr. 2-3. An introduction to developmental psycholinguistics, including delayed language development and remedial approaches. Offered in even-numbered years.

122. (Formerly 157.) Disorders of Fluency. Sem. 2. Cr. 2-3. The nature and treatment of stuttering and cluttering. Offered as announced.

123. (Formerly 158.) Voice Disorders. Sem. 2. Cr. 2-3. The diagnosis and treatment of functional and organic disorders of phonation. Offered as announced.

124. (Formerly 159.) Aphasia. Sem. 2. Cr. 2-3. The diagnosis and treatment of the impairment of symbolization caused by brain damage. Offered as announced.

125. (Formerly 152.) Clinical Practice in Speech Pathology. Each sem. 0+2 or 0+4. Cr. 1-2. Supervised clinical experience in the evaluation and treatment of communication disorders. Prerequisites: Speech and Drama 20, 21, 22, 23, 24*, 120*, 143* and consent of the clinic director. *May be taken concurrently with Speech and Drama 125. May be repeated for credit.
THEATRE.

30. (Formerly 67.) Theatre Production. Each sem. Cr. 2. Intensive studies in the technical areas of theatre including: Scenery—Scene Design—Lighting, Sound, and Props—Costumes and Makeup. These specific areas of study will be included in the time schedule. Costumes and Makeup. The material covered is not duplicated.

31. (Formerly 68.) Theatre Practicum. Each sem. Cr. 1-2. Creative work in technical production on plays in the University Theatre. Prerequisite: consent of the technical director.

32. (Formerly 81.) Acting. Sem. 1. A basic course in the theory and technique of acting.

33. (Formerly 182.) Acting. Sem. 2. 2+2, Cr. 2. A continuation of study in the theory and technique of acting. Prerequisite: Acting 32.

131. (Formerly 166.) Play Directing. Sem. 2. 2+2, Cr. 2. Students direct one-act plays for public performance. Prerequisite: Speech and Drama 30.

132. (Formerly 193.) Advanced Acting. Sem. 1. 2+2, Cr. 2. An intensive study of characterization, ensemble playing, and acting techniques. Prerequisites: Speech and Drama 32 and consent of instructor.

134. (Formerly 138.) Repertory: Creative Dramatics. Each sem. 2+2, Cr. 2. A basic course in the theory and technique of acting.

135. (Formerly 103.) The Development of Theatre Art. Sem. 1. Cr. 3. A study of the development of theatre and performances from ancient ritual to the modern professional theatre. This course may be used to fulfill the Literature or Fine Arts Requirement.

136 (236). (Formerly 105-205.) Dramatic Form: Tragedy. Each sem. Cr. 2. A survey of modern American drama from O'Neill through Williams. This course may be counted toward a major or minor in the department.

137 (237). (Formerly 105-205.) Modern American Theatre and Its Literature. Sem. 1. Cr. 3. A survey of modern American drama from O'Neill through Williams. This course may be used to fulfill the Literature or Fine Arts Requirement.

138 (238). (Formerly 185-285.) Dramatic Form: Tragedy. Sem. 1. Cr. 3. A survey of the history, literature, and theory of tragedy and melodrama from the ancient to the modern theatre. This course may be used to fulfill the Literature or Fine Arts Requirement.

139 (239). (Formerly 180-286.) Dramatic Form: Comedy. Sem. 2. Cr. 3. A survey of the literature, history, and theory of comedy and farce from the ancient to the modern theatre. This course may be used to fulfill the Literature or Fine Arts Requirement.

191. The Teaching of Speech and Drama. Sem. 2. Cr. 2. (See Education 191.) A study of the methods of teaching speech and drama in the secondary schools. Prerequisite: admission to Supervised Teaching. This course may not be counted toward a major or minor in the department.

195. Projects in Speech and Theatre. Each sem. Cr. 1-3. A course offering talented students an opportunity to study intensively an area of theatre arts or communication. May be repeated for credit.

199. Contemporary Man in Drama. Sem. 2. Cr. 3. A search for the psychological, philosophical, and theological perspectives of humankind.

COMMUNICATION.


41. (Formerly 70.) Oral Interpretation. Each sem. Cr. 2. A basic course stressing the communication of thought and feeling from the printed page to the listener. Emphasis is on analysis, interpretation, and reading of drama, verse, and prose.
THEOLOGY

STAFF: Associate Professor Senne (Acting Chairman); Professors R. Baeper, T. Droeges, Jungkunz, Keller, Koepe, Korby, Knode, N. Nagel, and Rast; Associate Professors Albers, Lasky, Ludwig, and Truemper; Assistant Professors Brockopp, Niedner, Weinhold, and Widiger.

General Education. The General Education Requirement in religion at Valparaiso University is three courses of 3 credits each. These courses shall be taken from each of the first three levels indicated in the course listings below. All students are required to take the Level I course, ordinarily in their freshman year. This must be followed by a course from Level II, ordinarily in the sophomore year. This must be taken in the sophomore year. In either the junior or senior year, each student must take at least one course from the Level III or IV listings. Non-majors should select a course from Level III.

Major. A major in religion requires 30 credit hours of work in the department, 21 credits beyond the General Education Requirement.

a) Students who desire to earn a major in religion shall meet the following requirements: 1) Religion 5. Introduction to Christian Theology; 2) a course in the history of the Church in biblical studies (10, 110-117); 3) a course in the history of the Church and its thought (20, 120-121, 30, 130-139); 4) a course in contemporary religion and practice (40, 140, 50, 150, 155); 5) a course in the history of religion and practice (40, 160-161); and, 6) a senior project, either a seminar (180) or an independent study (190). They shall also take four additional courses chosen in consultation with their departmental major advisor.

b) Students with a major in another department may develop their program for a second major in religion according to (a) above, or by completing the following alternative major program, intended to prepare for voluntary service in the Church: Religion 5, 60, 115, 116, 155, and five additional courses chosen in consultation with their departmental major advisor.

Minor. Although a minor is not required for graduation in the College of Arts and Sciences, a student may request that a minor be listed on his/her transcript. A minimum of 9 credits (three courses) beyond the General Education Requirement, chosen by the student in consultation with the chairperson of the department, constitutes a minor.

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

Undergraduate and Graduate Credit.

LEVEL I (ORDINARILY FRESHMAN YEAR)

This course is prerequisite for all other courses offered by the department.

1. Introduction to Christian Theology. Each sem. Cr. 3. An introduction to the study of Christian theology, with attention to the religious question, basic biblical themes, central doctrines, ethics and worship.

LEVEL II (ORDINARILY SOPHOMORE YEAR)

Prerequisites for these courses are sophomore standing and satisfactory completion of Religion 5.


Prerequisites for these courses are one course at Level II and junior standing or above.

110. (Formerly 100.) Studies in the Bible and Its World. Cr. 3. An examination of selected topics as announced semester by semester.

111. Faith of the Prophets. Cr. 3. An examination of faith and tradition in the writings of the Old Testament prophets.

112. Archaeology and Old Testament Interpretation. Cr. 3. An introduction to archaeological discoveries in the Near Eastern countries and their usefulness in understanding and interpreting the Old Testament.


120. (Formerly 110.) Studies in Church History. Cr. 3. An examination of selected topics as announced semester by semester.

121. (Formerly 160.) The American Religious Experience. Cr. 3. An investigation of American religious thought with special emphasis on the interaction between religion and cultural development.

130. (Formerly 120.) Studies in Christian Thought. Cr. 3. An examination of selected topics as announced semester by semester.

131. (Formerly 121.) Life and Thought of Martin Luther. Sem. 1. Cr. 3. A study of the life of Martin Luther and the structure of his thought.

132. (Formerly 122.) Lutheran Confessional Theology. Sem. 2. Cr. 3. A study of the historical background and doctrinal content of the confessions of the Lutheran Church.

134. (Formerly 123.) Comparative Christianity. Cr. 3. An examination of various Christian denominations in the life of their history and confessions.

140 (240). (Formerly 182-282.) Contemporary Ethical Issues. Cr. 3. An examination of selected topics as announced semester by semester.

150 (250). (Formerly 130.) Studies in Worship and Liturgy. Cr. 3. An examination of selected topics as announced semester by semester.

160. (Formerly 140.) Studies in the History of Religions. Cr. 3. An examination of selected topics as announced semester by semester.


170. (Formerly 150.) Colloquium. Cr. 3. The Christian faith in conversation with current questions and problems. Varied topics to be listed each semester.

171 (271). (Formerly 181-281.) Theology and the Sciences of Man. Cr. 3. An investigation of areas of common interest in the fields of Christian theology and the social or personality sciences. Varied listings to be announced each semester.
172. (Formerly 124.) Christianity and Culture. Cr. 3. An examination of the contemporary Christian life through its encounter and dialogue with the world.

173. Spiritual Needs and Health Care. Cr. 3. Study and practice in the assessment of the spiritual needs of patients and in providing appropriate care in meeting those needs within the context of medical treatment. Prerequisite: students in nursing or in a program of preparation for the medical arts.

LEVEL IV

These courses are designed primarily for majors. Prerequisites are one course at Level II and junior standing or above.

115. (Formerly 101.) Introduction to the Bible: Old Testament. Sem. 1. Cr. 3. A study of the history and theology of the Old Testament with attention to the role of the Old Testament in Christian faith. (Not normally open to students who have completed Religion 10.)


117. (Formerly 175.) Principles and Practice of Biblical Interpretation. Cr. 3. Studies of selected biblical sections concentrating on methods of interpretation. Prerequisite: Religion 116 or consent of the chairperson of the department.


119 (219). (Formerly 184-284.) Systematic Theology II. Sem. 2. Cr. 3. Continuation of Religion 118 (218) emphasizing the constructive task of contemporary systematic theology, and studying the structure and content of the Christian faith. Prerequisite: Religion 118 (218) or consent of the chairperson of the department.

151. (Formerly 177.) Deaconess Work. Sem. 1. Cr. 3. A study of various aspects of Deaconess ministry, care, and counseling. This course may not be used to fulfill the religious requirements for general education, the minor, or the major.

152. (Formerly 178.) Christian Education. Sem. 2. Cr. 3. A theological study of the diaconal activity of the Church, with special emphasis on the role of the laity.

180. Theology Seminar. Each sem. Cr. 3. An advanced study of selected areas or issues in the discipline of theology. Offered on S/U basis. Prerequisite: senior standing and consent of the chairperson of the department.

190 (290). Independent Study. Each sem. Cr. 1-3. Prerequisites: junior standing, 12 semester hours in religion, and consent of the chairperson of the department.
ORGANIZATION. Christ College is an Honors College emphasizing liberal studies and providing a place in undergraduate study for courses and programs which implement honors standards and offer the freedom and flexibility for educational experimentation.

The College shares the general purposes of Valparaiso University. Its membership is drawn from the University's four undergraduate colleges in which each student is completing a normal specialized program. Through these colleges a university degree will be granted with the added honors designation, "Christ College Scholar" or "Christ College Associate" for students who at the same time have met the requirements of Christ College.

The program of courses offered by Christ College replaces many of the general education courses required of all students by the University. This program, supplemented by additional seminar work, invites its students to inquire beyond their specialized interests into larger contexts of thought, action and production, encouraging thereby the exploration of values and the integration of knowledge. Such liberal studies are an excellent preparation for many professions. Personal and intellectual growth of high quality is fostered by a resident staff which works closely with small numbers of students.

Above all, Christ College encourages the restlessness of the seeker who desires to know things as they are and whose thought and imagination have been captured by some vision of things as they might be under the grace of God and the exertions of human will and intelligence.

To achieve these purposes Christ College provides: a variety of planned programs and supervised study leading to a student's graduation with the honors designation "Christ College Scholar" or "Christ College Associate"; one or more comprehensive Freshman Programs which approach general education experimentally at the level of honors work and fulfill part of the University's General Education Requirement; a range of courses and programs, largely experimental or interdisciplinary in nature, which do not naturally fall into the traditional division of work among the regular departments; co-curricular experiences, including lectures and conferences designed to foster a reflective and civilized style of life as well as involvement in the problems of modern society; opportunities to work out a theology of life and vocation; and a new physical setting which facilitates immediate relationships between students and faculty as well as communication among the traditional divisions of knowledge.

THE FRESHMAN PROGRAM. The Program is a network of activities designed to capitalize on the educational opportunities arising from a series of carefully designed general studies. The Program is offered to a relatively small group of freshmen who are willing to invest more of themselves in the academic enterprise than might normally be required of them. Small classes, tutorial work, and an experimental flair characterize the multi-disciplinary work of the Program.

Students are admitted into the Program upon approval of their applications for admission. The application form, which is available through the Dean's Office, asks that a student provide evidence of his/her ability to profit from the Program, together with an expression of his/her personal intellectual goals.

Since a limited number of students can be accepted for the Program, the Christ College staff will choose its registrants from among the applicants.

The Program is planned as a two-semester sequence and carries eight hours of academic credit per semester. The successful completion of the Program satisfies part of the General Education Requirements of the student's college. Students from the professional colleges as well as from the College of Arts and Sciences are enrolled in the Program. A further description of it is available through the office of the Dean of the College.

ADMISSION AND MEMBERSHIP. Any student at Valparaiso University is welcome to enroll in the courses offered by Christ College, subject to the approval of the instructor of the course. Students who wish to become members of the College may apply for admission beginning with their sophomore year but no later than the middle of their junior year. Students admitted to the College are designated "Members of Christ College." Since such students are at the same time enrolled in another University college, they are jointly advised by their departmental adviser and their Christ College adviser.

In admitting students, consideration will be given to the interests and goals of the student, his/her academic achievement and promise, and evidence of his/her initiative, originality, creativity or qualities of leadership.

Once admitted to membership, a student's status is periodically reviewed by the faculty to determine whether the student is satisfying the standards and requirements of the College. These requirements include satisfactory academic progress toward the College's stated goals and a contribution to the common life of the College and the University. Even when a student is not directly involved in the courses offered by the College, he/she shall contribute to the life of the College's common life, partly through the relationship with the adviser and partly through membership in the Christ College Symposium, which meets periodically during each semester at a regularly scheduled hour. He/She may further contribute by assisting in teaching; opportunities for instructional assistance shall be arranged particularly for senior students.

The faculty takes an interest in the total program of each member. Accordingly it may authorize certain variations in the normal academic requirements of a student if such variations seem desirable. For example, it may permit him/her to carry additional hours, to waive prerequisites for advanced courses, to acquire academic credit through examination, and to waive certain University requirements if such waivers are justified. In general, the faculty may tailor the student's program to meet the interests and needs within the general framework of the University's objectives.

Membership in Christ College is never terminated by the mechanical application of arbitrary criteria such as grade-point average or the student's academic record for a particular semester. In general, Christ College students should expect to maintain an average grade of B or better, but in every case the judgment of whether a student should be admitted, retained, or readmitted as a member of the College will be made only after thorough consideration of the probable best interests of the student.

A member of Christ College may graduate as a "Christ College Scholar" or a "Christ College Associate." The particular requirements of each designation are stated below. The transcript of each graduate will carry this designation together with an explanation of its meaning.

Members of the College will normally be required to meet, by course examination or other evidence of qualification, the regular requirements for graduation except where explicitly modified. The faculty of Christ College may recommend such adjustments in these requirements as are in the spirit of the University's requirements and in the best interests of the students.

CHRIST COLLEGE SCHOLAR. The requirements for graduating with this designation are:

1) Membership in Christ College for a minimum of three semesters;
2) Twenty-five hours of work in courses in the College at a grade average of at least B. Students who have completed part or all of the Freshman Program need offer only twenty-one additional hours;
3) Humanities 105 and 106;
4) Three courses in Christ College taken during the junior and senior years. These courses shall be either junior-senior seminars or tutorial and independent-study work taken under the auspices of the College. Students enrolled in an off-campus program of the University may petition to waive one of these three courses. Of the three courses, one shall be the Senior Honors Seminar which shall not be waived except for extraordinary reasons;
5) One course in religion sponsored by Christ College; and
6) An appropriate independent-study project. This shall not count as one of the three required junior-senior courses referred to in 4, above.

CHRIST COLLEGE ASSOCIATE. The requirements for graduating with this designation are:

1) Membership in Christ College for a minimum of three semesters;
2) Sixteen hours of work in courses in the College at a grade average of at least B. Students who have completed part or all of the Freshman Program need offer only twelve additional hours;
3) Humanities 105 or 106;
4) The Senior Honors Seminar;
5) One course in religion sponsored by Christ College; and
6) An appropriate independent-study project.

*URBAN SEMESTER. Through Christ College, Valparaiso University offers to all students a semester long program involving residence in Chicago in cooperation with a number of Midwest colleges. This program involves the student in direct observation of urban life in the context of academic reflection and research. Students admitted to the program may earn from 13-16 credits, including closely supervised independent study. In addition, each student is required to engage in a service job supplied him/her by the Director. The program is taught by a special staff, partly recruited from the cooperating colleges and partly from other academic institutions.

*S/U grade.
The following courses are offered in a residential program in Chicago in cooperation with the Associated Colleges of the Midwest:

Urban Studies 138 The City and Its Systems ................. 6 credits
Urban Studies 150 Power and Justice .................... 4 credits
Liberal Studies 194 Independent-Study Project .......... 3 credits

Students shall be admitted to this program on the recommendation of an appropriate committee. This program is scheduled to be offered for the school years of 1979-1980 and 1980-1981.

SPECIAL PROGRAM IN THE HUMANITIES. A student with a first major in any department of the College of Arts and Sciences may earn a second major in an interdisciplinary study of the humanities. This combination comprises the Special Program in the Humanities.

The aim of the Program is an increased knowledge of the human world and the acquisition of skills leading to the enjoyment and understanding of a wide range of imaginative and intellectual works.

The courses in the Program focus on a variety of works and ideas such as lyric poetry, various kinds of argument, analyses of the symbolic structures of society and significant concepts found in scientific literature. These courses cultivate the arts of interpretation and judgment which may be applied to texts as well as to events in social and political life. This activity leads to further reflection on central cultural problems of our time, so that the student is encouraged to make an independent effort to assess statements of facts and test values among competing contemporary and traditional claims.

A brochure offering detailed information on this Program is available in the Dean's Office. A brief outline of the study plan follows:

I. A major concentration approved by any department in the College of Arts and Sciences.

II. Interdisciplinary major in the Humanities.

Note: As background for this major, students should develop historical perspective, some appreciation of the fine arts, and some insight into the relation of theology and the imagination before or during their formal work in the Program. Members of Christ College who have taken the College's freshman-sophomore offerings should also take Art 168 or Music 1 and an upper division religion course related to this program as approved by his adviser. Students who have not taken the lower division program in Christ College should take History 1 and 2; or Philosophy 51 and 53; or English 105 and 106 in addition to the art or music course and the religion course mentioned above.

A. Core Sequence.

1. Humanities 150: Interpretation in the Humanities.
3. Liberal Studies 198: Senior Honors Seminar.

Liberal Studies 140. Special Topics. Each sem. Cr. 2-3. Each year Christ College will offer courses, often in the form of seminars and open to sophomores, juniors, and seniors in the University, dealing with themes of social, intellectual, or artistic importance. These courses will ordinarily be multidisciplinary in nature. Topics dealt with in the past and likely to be repeated in the future include:

Revolution Science, Technology, and Public Policy Women Behind the Image Changing American Lifestyles

Law, Society, and Medicine Religion and Politics America at the Movies Law and Society

Liberal Studies 155. Tutorial Studies: Topic. Each sem. Cr. 2-4. A course of studies arranged by a professor and one or more students. S/U grade optional. Open only to members of Christ College. Prerequisite: consent of the Dean.


Liberal Studies 191. Inquiry in the Liberal Arts. Sem. 1 or 2. Cr. 3. A course in the theory and practice of the liberal arts. Students in this course will collaborate with instructors as tutorial assistants in other courses offered by the College. S/U grade.

Liberal Studies 194. Independent-Study Project: (Area of concentration.) Each sem. Cr. 2-6. A special independent study project for which there are no provisions for independent work in the student's major area of concentration. Approval of the project must be obtained from the chairperson of the department concerned and the Dean of the College. Only under special circumstances may a student register for this course in a regular Summer Session. However, under certain circumstances, some credit may be assigned for a portion of the work done during the summer months.

Liberal Studies 195. Senior Honors Seminar. Sem. 2. Cr. 4. A seminar offered under the supervision of the faculty of Christ College. The purpose of the course is twofold: 1) to examine a selected number of texts from a variety of disciplinary perspectives; and 2) to allow students to relate their disciplinary independent study projects to the humanities and/or liberal arts. Required of Christ College seniors.

Public Affairs 100. The Legal Process. Sem. 1 or 2. Cr. 3. A study of leading legal concepts, methods of legal reasoning and the function of the law in the social and economic order. Prerequisite: consent of the Dean.

Public Affairs 130. The Philosophy of Public Discourse. Sem. 2. Cr. 4. A study of the classical liberal arts of language and an examination of their use in selected classical and popular examples of discourse about the public and its affairs. Prerequisite: consent of the Dean.

Public Affairs 135. Public Affairs Seminar. Sem. 1 or 2. Cr. 3. Application of the arts of inquiry, invention, and judgment to a selected issue currently under public discussion. The approach is interdisciplinary from the standpoint of involving several academic and professional fields and of shaping new questions for research and policy formation. Topics of seminar offered in the past include: The Modern City; Philosophy and Public Affairs; The American Right Wing.

SPECIAL PROGRAM IN THE HUMANITIES.

Humanities 150. Interpretation in the Humanities. Sem. 1. Cr. 4. An introductory study of interpretive problems in the humanities. Primary attention will be given to the theory and practice of interpretation, particularly in relating interpretation to authorial or artistic intention, varying subject matters, and differing audience expectations. Required for humanities majors.

Humanities 155. Literature, Religion, and Modernity. Sem. 1 or 2. Cr. 3. An examination of religious elements in the rhetoric and style of modern writers. Topics include religion and rhetoric, the religious symbol, esthetics of religious art. Prerequisite: consent of the Dean.

Humanities 160. Humanities Seminar. Sem. 1 or 2. Cr. 3. A study of a particular topic (e.g., Christian Humanism, Politics and the Novel, Technology and Culture) on the basis of works selected from the various fields of the humanities. Prerequisite: consent of the Dean.
OBJECTIVES. This College, as an integral part of Valparaiso University, shares the philosophy and the general objectives of the University. The special objective, however, is to provide the appropriate basic education for business careers and for graduate work in three fundamental areas. Each student, in addition to majoring in a department, is required to complete a number of courses which provide an introduction to various phases of business. Because of the variety of business opportunities and the changing environment within which business operates, the student is encouraged to broaden this background and outlook by taking as many courses as possible in the liberal arts. Each student is encouraged to learn to think coherently, logically, and creatively and to learn to apply the knowledge and understanding of human society and of Christian principles gained from the liberal arts and religion to business decision making and to the conduct as a businessperson.

ORGANIZATION. The College is an administrative and instructional unit of the University under the direction of the Dean of the College. It comprises three departments: Accounting, Administrative Sciences, and Economics. Course offerings in Administrative Sciences are structured to permit limited concentrations in marketing, personnel-production, and business law and finance.

CURRICULA. Three four-year curricula are offered which lead to the degree of Bachelor of Science in Business Administration. In addition to taking certain prescribed courses in accounting, business law, marketing, finance, personnel-production, and economics, the student must complete a major in one of the three departments: Accounting, Administrative Sciences, or Economics. The requirements for a major in each of these three departments are set forth in the curricula described below. Each of the three curricula requires that the student devote approximately one half of his/her time to required and elective courses in the liberal arts. The required courses include English, religion, the natural sciences, mathematics, the social sciences, and physical education. The liberal arts electives may be chosen from any of the natural sciences, humanities, languages, or social sciences. The student will normally choose elective courses in those areas which provide both diversity and support to his/her educational background. Specific details concerning the prerequisites for courses in the liberal arts will be found in the announcements of the College of Arts and Sciences.

STUDENT ORGANIZATION. All students in the College are eligible for membership in The Association of Business Students. This association offers the student the opportunity for development through field trips, a guest speaker program, special faculty lectures, and participation in other extracurricular activities.

OMICRON DELTA EPSILON. This international honor society recognizes undergraduate students for their scholastic attainment in the area of economics. Its objectives are to establish closer ties between students and faculty and to encourage discussion on economic topics. Students who have completed twelve credits of economics with an average of 3.00 or better and have a similar average in their overall scholastic work are eligible for membership. The Delta Indiana Chapter was established at Valparaiso University in 1969.
COOPERATIVE PROGRAMS. An arrangement has been established with the Internal Revenue Service such that two students each year from the Department of Accounting participate in a work-study program with the Gary, Indiana office of the Internal Revenue Service. Students selected for this program work during the summer between their junior and senior years and half time during their senior year. This arrangement is designed to familiarize the student with accounting practices and also to give him/her a singular advantage should he/she elect to join the Internal Revenue Service after graduation.

Another cooperative opportunity exists for selected students who will be assigned a consultative role in the Small Business Institute class in an affiliation with the Small Business Administration.

GRADUATION REQUIREMENTS. In order to be eligible for the degree of Bachelor of Science in Business Administration, a student must complete one of the three prescribed curricula and must meet all the additional requirements for graduation set by the University (see pages 71-74 of this bulletin).

No credits earned in secretarial studies and only twelve semester credits earned in the College of Engineering may count towards the degree of Bachelor of Science in Business Administration. Credits earned in Developmental Reading are treated in the same manner as secretarial studies. Students who transfer to the College of Business Administration from another college within the University must have their work evaluated with reference to the requirements of the appropriate curriculum.

MINOR. A student is allowed to declare a minor in the College of Arts and Sciences, provided that no more than six hours required for the business administration program are used in fulfilling the requirement of a minor. The minor will be listed on the student’s official academic record.

ADMISSION. The requirements are the same as those for admission to the College of Arts and Sciences. These requirements may be found on page 61 of this bulletin.

CURRICULA FOR DEGREE OF BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION.

The following courses are common to each major.

LOWER DIVISION.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>6</td>
</tr>
<tr>
<td>English: Exposition and Argument 5 (or English 2 or 3-4)</td>
<td>4</td>
</tr>
<tr>
<td>Literary Studies 25</td>
<td>4</td>
</tr>
<tr>
<td>Business Communication 57</td>
<td>3</td>
</tr>
<tr>
<td>*Mathematics 35, 36 or 51, 52</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science (any course)</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science, Mathematics 60 and 23 or 25</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Oral Communication</td>
<td></td>
</tr>
<tr>
<td>(Recommended Courses: Speech 45, 144, or 146)</td>
<td>3</td>
</tr>
<tr>
<td>Economics 71 and 72</td>
<td>3</td>
</tr>
<tr>
<td>**Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>***Liberal Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 1 and 2</td>
<td>6</td>
</tr>
<tr>
<td>Administrative Sciences 21</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 22</td>
<td>3</td>
</tr>
</tbody>
</table>

UPPER DIVISION.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>3</td>
</tr>
<tr>
<td>Economics Elective</td>
<td>3</td>
</tr>
<tr>
<td>** *University Course</td>
<td>3</td>
</tr>
</tbody>
</table>

CORE COURSES—COMMON TO ALL THREE MAJORS.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Sciences 31</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 51</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 61</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 62</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 123</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 126</td>
<td>3</td>
</tr>
</tbody>
</table>

ACCOUNTING MAJOR.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Division</td>
<td></td>
</tr>
<tr>
<td>Accounting 17</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 18</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 105</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 107</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 109</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 113</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 23</td>
<td>3</td>
</tr>
<tr>
<td>Administrative Sciences 167</td>
<td>3</td>
</tr>
<tr>
<td>**Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**Transfer student may apply a maximum of 8 credits in religion from his/her advanced standing to the religion requirement. Otherwise, a transfer student with more than 45 credits but less than 75 credits of advanced standing need complete two courses (6 credits) of religion at Valparaiso University. A transfer student with 75 credits or more of advanced standing need complete one course (3 credits) of religion at Valparaiso University.

*The appropriate equivalences. Students who place out of mathematics requirements should consult with the Dean of the College regarding remaining mathematics requirements and appropriate substitute courses.

**Economics courses may not be used to fulfill this requirement.

***Applied music and economics courses may not be used to fulfill this requirement.

††Any approved course except Home Economics 166.

†††Fulfillment of this requirement with courses other than business and economics courses requires approval of the Dean.
Suggested Course Program.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 5</td>
<td>Accounting 2</td>
</tr>
<tr>
<td>Mathematics 55</td>
<td>Mathematics 36</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Liberal Arts Elective</td>
</tr>
<tr>
<td>Accounting 1</td>
<td>Accounting 2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total credits 15</td>
<td>Total credits 16</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>Mathematics 57</td>
</tr>
<tr>
<td>English 25</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Natural Science</td>
<td>Adm. Sc. 62 or Religion</td>
</tr>
<tr>
<td>Economics 71</td>
<td>Economics 72</td>
</tr>
<tr>
<td>Adm. Sc. 21</td>
<td>Adm. Sc. 22</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total credits 17</td>
<td>Total credits 18</td>
</tr>
</tbody>
</table>

Economics 71 or Economics 72 may not be taken in the freshman year except by permission of the Chairperson, Department of Economics.

The following courses may be alternated between the first and second semester of the assigned year:

- **English 5 and Religion 5**
- **Mathematics 60 and 23 or 25 and Natural Science**
- **Economics 71 and Economics 72**
- **Administrative Sciences 21 and Administrative Sciences 22**

*Fulfillment of this requirement with courses other than business and economics courses requires approval of the Dean.

**ACCOUNTING**

**STAFF:** Associate Professor Ehrenberg (Chairman); Professor Sievers; Assistant Professor Mortensen; M. Martin

The accounting major, required and elective curriculum, is designed to satisfy the minimum requirements for professional positions in the following fields of endeavor: public, industrial, governmental, and small business accounting as well as graduate schools in business and schools of law. It is strongly recommended that the accounting major consult with his/her adviser in accounting and/or the chairperson of the department to develop his/her own curriculum. It is highly recommended he/she plan his/her curriculum as early in his/her college career as possible. Normally, to expand his/her background, a student will present more credit hours at time of graduation than is minimally required. The use of the student's elective courses to supplement the accounting major is imperative, especially if a specialized background is desired.

**Undergraduate Credit.**

1. **Accounting Principles I.** Each sem. 3+1, Cr. 3. The course develops and applies the fundamental principles and procedures of accounting to the single proprietorship, partnership, and corporate forms of business enterprise.

2. **Accounting Principles II.** Each sem. 3+1, Cr. 3. A continuation of Accounting I. Prerequisite: Accounting 1 or the equivalent.

17. **Intermediate Accounting I.** Sem. 1. Cr. 3. The course covers the premises and constituent parts of accounting statements in light of present day practices and theories including alternative methods of presentations. Prerequisite: Accounting 2 or the equivalent.

18. **Intermediate Accounting II.** Sem. 2. Cr. 3. A continuation of Accounting 17. Prerequisite: Accounting 17 or consent of the chairperson of the department.

103. **Managerial Accounting.** Each sem. Cr. 3. For non-accounting majors only. Student is assumed to have a basic knowledge of the financial record-keeping process. The course is designed to enable the student to analyze for management decision-making the information contained in a company's books and records. Prerequisite: Accounting 2 or the equivalent.

105. **Cost Accounting.** Sem. 1. Cr. 3. A course designed to examine in detail the specialized problems of cost accumulation and analysis of manufacturing operations. Emphasis is placed on understanding different systems and costs. Prerequisite: Accounting 2 or the equivalent.

106. **Advanced Cost Accounting.** Sem. 2. Cr. 3. A course designed to prepare students to analyze the use cost information for: cost planning, decision and control by utilization of forecasting, budgeting, capital budgeting, rate of return, and cost-volume-profit analysis techniques; motivation, performance, evaluation through utilization of standards and variance analyses, direct costing, decentralization, internal transfer pricing and cost allocations; application of cost analysis techniques to governmental and not-for-profit organizations will be covered as well. Prerequisite: Accounting 105 or consent of the chairperson of the department.

107. **Standards and Principles of Financial Accounting.** Sem. 1. Cr. 3. A survey of official pronouncements on accounting standards and principles. Prerequisite: Accounting 18 or the equivalent. Accounting 107 should be taken by accounting majors immediately after Accounting 18 or the equivalent.

109. **Advanced Accounting.** Sem. 1. Cr. 3. A course dealing with the special problems of business organization expanding into multiple groups. Prerequisite: Accounting 17.

*Credit for Accounting 1 and 2 may be earned through the College Level Examination Program (CLEP) subject examination in Introductory Accounting.
110. Accounting Procedures in Special Areas. Sem. 2. Cr. 3. A course dealing in accounting procedures covering partnerships, joint venture, installment sales, consignments, receiv­ erships, estates, trusts, foreign exchange, government and fund accounting. This course is designed primarily for students who intend to enter public accounting or law. Prerequisite: Accounting 17.


115. Accounting Systems and Controllership. Sem. 1. Cr. 3. A course designed to acquaint the student with contemporary accounting problems and theory through use of selected case studies; also internal control, including what it is, how it is used, and what it can do for the business organization. Topics will include accounting systems-manual accounting procedures, mechanical, automatic and electronic adoptions to the accounting needs; budget programming and control; and projection for analysis of return on capital invested. Prerequisites: Accounting 105 and senior standing in the College or consent of the chairperson of the department.

116. Contemporary Accounting Theory. Sem. 2. Cr. 3. A course which examines contemporary accounting theory through current readings. Attention is focused on those areas about which the accounting profession is most concerned. The significance and limitations of generally accepted accounting principles as well as the evolutionary process involved in their development, are stressed. Recommended for senior accounting majors only.

117. Auditing. Each sem. Cr. 3. Techniques of performing audits for public accounting firms. Auditing standards will be reviewed, as well as criteria and methods used to support balance sheet account values. Prerequisites: Accounting 18 and 105.

118. Auditing Practice Set. Each sem. Cr. 1. The simulation of an actual audit. Worksheet preparation and supportive documentation will be emphasized. Prerequisite: Accounting 117 or concurrently with Accounting 117.

119. Problems in Accounting. Each sem. Cr. 1-3. A course in which a special topic in accounting will be given intensive study. Prerequisites: senior standing in the College and consent of the chairperson of the department.

ADMINISTRATIVE SCIENCES

STAFF: Professor Laube (Dean and Acting Chairman); Professors Hutchins, D. Luecke, and Schleider; Associate Professors Listman and Wilson; Assistant Professors Robinson and Slaby; R. Swetz

Undergraduate Credit.

GENERAL ADMINISTRATION.

*21. Principles of Management. (Formerly The Individual in the Managerial Setting.) Each sem. Cr. 3. This basic course exposes the student to the complexities of the manager's milieu, including: the societal sectors; organizations; the manager within the organization; the organization within the various sectors; the work of the manager and personal requirements of managers. Prerequisite: sophomore standing.


23. Quantitative Methods. Each sem. Cr. 3. A course covering various quantitative techniques used in the solution of management decision-making problems. Topics covered include: decision theory, game theory, distribution models, network models, inventory analysis, linear programming, and queuing theory. Prerequisite: Administrative Sciences 22.

24. Management Systems. Sem. 1. Cr. 3. Study of systems theory and impact upon organizations and management, including analysis and design of information systems, role of management in the development of systems, and applications to the decision-making process. Prerequisite: senior standing in the College or consent of the chairperson of the department.

25. Business Research. Sem. 2. Cr. 3. Study of the research procedure covering problem definition, sources of information, sample design, questionnaire development and analysis and presentation of data. A field project will be undertaken to emphasize applications. Prerequisites: Administrative Sciences 22 and junior standing in the College.

Note: The following courses are basic courses designed to encompass all functional areas with varying degrees of emphasis and with the intent of fulfilling an integrative objective.

121. Small Business Management. Each sem. Cr. 3. Study and applications of the essential managerial factors of various types of small business, including organizational, environmental, and personal factors. Exposure to sources of information and assistance for the small businessperson. Prerequisites: Administrative Sciences 21, 31, 51, and 61.

122. Small Business Institute. Each sem. Cr. 3. Practicum in which the student participates as a member of a team of student consultants on actual small business cases referred by the Small Business Administration. Enrollment limited by the number of cases referred by the agency (SBA). All consultant activities are performed by the students, under general supervision of the faculty coordinator. Prerequisites: Administrative Sciences 121 and approval of the chairperson of the department.

123. Business Policies. Each sem. Cr. 3. A capstone course integrating core business curriculum and background through case studies and computer simulation; a conceptual approach to administrative policy; strategy and decision-making through analysis of interrelated administrative problems. Prerequisites: Mathematics 60 and 23 or 25 and senior standing in the College.

126. Business and Modern Society. Each sem. Cr. 3. An analysis of our business system and its interrelationships with other institutions in our pluralistic society; mutual influence of ethics, changing value systems and business behaviors; social responsibilities of the corporate citizen. Prerequisite: senior standing in the College.

127. Ethics in Business. Sem. 1. Cr. 3. An analysis of moral bases for ethical decision and behavior's ethical aspects of business leadership, contemporary business conduct examined in an ethical context. Prerequisite: senior standing in the College.

MARKETING.

*31. Principles of Marketing. (Formerly Introduction to Business Management.) Each sem. Cr. 3. A course introducing the student to the marketing of goods and services as viewed through the role of the marketing manager. Emphasis is placed upon the major elements of the marketing mix: price, promotion, products and distribution. Prerequisite: sophomore standing.


132. Retailing. Sem. 1. Cr. 3. A study of the contemporary environment of the retailing industry with emphasis on techniques utilized in store location, merchandising, promotion, and control. Prerequisite: Administrative Sciences 31.
133. Promotional Techniques. Each sem. Cr. 3. An introductory study of the marketing communications process. The promotional tools of advertising, personal selling and public relations are covered. Prerequisite: Administrative Sciences 31.

134. Sales Management. Sem. 2. Cr. 3. A study of the managerial functions of sales managers with an emphasis on field and territorial management, recruiting, and training of the sales force. Sales forecasting techniques, routing, variance analysis, and personal selling principles will also be included. Prerequisite: Administrative Sciences 31.

137. Consumer Behavior. Sem. 2. Cr. 3. A study of the factors entering into the decision-making process employed by the consumer in the marketplace. Applications of the behavioral sciences to the field of marketing are undertaken. Prerequisite: Administrative Sciences 31.

139. Problems in Marketing. Each sem. Cr. 1-3. A course in which a special topic in marketing will be given intensive study. The topic may vary for each offering. May also be used for independent study. Prerequisite: senior standing in the College or consent of the chairman of the department.

PERSONNEL-PRODUCTION.

41. Personnel Management. (Formerly Management of Human Resources.) Each sem. Cr. 3. The effective utilization of human resources, the policies relating to manpower planning, selection, placement, compensation, training and union relations. Prerequisite: Administrative Sciences 21.

51. Production Management. Each sem. Cr. 3. An introduction to the basic production operations: relating to plant location, plant layout, product design, industrial research, material handling, production planning and control, inventory, quality control, work measurement, plant safety and industrial hygiene. Prerequisites: Administrative Sciences 21 and 22.

141. Wage and Salary Administration. Sem. 2. Cr. 3. The philosophy and guiding principles in establishing and maintaining an adequate and equitable compensation for employees in an enterprise with emphasis on activities, principles, techniques, and practices proven successful. Prerequisite: Administrative Sciences 41.

145. Industrial Relations. Sem. 1. Cr. 3. Employer-employee relations relating to unions, the negotiations of collective bargaining agreement, contract administration, grievance procedure and arbitration, wage determination and inflation. Prerequisites: Administrative Sciences 31 and 41.

153. Production Planning and Control. Sem. 2. Cr. 3. Planning and forecasting for production, inventory control, economic lot size, scheduling, dispatching, machine loading, mathematical programming, and budgetary control. Prerequisites: Administrative Sciences 23 and 51.

159. Problems in Personnel-Production. Each sem. Cr. 1-3. A course in which a special topic in Personnel-Production will be given intensive study. The topic may vary for each offering. May also be used for independent study. Prerequisite: senior standing in the College or consent of the chairman of the department.

BUSINESS LAW AND FINANCE.

60. Risk and Insurance. Each sem. Cr. 3. An introduction to risk and risk bearing for business and individuals. Topics include the theory of risk, the insurance mechanism, insurance techniques, and a survey of insurance functions by principal types of coverage. Prerequisite: Accounting 2.

61. Principles of Finance. Each sem. Cr. 3. A survey of the principles of finance from the viewpoint of the manager. The courses will cover current asset management, capital budgeting, sources of long and short-term financing, money and capital markets, failure and reorganization, and cost of capital. Prerequisite: Accounting 2.

62. The Legal Environment of Business. Each sem. Cr. 3. A survey of the law as an environmental influence in business including the law of torts and crimes; and a study of the law of contracts and agency. Prerequisite: sophomore standing in the College or consent of the chairperson of the department.

*Credit for Administrative Sciences 62 may be earned through the College Level Examination Program (CLEP) subject examination in Introductory Business Law.


162. Capital and Debt Financing. Sem. 2. Cr. 3. An analysis of the managerial problems connected with the generating of long-term capital for the corporate enterprise. Prerequisite: Administrative Sciences 61.

163. Principles of Investment. Each sem. Cr. 3. A survey of the principles of investment, security analysis, measurement of the investment risk, the organization and operation of security exchanges, and the investment policies of individuals and financial firms. Prerequisites: Administrative Sciences 22 and 61.


165. Property and Liability Insurance. Sem. 1. Cr. 3. A study of the basic economics and legal concepts of property and liability insurance. Special attention is given to the protection of business assets through insurance coverage. Prerequisite: Administrative Sciences 60.

166. Life and Health Insurance. Sem. 2. Cr. 3. An analysis of the alternate techniques for protection against economic losses for the individual through death, disability, and retirement. Prerequisite: Administrative Sciences 60.

167. Business Law II. Sem. 2. Cr. 3. A study of the Uniform Commercial Code including the law of sales, commission, paper, secured transactions, and economic relations and the law. Prerequisite: Administrative Sciences 62.

169. Problems in Finance. Each sem. Cr. 1-3. A course in which a special topic in finance will be given intensive study. The topic may vary for each offering. May also be used for independent study. Prerequisite: senior standing in the College or consent of the chairperson of the department.

ECONOMICS

STAFF: Professor Bernard (Chairman); Associate Professors Heinze and Henderson; Assistant Professors Allston, R. Nielsen, and O'Toole

Undergraduate Credit.


88. Econometrics. Sem. 2. Cr. 3. The application of mathematical and statistical techniques to the analysis of economic problems. This includes the study of nonparametric statistical tests, single and multiple regression models and computer applications. Prerequisites: Economics 71 and 72, Mathematics 36 or 52 or 72, and Administrative Sciences 22 or equivalent.

89. Mathematics for Economists. Sem. 1. Cr. 3. A course which considers economic problems of a mathematical type along with the necessary mathematical analysis. Not open to students with more than a year of calculus. Prerequisites: Economics 71 and 72, Mathematics 36 or 52 or 72, and Administrative Sciences 22 or equivalent.

*Credit for Economics 71 and 72 may be earned through the College Level Examination Program (CLEP) subject examination in Introductory Economies.


172. Comparative Economic Systems. Sem. 1. Cr. 3. A comparative analysis of political theories and the economic systems that derive from those theories. The course will focus on those ideological assumptions that result in capitalism, socialism, fascism, anarchism, etc. as the solution to economic problems. Prerequisites: Economics 71 and 72.

173. Public Finance. Sem. 2. Cr. 3. An analysis of the role of the public sector in a market economy. Public revenues and expenditures, fiscal administration, and taxation are considered as they relate to economic activity. Prerequisites: Economics 71 and 72.

174. Managerial Economics. Sem. 2. Cr. 3. A course in applied economics which emphasizes the use of microeconomics, statistics, and decision-theory in the process of making managerial decisions. Using problems and short case studies, topics such as estimating demand, cost and profit analysis, forecasting, capital budgeting, and location analysis will be discussed. Prerequisites: Economics 71 and 72 and Administrative Sciences 22.

175. Modern European Economic History. Sem. 2. Cr. 3. A history of the economic development of Western Europe from 1750 to the present. Emphasis is placed on the role of the industrial revolution and its impact on modern society. Prerequisites: Economics 71 and 72.

176. International Economics. Sem. 2. Cr. 3. A study of the theory underlying the methods of financing international trade, the deviations from and the restoration of equilibrium and the problems associated with foreign investment and indebtedness. Prerequisites: Economics 71 and 72.

177. Urban Economic Problems. Sem. 2. Cr. 3. The approach of workers and employers to the problems of labor; the development of trade unions and collective government regulation of labor relationships; and an economic analysis of wage-employment problems. Prerequisites: Economics 71 and 72.

180. Money and Banking. Sem. 1. Cr. 3. A study of the institutions, principles and problems of money and banking in the U.S. Special attention is given to the basic elements of monetary theory and policies. Prerequisites: Economics 71 and 72.


188. Monetary Theory and Policy. Sem. 2. Cr. 3. An examination of monetary theories and their impact on aggregate economic behavior. Prerequisite: Economics 185.

*189. The History of Economic Thought. Sem. 1. Cr. 3. Economic thought in its historical development from the Mercantilists to the present day. Prerequisites: Economics 71 and 72.

190. Independent Study in Economics. Each sem. Cr. 1-3. Independent study to be approved by the chairperson and advising economics professor.

191. Problems in Economics. Each sem. Cr. 3. A course in which a special topic in economics will be given intensive study. The topic will vary from year to year. Prerequisites: Economics 71 and 72. Recommended for senior students.

*For graduate credit, these courses must be taken as part of the graduate program in the College of Arts and Sciences.

*Credit for Economics 185 may be earned through the College Level Examination Program (CLEP) subject examination in Money and Banking.
GENERAL INFORMATION. As early as 1873 Civil Engineering was taught at Valparaiso University. The College of Engineering was established in 1920 with full, four-year programs in Civil, Electrical, and Mechanical Engineering. During World War II, with the shortage of men, the program was temporarily reduced to two years at Valparaiso University followed by the final two years at Purdue University. After the war, engineering was reinstated to four years through the initiative of the students who collected funds and then designed and built a new engineering building. Degrees were granted in 1951. In 1968 the College of Engineering moved into the newly-constructed Gellersen Engineering-Mathematics Center. This modern building, located on the east edge of campus, contains all the offices, classrooms, and laboratories of the College of Engineering.

LOCATION. The University's location, approximately fifty miles from the heart of Chicago and a short distance from the Calumet and St. Joseph Valley industrial areas of Indiana, provides opportunity for close contact with industry through inspection trips. Student members of the professional engineering societies are welcome at meetings of the parent societies in the area.

OBJECTIVES OF AN ENGINEERING EDUCATION. The College recognizes the responsibility to offer a program which is a strong professional program in Engineering, yet broad in liberal arts and communication skills. The College of Engineering being an integral part of the University, gives the student an opportunity to participate in all phases of University life. Consistent with the University objectives of inculcating the Christian ethic, it is important for the engineer to have a proper perspective of social, moral, and ethical issues in contemporary society. Such a perspective can be achieved only by full participation in the academic, social, cultural, and spiritual life of a Christian university.

ORGANIZATION. The College constitutes a separate administrative and instructional unit of the University and is under the direction of the Dean of the College. It is organized into the Departments of Civil Engineering, Electrical Engineering, and Mechanical Engineering. The College places its major emphasis on offering an outstanding undergraduate program.

ACADEMIC PROGRAM. The programs of the College prepare the student for direct entry into an engineering profession or for graduate school. The first one and one-half years are designed to give the student a good general education, including a firm foundation in mathematics and the physical sciences. During the following two and one-half years, the student receives a broad education in the particular field of engineering that is chosen. In the senior year, the student has the option to select courses oriented toward graduate school or design courses oriented toward professional engineering. All programs contain extensive laboratory work which demonstrate practical applications and support the theory learned in the classroom. In addition, each senior student completes an independent study project in an area of personal interest. These projects require the solutions to engineering problems supplied by industrial and consulting firms, by the student, or by the faculty.

One-fourth of the engineering program is devoted to non-technical course work. These courses taken throughout the four years include religion, literature, English composition, economics, public speaking, and several
The academic program and participation in the life of the University help the student mature socially, spiritually, and professionally.

**CURRICULA.** Four-year curricula are offered leading to the degrees of Bachelor of Science in Civil, Electrical, and Mechanical Engineering. These programs are accredited by the Engineers' Council for Professional Development.

The College is a member of the Engineers' Council for Professional Development and an institutional member of the American Society for Engineering Education.

**PLANT AND FACILITIES.** The College is located in the Gellersen Engineering Mathematics Center. This building was made possible through the generosity of the late William A. Gellersen of Oakland, California, and houses the offices, classrooms, and laboratories of the College as well as the offices, classrooms, and computer center of the closely-related Department of Mathematics of the College of Arts and Sciences.

The Laboratories of Civil Engineering.

Materials Testing Laboratory. This laboratory contains equipment necessary to conduct investigations of the behavior of real engineering materials under static, impact, and cyclic loading conditions. This equipment includes both mechanical and hydraulic universal testing machines with capacities up to 60,000 pounds for applying tensile, compressive, torsional, and flexural loads. Fatigue testing machines are also available for applying alternating direct stress and/or bending stress to test specimens or to actual machine or structural components. In addition, instrumentation is available for measuring and recording the deformation and deflection resulting from the applied load.

Fluid Mechanics Laboratory. This laboratory contains apparatus for instrumental use and senior project research including a large subsonic wind tunnel, tilting flume, impulse turbine, pipe network, centrifugal pump test stand, Hele-Shaw unit, Reynolds apparatus, a set of instructional films, and extensive supporting apparatus.

Environmental Engineering Laboratory. This laboratory is equipped with apparatus required for physical, chemical, and bacteriological analyses of air, water, waste water, and solid wastes. The laboratory is also equipped to handle individual investigation and research studies by the students and staff in the field of environmental engineering.

Concrete and Soil Mechanics Laboratory. This laboratory contains the equipment required for conducting the ASTM standard tests on Portland cement, aggregates, cement and masonry products, and soil as an engineering material. Among the major pieces of equipment are a 400,000 pound compression testing machine, direct shear, unconfined compression, consolidation and triaxial testing machines.

Surveying Laboratory. Practical field exercises in surveying are conducted outdoors except in cases of unusually inclement weather. The Civil Engineering Department maintains a wide range of instruments and equipment representative of current surveying practice. In addition to a variety of conventional nonoptical tools and measuring devices, principal instruments available for supervised student use include modern theodolites, modern precise self-leveling levels, and traditional transits and levels of the manual four-point leveling type.

Experimental Stress Laboratory. This laboratory contains the necessary equipment for experimental studies of stress and strain distribution using Brittle coatings, photoelasticity, electrical strain gage, and Birefringent coating.

The Laboratories of Electrical Engineering.

Electrical Science Laboratory. This laboratory is equipped to give instruction in basic electrical instrumentation and circuits. Work stations are equipped with signal generators, power supplies, oscilloscopes, and components necessary for study of elementary electrical, electronic, and electromechanical circuits and systems.

Electronics Laboratory. This laboratory is equipped with the electronic instruments and components necessary for conducting studies of semi-conductor devices and circuits, active and passive networks, and characteristics of signals. A typical work station for a group of two students includes an oscilloscope, power supplies, a signal generator, and necessary electronic components. This laboratory is equipped so that students may design and construct prototype electronic circuits and systems.

Energy Conversion. This laboratory is equipped to conduct studies of the behavior of electrical energy conversion devices and their control under static and dynamic conditions. It contains medium and fractional horsepower A.C. and D.C. motors, generators, dynamometers, and static electronic converters.

Microwave Laboratory. This laboratory is equipped with instruments for making precision measurements of electrical quantities at microwave frequencies. It contains signal sources, slotted lines and wave guides, and antennas for the study of propagation of electrical energy at high frequencies.

Systems Analysis Laboratory. This laboratory is equipped with electromechanical and hydraulico-pneumatic devices and components, transducers, recorders, and breadboard apparatus. Analog computers and special measuring devices are used for component modeling and system design.

Digital Circuits Laboratory. This laboratory contains equipment for the study and design of digital systems ranging from combinational circuits to microprocessors. Microprocessor equipment includes an Altair 8800, two SWTP8800 systems with breadboarding capacity, and eleven Motorola MEK6800D2 systems for hands-on software study.

The Laboratories of Mechanical Engineering.

Controls. This laboratory is equipped for the study of closed loop control systems. Small scale process systems, including pressure, temperature, flow and level control loops, are available for experimentation. Electronic and pneumatic analogs, with associated commercial controllers, are also available to test control loop fundamentals related to machine and process applications.
Energetics. This laboratory is equipped for the study of mobile power sources. Equipment consists of reciprocating and rotating (Wankel) spark ignition and compression ignition engines, fuel cell and associated measurement and analysis instruments.

Experimental Stress. This laboratory contains the necessary equipment for experimental studies of stress and strain distribution using Brittle coatings, photoelasticity, electrical strain gage, and Birefringent coating.

Heat Transfer and Gas Dynamics. This laboratory is equipped with a heat exchanger, natural convection loop, refrigeration and air conditioning units, blowers, compressors, shock tube, flow table, thrust stand, a supersonic wind tunnel, and necessary instrumentation for the study for heat transfer and compressible fluid flow.

Manufacturing Processes. This laboratory complex provides facilities for metal cutting, metal forming, welding, heat treatment and metal casting studies. The equipment contained in these laboratories include: tracer and numerically-controlled machines, standard tool room equipment, production equipment, a television-equipped metallograph, heat treating and casting furnaces, and welding equipment.

Measurements. This laboratory contains equipment for measuring pressure, temperature, force, strain, and numerous other physical phenomena. Auxiliary equipment is available to study calibration techniques, and to determine instrument limits in response to both static and dynamic signals.

Vibration and Sound. This laboratory contains a vibration table, electrical and mechanical excitation equipment, system models, sound chamber, and sound-measuring instrumentation.

Design. Although no single room is available, experiments in the area of lubrication, stress concentration, fatigue strength, and critical speeds of shafting are performed in the above-named laboratories.

Interdepartmental Laboratories.

Television Center. This facility is equipped with a control room for the preparation of videotapes and videocassettes for instructional use and student self-evaluation. Television cameras, recorders, monitors, special effects, and distribution equipment are operated by trained personnel to provide supplementary audio-visual material for the classroom teacher. The facility also houses dial-access and videocassette study carrels which are provided for independent study and/or review of material at times convenient to the student. The study carrels are also available for use by other academic departments of the University.

The Computer Center. The digital computer laboratory, which is under the administrative direction of the academic computing center, is housed in the Gellersen Engineering-Mathematics Center and is available for use by the students and faculty of the College of Engineering. The Center is equipped with a Hewlett-Packard 3000-II digital computer system. The Center also houses key punches, and terminals to access the computer. This system is used for academic purposes only.

STUDENT ORGANIZATIONS. Professional development of engineering students is encouraged through the activities of the Engineering Society. Upper division students are encouraged to join the local student chapters of the American Society of Civil Engineers, the American Society of Mechanical Engineers, and the Institute of Electrical and Electronic Engineers. Officers of these Founder Societies form the Joint Engineers Council which administers the affairs of the Engineering Society. The Engineering Society conducts a general interest program for all engineering students and sponsors social and recreational activities for the College.

The Engineering Supply Store is a student-operated, not-for-profit store that supplies students with engineering materials at reduced prices. Earnings are used to finance Engineering Society activities.

TAU BETA PI. 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 this national engineering honorary fraternity. The Indiana Delta Chapter was installed at Valparaiso University on March 23, 1963. The chapter serves to replace Appian Society, which was a local honorary organization founded in 1959.

PROFESSIONAL REGISTRATION OF ENGINEERS. Registration 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. It is desirable, therefore, that every engineering graduate apply for registration as an Engineer-In-Training (EIT) shortly before or upon graduation. EIT examinations are held each spring at Valparaiso University and at other institutions offering accredited engineering programs.

INTERDISCIPLINARY PROGRAMS. Programs can be planned which meet special needs of students who study engineering at Valparaiso University. Typical career programs are in nuclear engineering, electromechanical engineering, bio-engineering, chemical engineering, or medicine. These programs involve replacing technical and free electives with courses from other disciplines. Each student plans a program in consultation with a faculty adviser and must secure the approval of the Dean of the College. Upon graduation, the student receives a Bachelor of Science degree in Civil, Electrical, or Mechanical Engineering.

Students who have an interest in nuclear engineering take advanced courses in nuclear science offered by the Department of Physics. The Department of Physics has excellent facilities and a modern nuclear reactor.

DOUBLE-DEGREE PROGRAM. This program leads to the degree of Bachelor of Arts or Bachelor of Science, in addition to the appropriate engineering degree. Five years are usually required to complete this program, although exceptional students have completed it in less time.

Two degrees may be earned by completing one of the engineering curricula and completing the general education and major requirements of the B.A. degree or B.S. degree. This will require earning the credit hours and attaining a standing of at least two (2.00). Students electing 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. Further information may be obtained from the Dean of the College.

MAJOR. A student may declare a major in the College of Arts and Sciences by fulfilling all requirements for that major. The major will be listed on the student's official academic record.

MINOR. A student may declare a minor (including the General Business Minor) in the College of Arts and Sciences, provided that no more than six hours required for the engineering program are used in fulfilling the requirement of a minor. The minor will be listed on the student's official academic record. Since the mathematics minor is implicit in the engineering program, it will not, however, be listed on the student's official academic record.

THE COLLEGE AND CHRIST COLLEGE. Certain students enrolled in the College may be invited to participate in the program of Christ College. These students will pursue a normal engineering program; however, courses taken in the Christ College program will replace selected non-technical courses in the engineering program. These students will be assigned an academic adviser who is a member of the faculty of the College of Engineering as well as a member of the Christ College Committee of the University. In conjunction with the advisers, and with the approval of the Dean of the College, these students will plan and execute an enriched program in the humanities, taking advantage of the specialized courses offered by the Christ College Program.

HONORS WORK. A student of exceptional ability may pursue a program of independent study or research during his/her senior year. Details of this program must be worked out with the department chairperson and have the approval of the Dean of the College.

INSPECTION TRIPS. Trips to industrial plants are arranged and conducted by members of the engineering faculty and are designed to correlate the instruction with the industries visited.

MATHEMATICS ENRICHMENT. For those entering students who perform well on the mathematics placement examination, an enriched program is available. With approval of the Dean of the College, Mathematics 75, Calculus I (4 credits) and Mathematics 81, Topics in Mathematics I (1 credit) are taken in place of Mathematics 71, Analytic Geometry and Calculus I (5 credits) during the first semester. In the second semester, Mathematics 76, Calculus II (4 credits) and Mathematics 82, Topics in Mathematics II (1 credit) are taken in place of Mathematics 72, Analytic Geometry and Calculus II (5 credits).

PLACEMENT. The University Placement Service arranges on-campus interviews for seniors with a variety of employers. Over two hundred businesses and industries visit the campus each year for that purpose. In addition, the Placement Service helps students to arrange for off-campus interviews with firms not interviewing on campus, and assists students in finding summer employment and part-time employment during the school year. The career resources library, in the Placement Office, contains information on employers throughout the United States.

APPROVAL OF SCHEDULES. All engineering students must have their schedules approved by their advisers at the beginning of each semester.

ADMISSION. The requirements for the first-year class are set forth on page 61 of this bulletin.

GRADUATION REQUIREMENTS. In addition to the requirements set forth on page 71 of this bulletin, the student must complete one of the prescribed curricula. The curriculum for each degree is composed of a group of courses common to all degree programs offered by the College and a group of courses that make up the specialized work in each program. Each program requires a total of 138 credits. The common courses required for all programs are listed below and the additional courses required for each program are found in the departmental listings.

REQUIREMENTS COMMON TO CIVIL, ELECTRICAL, AND MECHANICAL ENGINEERING PROGRAMS.

| GE  | 20. Introduction to Algorithms for Computing | 3 |
| GE  | 30. Engineering Laboratory | 2 |
| GE  | 69. Energy Systems | 3 |
| GE  | 90. Mechanics-Statics | 3 |
| GE  | 94. Mechanics-Dynamics | 9 |
| GE  | 95. Electricity and Magnetism | 4 |
| GE  | 97. Engineering Science | 4 |
| Math | Calculus | 1 |
| Chem. | General Chemistry | 1 |
| Engl. | Exposition and Argument | 4 |
| Engl. | Literary Studies | 4 |
| SpDr. | Public Communication | 2 |
|  | Physical Education | 2 |
|  | Principles of Economics | 6 |
|  | Religion | 6 |
|  | Approved Liberal Arts Electives | 6 |
|  | Free Elective | 3 |
|  | Total Credits | 72 |

TRANSFER STUDENT. Academic work taken at other schools will be evaluated by the appropriate department chairperson and advanced standing granted by the Registrar accordingly. A transfer student may apply a maximum of 3 credits in religion from his advanced standing to the religion requirement. A transfer student with more than 68 credits of advanced standing need only complete one course (3 credits) of religion at Valparaiso University.

SUGGESTED COURSE PROGRAM. The suggested program is the same for all three engineering degree programs for the first three semesters. At the start of the fourth semester the student begins a program leading to one of the three professional degrees. Special programs for the fourth semester are arranged for those students who wish to delay a choice of major until the fifth semester. Suggested programs for the last five semesters are found under departmental offerings.
FRESHMAN YEAR.
First Semester.
M 71. Analytic Geometry and Calculus I ............... 5
GE 20. Introduction to Algorithms for Computing .......... 4
Engl 5. Composition and Argument .............................. 1
PE 10. Physical Education: Activities ....................... 3
Liberal Arts Elective ........................................ 18
Total Credits ........................................ 50

Second Semester.
M 72. Analytic Geometry and Calculus II .................. 5
GE 30. Engineering Laboratory ................................. 2
GE 69. Energy Systems ......................................... 3
GE 90. Mechanics-Statics ....................................... 1
PE 10. Physical Education: Activities ....................... 3
Religion ....................................................... 18
Total Credits ........................................ 56

SOPHOMORE YEAR.
First Semester.
M 77. Calculus III ............................................ 4
Ch 51E. General Chemistry .................................... 3
GE 94. Mechanics-Dynamics .................................... 4
GE 95. Electricity and Magnetism ............................. 3
Religion ....................................................... 18
Total Credits ........................................ 56

CIVIL ENGINEERING

STAFF: Associate Professor Spring (Chairman); Professors El-Naggar, Mortimer, and Peller; Associate Professors Frankus and Schuler; Assistant Professor Savur

GRADUATION REQUIREMENTS.
In addition to the courses common to each degree program listed on page 219, the following courses are required to earn the degree of Bachelor of Science in Civil Engineering:

CE 100. Surveying ........................................... 3
CE 103. Mechanics of Materials .............................. 2
CE 112. Materials Engineering ............................... 3
CE 120. Soil Mechanics ....................................... 3
CE 122. Soil and Foundation Engineering .................. 4
CE 109. Structural Analysis I ................................ 3
CE 115. Structural Analysis II ................................ 3
CE 116. Structural Design I .................................. 4
CE 117. Structural Design II .................................. 3
CE 184. Environmental Engineering I ...................... 3
CE 185. Environmental Engineering II ...................... 3
CE 186. Transportation ....................................... 3
CE 106. Fluid Mechanics I .................................... 2
CE 113. Fluid Mechanics II ................................... 2
CE 114. Engineering Management ............................ 2
CE 180. Independent Study Project I ....................... 2
CE 181. Independent Study Project II ....................... 4
M 102. General Chemistry or Unity of Life or Geomorphology 3 or 4
EE 96. Principles of Electrical Engineering ............... 4
Technical Electives ........................................ 6
Total Credits ........................................ 60 or 67

Technical Electives.
The technical elective requirement may be met with courses from departmental technical electives: Biology, Chemistry, Computer Science, Mathematics, Physics, or courses in other engineering departments. Courses used to fulfill this requirement must be upper-division courses and must be approved by the Civil Engineering Department Chairperson.

SOPHOMORE YEAR.
Second Semester.
M 102. Linear Algebra and Its Applications ............... 4
CE 100. Surveying ........................................... 3
CE 97. Engineering Science .................................... 4
EE 96. Principles of Electrical Engineering ............... 4
Add One of the Following:
Ch 52E. General Chemistry .................................... 3
Bi 50. Unity of Life ......................................... 4
Geo 4. Geomorphology ....................................... 4
Total Credits ........................................ 16 or 19

JUNIOR YEAR.
First Semester
CE 103. Mechanics of Materials ......................... 3
CE 106. Fluid Mechanics I .................................. 3
CE 112. Materials Engineering ............................. 2
CE 120. Soil Mechanics ....................................... 3
Sp 40. Public Communication ................................. 2
Total Credits ........................................ 16
Engl 25. Literary Studies ................................... 4
Total Credits ........................................ 16

SENIOR YEAR.
First Semester
CE 115. Structural Analysis II ............................ 3
CE 117. Structural Design II ............................... 3
CE 122. Soil and Foundation Engineering .................. 3
CE 165. Environmental Engineering II .................... 3
CE 184. Environmental Engineering III .................... 3
CE 185. Environmental Engineering IV .................... 3
CE 186. Transportation ....................................... 3
CE 106. Fluid Mechanics I .................................... 2
CE 113. Fluid Mechanics II ................................... 2
CE 114. Engineering Management ............................ 2
CE 180. Independent Study Project I ....................... 2
CE 181. Independent Study Project II ....................... 4
M 102. General Chemistry or Unity of Life or Geomorphology 3 or 4
EE 96. Principles of Electrical Engineering ............... 4
Technical Electives ........................................ 6
Total Credits ........................................ 60 or 67

Total Credits, 138

1Sabbatical Leave, Fall Semester 1979-1980.
### Electrical Engineering

**STAFF:** Professor E. Luetsch (Chairman); Professors Dauberman, Shehan (Acting Dean), and Vocke; Associate Professor Vater; Assistant Professor Bohlmann; J. Crosmer; Visiting Assistant Professor Hart

**Graduation Requirements.**

In addition to the courses common to each degree program listed on page 219, the following courses are required to earn the degree of Bachelor of Science in Electrical Engineering.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 128</td>
<td>Linear Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EE 129</td>
<td>Nonlinear Circuits</td>
<td>2</td>
</tr>
<tr>
<td>EE 127</td>
<td>Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>EE 132</td>
<td>Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>EE 133</td>
<td>Laboratory III</td>
<td>2</td>
</tr>
<tr>
<td>EE 131</td>
<td>Electromagnetic Field Theory</td>
<td>3</td>
</tr>
<tr>
<td>EE 140</td>
<td>Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EE 143</td>
<td>Digital System Design</td>
<td>2</td>
</tr>
<tr>
<td>EE 153</td>
<td>System Theory I</td>
<td>3</td>
</tr>
<tr>
<td>EE 154</td>
<td>System Theory II</td>
<td>3</td>
</tr>
<tr>
<td>EE 158</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>EE 190</td>
<td>Independent Study Project I</td>
<td>2</td>
</tr>
<tr>
<td>EE 191</td>
<td>Independent Study Project II</td>
<td>2</td>
</tr>
<tr>
<td>ME 104</td>
<td>Differential Equations with Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CE 106</td>
<td>Fluid Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>ME 170</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ME 222</td>
<td>Technical Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 36

**Technical Electives.**

The technical elective requirement may be met with courses from departmental technical electives: Biology, Chemistry, Computer Science, Mathematics, Physics, or courses in other engineering departments. Courses used to fulfill this requirement must be upper-division courses and must be approved by the Electrical Engineering Department Chairperson.

**Sophomore Year.**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second</td>
<td>EE 104</td>
<td>Differential Equations with Linear Algebra</td>
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<tr>
<td></td>
<td>ME 106</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EE 128</td>
<td>Linear Circuits</td>
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</tr>
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<td>EE 129</td>
<td>Nonlinear Circuits</td>
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<td>Ch 52E</td>
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<td>EE 127</td>
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<td>Linear Circuits</td>
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<tr>
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<td>Engl 25</td>
<td>Literary Studies</td>
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**Total Credits:** 17

**Junior Year.**

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<tbody>
<tr>
<td>First</td>
<td>EE 131</td>
<td>Electromagnetic Field Theory</td>
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<td>EE 132</td>
<td>Laboratory II</td>
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<tr>
<td></td>
<td>EE 133</td>
<td>Laboratory III</td>
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<tr>
<td></td>
<td>EE 135</td>
<td>Network Analysis</td>
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<td>EE 140</td>
<td>Electronics</td>
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<td>EE 160</td>
<td>Engineering Science</td>
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<td>EE 153</td>
<td>System Theory I</td>
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<td>CE 106</td>
<td>Fluid Mechanics I</td>
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<tr>
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<td>Ge 40</td>
<td>Engineering Elective</td>
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</table>

**Total Credits:** 18

1 Sabbatical Leave, Spring Semester 1979-1980.

### Mechanical Engineering

**STAFF:** Associate Professor Schoech (Chairman); Professors Kruger, Lehmann, and Zoss; Associate Professors Doria, R. Rose, and Steffen; Visiting Associate Professor Lauck; Assistant Professor Heuer

**Graduation Requirements.**

In addition to the courses common to each degree program listed on page 219, the following courses are required to earn the degree of Bachelor of Science in Mechanical Engineering.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ME 104</td>
<td>Materials Laboratory</td>
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<td>ME 170</td>
<td>Thermodynamics</td>
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<td>ME 173</td>
<td>Mechanical Measurements Laboratory</td>
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<td>ME 177</td>
<td>Heat Transfer</td>
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<td>ME 179</td>
<td>Heat Power Design</td>
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<td>ME 180</td>
<td>Mechanical Analysis</td>
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<td>ME 183</td>
<td>Machine Design</td>
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<td>ME 186</td>
<td>Manufacturing Processes</td>
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</tr>
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<td>ME 187</td>
<td>Statistical Engineering</td>
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</tr>
<tr>
<td>ME 190</td>
<td>Independent Study Project I</td>
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</tr>
<tr>
<td>ME 191</td>
<td>Independent Study Project II</td>
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<tr>
<td>ME 104</td>
<td>Differential Equations with Linear Algebra</td>
<td>4</td>
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<tr>
<td>EE 96</td>
<td>Principles of Electrical Engineering</td>
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<td>CE 103</td>
<td>Mechanics of Materials</td>
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</table>

**Total Credits:** 66

**Technical Electives.**

The technical elective requirement may be met with courses from departmental technical electives: Biology, Chemistry, Computer Science, Mathematics, Physics, or courses in other engineering departments. Courses used to fulfill this requirement must be upper-division courses and must be approved by the Mechanical Engineering Department Chairperson.

**Sophomore Year.**

<table>
<thead>
<tr>
<th>Semester</th>
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<td>Thermodynamics</td>
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</tr>
<tr>
<td></td>
<td>ME 173</td>
<td>Mechanical Measurements Laboratory</td>
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</tr>
<tr>
<td></td>
<td>ME 179</td>
<td>Heat Power Design</td>
<td>3</td>
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<tr>
<td></td>
<td>ME 180</td>
<td>Mechanical Analysis</td>
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<td>ME 183</td>
<td>Machine Design</td>
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<td>ME 187</td>
<td>Statistical Engineering</td>
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<td>ME 190</td>
<td>Independent Study Project I</td>
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<td>ME 191</td>
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<td>EE 96</td>
<td>Principles of Electrical Engineering</td>
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**Total Credits:** 17
<table>
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<tr>
<th>Undergraduate Credit.*</th>
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</table>

**GENERAL ENGINEERING.**

**GE 4. Elementary Graphics.** (Also offered as Home Economics 4.) Sem. 2. 1+3, Cr. 2.

A course of study designed to acquaint the student with the graphic language-techniques of technical drawing and design. Emphasis is placed on the geometrical aspects of orthographic projection, lettering and line work, symbolic representation, and the use of the computer in technical design. No prerequisite.

**GE 14. Engineering Graphics.** Each sem. 1+4, Cr. 2. A basic course in the theory and techniques of engineering graphics. Emphasis is placed on theoretical geometry and design of structures, including the use of computer software for technical drawing and design. Prerequisites: GE 14.

**GE 20. Introduction to Algorithms for Computing.** Sem. 1. 3+0, Cr. 3. A fundamental course in algorithmic thinking. Special emphasis is placed on the analytical aspects of programs and the use of the computer in technical design. No prerequisite.

**GE 64. Engineering Science.** Each sem. 3+0, Cr. 3. A study of the fundamentals of atomic and nuclear structure, including properties of the electron and the special theory of relativity as applied to atomic and subatomic particles. A study is included of the development of the field of atomic and subatomic particles and the special theory of relativity. Prerequisites: Mathematics 72 or 76. Not offered after Fall Semester 1980.

**GE 69. Energy Systems.** Each sem. 3+0, Cr. 3. A basic course in heat and thermodynamics. The first and second laws of thermodynamics are emphasized through energy balances, conservation of energy and energy limits. Properties of fluids and vapors are studied using tables and charts, and the equation of the perfect gas. Functions, principles of combustion, and actual performance of heat power machinery are analyzed to demonstrate theory and practice.

**GE 90. Mechanics-Static.** Each sem. 3+0, Cr. 3. Resolution and composition of forces; combinations of forces; free-body diagrams; principles of equilibrium; friction; first and second moments of areas.

**GE 94. Mechanics-Dynamics.** Each sem. 3+0, Cr. 3. Motion of a particle in a rectangular, curvilinear, and polar coordinates; motion of a rigid body; forces involved in moving systems; work and energy relations; impulse and momentum; periodic motion. Prerequisites: Mathematics 72 or 76 and GE 90.

**GE 95. Electricity and Magnetism.** Sem. 1. 3+3, Cr. 4. A study of the definitions and properties of electric and magnetic force fields. The application of Kirchhoff's Laws to elementary DC circuits is emphasized. Prerequisite: Mathematics 71 or 76. Laboratory fee, $10.00.

**GE 97. Engineering Science.** Each sem. 4+0, Cr. 4. An introduction to the theory and application of sound and light and to the fundamentals of atomic and nuclear structure. Topics include: the theory of waves, reflection, refraction, diffraction, polarization, special theory of relativity, wave-particle duality, atomic structure, nuclear structure, and the application of nuclear energy. Prerequisites: GE 94 and GE 95.

**GE 101. Man and Technology.** Cr. 3. A study of socio-technological problems and the development of concepts which lead to an understanding of the use and influence of technology and science. No prerequisite.

**GE 169. Digital Computer Methods.** Each sem. 2+0, Cr. 2. An introductory course in numerical methods using the digital computer. Topics include: computer arithmetic; programming for the digital computer using the Fortran language; selected methods of numerical analysis applied to solutions of engineering problems; comparison of selected numerical methods. Prerequisite: Mathematics 77 or concurrent registration with previous exposure to Fortran.

**GE 195. Senior Problem.** Each sem. Variable credit. Selected students are permitted to work in depth on a problem of their particular field under the supervision of a member of the faculty. Each student will be required to keep a progress notebook and to turn in a final report, typed in triplicate and in approved form. Open only to students with acceptable senior standing upon permission of the faculty and approval of the Dean of the College.

**CIVIL ENGINEERING.**

**CE 100. Surveying.** Sem. 2. 2+3, Cr. 3. A study of the science and art of absolute and relative spatial measurements for engineering purposes. Special emphasis is placed upon the theory of errors; use of surveying instruments; and field practice in transit-traverse traversing, leveling, and route surveying. Prerequisite: Mathematics 71 or 75. Laboratory fee, $10.00.

**CE 103. Mechanics of Materials.** Each sem. 3+0, Cr. 3. 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 shafts and beams; combined loading; plastic and elastic action; and an introduction to statically indeterminate problems. Prerequisites: Mathematics 77 and GE 90.

**CE 106. Fluid Mechanics I.** Each sem. 2+3, Cr. 3. An examination of fluid properties, fluids at rest, and fluid flow including conservation of mass, momentum, energy, fluid friction, lift, drag, dimensional analysis, and similitude. Applications include pipe flow, channel flow, pumps, turbines, flow measurement, hydraulic model studies, and flow around submerged objects. Prerequisite: GE 94. Laboratory fee, $10.00.

**CE 109. Structural Analysis I.** Sem. 2. 4+0, Cr. 4. Analytical and graphical methods for the determination of axial, flexural, shear, and torsional stresses and their resulting deflections. Common structural forms of both determinate and indeterminate types such as bridges and roof trusses, cable-structures, beams and frames will be treated, influence line theory and energy methods will be introduced. Prerequisite: CE 103.

**CE 112. Materials Engineering.** Sem. 1. 1+3, Cr. 2. A study of the mechanical properties of engineering materials and the relationship between their behavior and the design of structural and machine components. The macro- and micro-structure of materials are studied and...
the elementary concepts of failure including fracture, yielding, and elastic instability are presented along with the classical theories of failure. Experimental investigations involving static loading and fatigue, impact and creep are conducted in the laboratory. Prerequisite: CE 103 or concurrent registration. Laboratory fee, $10.00.

CE 113. Fluid Mechanics II. Sem. 2. 2+0, Cr. 2. Application of the principles of fluid mechanics to solution engineering analysis and design problems. Topics include: model testing, analysis of energy distribution, application of fluid mechanics to civil engineering problems. Prerequisites: CE 50 and concurrent registration. Laboratory fee, $10.00.

CE 114. Engineering Management. Sem. 2. 3+0, Cr. 3. The application of engineering economy concepts to construction projects using the case study approach. Investigate construction management aspects including CPM, specifications, contracts, and forms of organization. Prerequisite: CPE 103 or concurrent registration. Laboratory fee, $10.00.

CE 115. Structural Analysis II. Sem. 1. 3+0, Cr. 3. Analysis of statically determinate structures, using the approximate method, classical methods and contemporary methods. These include moment distribution, slope-deflection, matrix methods, plastic column, analog and digital computer approaches. Prerequisites: GE 20 and CE 109.

CE 116. Structural Design I. Sem. 2. 3+3, Cr. 4. The design of steel structural system components using elastic and plastic methods. Design of bolted and welded connections. Use of AISI and AASHTO codes in the design of steel buildings, plate girders, and bridges. Prerequisite: CE 109 or concurrent registration.

CE 117. Structural Design II. Sem. 1. 3+0, Cr. 3. The analysis and design of reinforced concrete structural system components using the latest ACL strength design methods. Design of prestressed concrete and plastic design in steel. Prerequisites: CE 116 and CE 117.

CE 118. Structural Design III. Sem. 2. 2+2, Cr. 4. Selected design discussions in the areas of: Timber design, composite design, prestressed concrete and plastic design in steel. Prerequisites: CE 103, 106, 110 or concurrent registration. Laboratory fee, $10.00.

CE 120. Soil Mechanics. Sem. 1. 2+3, Cr. 3. The study of index, structural, mechanical, and hydraulic properties of soils. Soil compaction and stabilization. Theoretical soil mechanics, including shear strength, pressure distribution, consolidation, active and passive states of plasticity, settlement, and flow through permeable media. Elementary principles of laboratory testing of soils, identification and testing of soils. Fundamental properties of plain and composite materials, including batch design. Prerequisites: CE 103, 106, 110 or concurrent registration. Laboratory fee, $10.00.

CE 122. Soil and Foundation Engineering. Sem. 3. 3+0, Cr. 3. A continuation of CE 120. Further study of theoretical soil mechanics including slope stability, lateral earth pressure, and soil properties testing. Field trips are required. Prerequisite: CE 120.

CE 163. Transportation. Sem. 1. 3+0, Cr. 3. A study of the application of engineering principles to the location, design, and construction of highways, railroads, and airports. Prerequisite: CE 122.

CE 164. Environmental Engineering I. Sem. 2. 2+3, Cr. 3. The general aspects of society and the environment and the effects of pollution on nature's resources. Among topics considered are: water quality criteria, pollution abatement, and water quality problems. Prerequisites: concurrent registration in GE 95 or concurrent registration in EE 95.

CE 165. Environmental Engineering II. Sem. 1. 2+2, Cr. 3. The application of environmental pollution control principles to unit processes studies and design. Field trips are required. Prerequisite: CE 164.

CE 166. Environmental Engineering III. Sem. 1. 2+2, Cr. 3. The history of the air pollution control, the control of smoke and fumes, the control of industrial dust, and pollution control problems. Discussion of the different types of pollutants and their effect on the environment as well as regulations. Discussion of the methodology for determining air quality standards, and the control of pollution. Prerequisites: CE 164 or concurrent registration. Laboratory fee, $10.00.

CE 167. Traffic Engineering. Sem. 2. 2+2, Cr. 3. An introductory study of traffic flow; techniques for describing the flow and capacities of highways and intersections. Economic factors are considered. Prerequisite: CE 163.

CE 190. Independent Study Project I. Sem. 1. 1+0, Cr. 2. The application of theoretical and experimental engineering concepts and mathematical principles in the analysis, design, or investigation of an engineering problem. Individual problems are selected by the student and prerequisite to be selected by the student with the approval of the civil engineering faculty. Prerequisites: senior standing in civil engineering. Laboratory fee, $10.00.

CE 191. Independent Study Project II. Sem. 2. 1+3, Cr. 2. A continuation of the project selected in CE 190. Laboratory fee, $10.00.

ELECTRICAL ENGINEERING.

EE 80. Electronics and Scientific Instrumentation. (Also offered as Chemistry 80 and Physics 80). Sem. 1. 2+2, Cr. 2. Modern electronic principles and devices are studied, with applications to scientific instrumentation. Laboratory experience with modern instruments is emphasized, and simple troubleshooting techniques are taught. Prerequisites: Physics 77 or concurrent enrollment and sophomore standing. Laboratory fee, $15.00.

EE 86. Principles of Electrical Engineering. Each sem. 3+3, Cr. 4. Principles and applications of electronic and electromagnetic devices. Laboratory work in basic rotating machines, transformers, semiconductor circuits, logic circuits, amplifiers, and instrumentation. Prerequisite: GE 95. Laboratory fee, $10.00.

EE 127. Laboratory I. Sem. 2. 0+3, Cr. 1. Experimental study of linear and nonlinear circuits and instrumentation techniques. Prerequisite: GE 95. Laboratory fee, $10.00.

EE 128. Linear Circuits. Sem. 2. 3+0, Cr. 3. A study of the fundamental methods and theorems of electric circuit analysis. Emphasis is placed on both analytical and computer-aided methods of steady state analysis of DC and AC circuits, transient and complete response of first and second order circuits, frequency domain analysis, and two port circuits. Prerequisite: GE 95.

EE 129. Nonlinear Circuits. Sem. 2. 3+0, Cr. 3. (2+0, Cr. 2 as of 1980-1981) A study of the methods used to characterize nonlinear elements and to analyze the circuits in which they are used. Topics include the i-v characteristics of diodes, transistors, and composite electronic devices; electronic circuits; Boolean algebra; and digital devices and circuits. Prerequisite: GE 95.

EE 131. Electromagnetic Field Theory. Sem. 1. 3+0, Cr. 3. The study of fundamental laws of static and dynamic electric and magnetic fields using vector methods. Boundary value problems, wave equations, and electromagnetic radiation. Prerequisite: Mathematics 77.

EE 132. Laboratory II. Sem. 1. 0+6, Cr. 2. The study of signals and signal processing circuits emphasizing instrumentation and measuring techniques. Prerequisite: concurrent registration in EE 135 or EE 140. Laboratory fee, $10.00.

EE 133. Laboratory III. Sem. 2. 0+6, Cr. 2. A study of electromagnetic energy conversion devices and an introduction to the design and construction of prototype analog and digital electronic systems. Prerequisites: concurrent registration in EE 135 and EE 145. Laboratory fee, $10.00.

EE 135. Network Analysis. Sem. 1. 3+0, Cr. 3. A study of methods used in the analysis of linear electric networks. Topics include magnetically coupled circuits, polyphase circuits, Fourier methods, LaPlace transforms, matrix equation formulations, network transfer functions, and analysis and synthesis of passive and active filters. Prerequisite: EE 128.

EE 138. Energy Conversion. Sem. 2. 3+0, Cr. 3. A study of electromagnetic devices with emphasis on the principles and operating characteristics of transformers and rotating electrical machines. Prerequisites: GE 95 and concurrent registration in EE 133.

EE 140. Electronica. Sem. 1. 3+0, Cr. 3. A study of basic theory of semiconductors and the operation of discrete transistors, and integrated circuits. The basic operational amplifier is developed and applied to elementary amplifiers. Design techniques for biasing discrete and integrated amplifiers are studied. Prerequisite: EE 129.
EE 143. Digital System Design. Sem. 2. 3+0, Cr. 3. A course in the design of digital systems by classical techniques. Synchronous and asynchronous circuits and data path design. Prerequisite: EE 129 or consent of the instructor.

EE 153. System Theory I. Sem. 2. 3+0, Cr. 3. An introduction to system analysis with emphasis on linear time-invariant and discrete-time systems and an introduction to state space methods. Prerequisite: EE 135.

EE 154. System Theory II. Sem. 1. 3+0, Cr. 3. A continuation of System Theory I. Modern automatic control techniques and selected topics. Prerequisite: EE 153.

EE 158. Communication Theory. Sem. 2. 3+0, Cr. 3. The effects of system bandwidth and noise on the transmission of information by electrical signals; amplitude modulation; frequency modulation; pulse modulation; sampling theorem; information measure; channel capacity. Prerequisite: EE 153.

EE 190. Independent Study Project I. Sem. 1. 1+3, Cr. 2. The application of theoretical and experimental engineering concepts and mathematical principles to the analysis, design and investigation of an engineering system. Individual or group problems in the field of electrical engineering are selected by the student with approval of the faculty. Prerequisite: senior standing in electrical engineering. Laboratory fee, $10.00.

EE 191. Independent Study Project II. Sem. 2. 1+3, Cr. 2. A continuation of the project selected in EE 190. Laboratory fee, $10.00.

TECHNICAL ELECTIVES.

EE 144. Microwaves. 3+1, Cr. 4. An introduction to guided waves. Microwave devices and systems with a detailed study of wave-guides; microwave circuit theory; antennas; and microwave devices including parametric amplifiers and lasers. Laboratory experiments emphasize measuring technique and system performance. Prerequisite: EE 131. Laboratory fee, $10.00.

EE 146. Power Electronics. 7 weeks. 4+0, Cr. 2. A course in the application and design of power semiconductor circuits. Selected topics include rectifiers, AC controllers, choppers, inverters, and converters. Prerequisite: EE 140.

EE 147. Communication Electronics. 7 weeks. 4+0, Cr. 2. A course in the analysis and design of electronic circuits used in the communication of electric signals. Selected topics include different types of amplifiers, oscillators, multipliers, discrete and integrated amplifiers, and active filters. Prerequisite: EE 140.

EE 149. Topics In Electrical Engineering. Each sem. 7 weeks or 14 weeks. Cr. 2-3. The investigation of electrical engineering topics of special interest. Prerequisite: consent of the chairperson of the department.

EE 150. Microprocessor Applications. 3+0, Cr. 3. The application of programmable logic devices in the design of electrical engineering circuits and systems. The organization, programming, and interfacing of microprocessors and associated electronics are studied. Prerequisite: EE 143.

EE 155. Power System Engineering. 3+0, Cr. 3. Power system components, load flow and the control of voltage and energy are studied. System fault studies are related to system protection. Prerequisite: EE 138.

EE 156. Servomechanism Design. Sem. 2. 3+3, Cr. 4. The application of system theory to the design of feedback control systems. Methods of compensation to achieve specified performance measures are studied. The identification and representation problems are solved using prototype time and frequency domain methods. Laboratory work in the design and construction of prototype electromechanical and electrohydraulic control systems. Prerequisite: EE 154. Laboratory fee, $10.00.

MECHANICAL ENGINEERING.

ME 104. Materials Laboratory. Sem. 1. 1+3, Cr. 2. A study of the composition and mechanical properties of engineering materials as related to their selection in design and fabrication process. Destructive and nondestructive tests are performed to determine mechanical properties by classical techniques. Along with metallurgical examination of micro- and macro-structure of materials. Variables considered are heat treatment, material composition, and manufacturing processes. Prerequisites: Chemistry 52E and GE 90. Laboratory fee, $10.00.

ME 170. Thermodynamics. Each sem. 3+0, Cr. 3. The study of the second law of thermodynamics to reversible and irreversible processes, entropy, real gases, gas and gas-vapor mixtures. The application of thermodynamic principles to the study of vapor and gas cycles. Prerequisite: GE 89.

ME 172. Fluid Dynamics. Sem. 1. 3+0, Cr. 3. The study of fluid flow, both compressible and incompressible. Invariable and constant area ducts. The control volume method is employed in application of the conservation equations to flow systems. Fluid dynamics is applied to engineering design. Prerequisites: GE 94 and ME 170 or concurrent registration.

ME 173. Mechanical Measurements Laboratory. Sem. 2. 2+3, Cr. 3. Investigations into typical industrial and laboratory primary transducers and read out equipment in the mechanical measurement areas. Dynamic as well as static measurements are emphasized. Prerequisite: GE 69. Laboratory fee, $10.00.

ME 177. Heat Transfer. Sem. 2. 3+0, Cr. 3. The principles and practice of heat transfer by conduction, radiation, free and forced convection, vapor condensation, and boiling liquids. Unsteady state heat transfer, dimensional analysis, analytical and graphical solutions to engineering problems related to heat exchangers. Prerequisite: Mathematics 104.

ME 179. Heat Power Design. Sem. 1. 2+3, Cr. 3. The design of systems and equipment applying thermodynamic, flow and heat transfer fundamentals to power generation, energy conversion and environmental control. Interrelation of theory and practice based on reliability, safety, environmental and economic considerations is incorporated in both lecture and laboratory study. Emphasis will be placed on spark and compression ignition engines, steam and gas turbine pollution considerations on combustion processes. Prerequisite: senior standing in mechanical engineering. Laboratory fee, $10.00.

ME 180. Mechanisms. Sem. 1. 3+0, Cr. 3. A study of the kinematics of mechanisms by graphical and analytical methods; displacement, velocity, and accelerations of linkages, cams, and gears are investigated. Function, motion, and path generation synthesis techniques are considered. Prerequisites: Mathematics 77 and concurrent registration in GE 94 and GE 169.

ME 183. Machine Design. Sem. 1. 2+3, Cr. 3. The rational application of topics developed in the course of Mechanics of Materials to the design of machine elements. Theories of failure, combined stresses, contact stress, stress concentration, fatigue, and deflection analysis are considered in relation to the design of shafting, springs, fasteners, and general mechanical elements. Prerequisite: GE 103.

ME 186. Manufacturing Processes. Sem. 2. 2+6, Cr. 4. A study of manufacturing methods including production drawings, tools, operation planning, materials, fabrication techniques, and inspection. Machinability of materials, application of machine tools, welding, casting, heat treating, and numerical control are introduced through lecture and laboratory work. Field trips to industrial facilities are arranged. Prerequisites: GE 14 and ME 187 or consent of the chairperson of the department. Laboratory fee, $10.00.

ME 187. Statistical Engineering. Sem. 1. 3+0, Cr. 3. An introduction to the application of statistics and probability theory in the solution of engineering problems. Concepts of variance, tolerance, and statistical properties of engineering elements are applied to design and production problems. The algebra of normal functions, engineering economics, and statistical quality control techniques are related to manufacturing, reliability, and maintainability. Prerequisite: Mathematics 77 or concurrent registration.

ME 190. Independent Study Project I. Sem. 1. 1+3, Cr. 2. The application of theoretical and experimental engineering concepts and mathematical principles in the analysis, design, or investigation of an engineering system. Individual or group problems in the field of mechanical engineering to be selected by the student with the approval of the mechanical engineering faculty. Prerequisite: senior standing in mechanical engineering. Laboratory fee, $10.00.

ME 191. Independent Study Project II. Sem. 2. 1+3, Cr. 2. A continuation of ME 190. Laboratory fee, $10.00.
TECHNICAL ELECTIVES.

ME 105. Experimental Stress Analysis. Sem. 1. 2+2, Cr. 3. An introduction to experimental methods for measuring stresses and strains including: Brittle coatings, photoelasticity, resistance strain gages, Birefringent coatings, and Moiré grids. Stress distributions in machine and structural components subjected to various loadings are analyzed both theoretically and experimentally. Prerequisite: senior standing in the College of Engineering.

ME 149. Topics in Mechanical Engineering. Each sem. 7 weeks or 14 weeks. Cr. 2-3. The investigation of mechanical engineering topics of special interest. Prerequisite: consent of the chairperson of the department.

ME 181. Automatic Control. Sem. 1. 2+2, Cr. 3. Basic fundamentals of instrumentation with particular application to process control. System dynamics and stability concepts using step, ramp and frequency response techniques. Prerequisite: senior standing in the College of Engineering.

ME 182. Vibrations. Sem. 2. 2+2, Cr. 3. Analysis of single degree and multiple degree of freedom vibration systems. Determination of natural frequencies; practical aspects of vibration isolation and absorption; critical speeds; and balancing are investigated. Noise measurement and reduction techniques are considered. Prerequisite: senior standing in the College of Engineering.

ME 184. Heat Power Design. Sem. 2. 2+2, Cr. 3. A continuation of ME 179. Emphasis will be placed on heat transfer, air conditioning and environmental control systems and modern energy sources. Prerequisite: senior standing in the College of Engineering.

ME 185. Machine Design. Sem. 2. 2+2, Cr. 3. A comprehensive study in the design of flexible drives, gearing and gear trains, antifriction and journal bearings, and lubrication. Topics in the design of cams and critical frequencies of shafting are considered. Prerequisite: senior standing in mechanical engineering.

ME 188. Production Operations and Systems. Sem. 1. 2+2, Cr. 3. An analysis of production operations including both physical systems which produce goods and services, and management systems which provide decisions, information, and control data. Course emphasis is placed on analysis, synthesis, and improvement of individual operations within the production system. Inspection visits to production facilities are planned. Prerequisite: senior standing in mechanical engineering. Laboratory fee, $10.00.
STAFF: Professor D. Smith (Dean); Associate Professors Knaub, Sheehan, and Sperber; Assistant Professors Barlow, R. M. Brown, E. Droge, P. Evans, Kowalski, Logothetis, Masood, McCoy, L. Nielsen, Primich, Sawyer, Wickert, and Yover; B. Mostak and D. Withrow

The College offers a four-year curriculum leading to the degree of Bachelor of Science in Nursing.

The College also admits registered nurses who want to earn a baccalaureate degree. Registered nurses may complete the requirements for the Bachelor of Science in Nursing degree in less than four years by passing standardized tests and transferring acceptable college credits.

OBJECTIVES. The purposes of the College are to prepare professional nurses who will:

- Use the nursing process in caring for persons with varying complexities of health needs in a variety of settings;
- Utilize interpersonal skills with patients/clients, colleagues, and the public to establish and maintain effective professional relationships;
- Assume a leadership role in providing high standards of nursing care;
- Assume responsibilities of a professional for the maintenance and the promotion of high standards of health care;
- Recognize research as a scholarly method of validating and improving nursing practices;
- Assume responsibility for continued personal and professional growth; and
- Recognize the value of the individual’s religious belief as an inner resource in motivating and guiding the life of the individual.

In accordance with the philosophy of Valparaiso University, the faculty of the College 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 foundation courses in the natural and social sciences and in the liberal arts, as well as courses which lead to the mastery of the principles and practices of nursing. Throughout, the development of Christian character and the inculcation of Christian ideals are emphasized.

GRADUATION REQUIREMENTS.

In order to realize its objectives, the College holds the students to the following requirements:

A. A minimum of 55 credits in nursing. The specific requirements are:

- Introduction to Clinical Nursing .................................................. 6 credits
- Maternal-Child Health ................................................................. 10 credits
- Nursing in Chronic Illness ............................................................ 5 credits
- Pathophysiology ............................................................................. 3 credits
- Nursing in Acute Illness ................................................................. 5 credits
- Community Nursing ....................................................................... 6 credits
- Mental Health—Psychiatric Nursing ............................................... 6 credits
Nursing in the Social Order ........................................... 2 credits
Leadership in Nursing Care ......................................... 6 credits
Seminar in Clinical Nursing ......................................... 6 credits
Total Credits .......................................................... 54 credits

B. A minimum of 57 credits from the College of Arts and Sciences. The specific requirements are:

Exposition and Argument ............................................. 4 credits
Literary Studies .......................................................... 4 credits
Abnormal Psychology ..................................................... 3 credits
Unity of Life ..................................................................... 4 credits
Anatomy and Physiology ................................................. 4 credits
Microbiology ..................................................................... 4 credits
Human Environmental Biology ........................................... 3 credits
General Chemistry ......................................................... 8 credits
Statistics ......................................................................... 3 credits
Physical Education .......................................................... 2 credits
Religion ............................................................................ 9 credits
Psychology ........................................................................ 3 credits
Sociology .......................................................................... 3 credits
Human Growth and Development ...................................... 3 credits
Total Electives .................................................................. 57 credits

C. Electives:

In addition to meeting the requirements in Nursing and Arts and Sciences, the student must present for graduation a sufficient number of electives to bring the total number of semester credits to 124.

These electives are to be selected from the offerings of the College of Arts and Sciences.*

D. Requirements for Admission to Nursing Courses:

A student must have a minimum cumulative grade-point average of 2.00 to be admitted to the first nursing course (usually N 52).

In reviewing the academic record of students, the nursing faculty evaluates the progress of any student earning grades below C in more than one required course and makes recommendations to the dean regarding the necessity of repeating those courses.

Continuation of the nursing program requires that the student entering the junior year shall have completed the required courses listed in the suggested schedule for freshman and sophomore years with an overall grade-point average of at least 2.00.

MINOR. A student is allowed to declare a minor (including the General Business Minor) in the College of Arts and Sciences, provided that no more than six hours required for the nursing program are used in fulfilling the requirement of a minor. The minor will be listed on the student's academic record.

*No more than six (6) credits earned in the College of Business Administration may be counted toward a degree of Bachelor of Science in Nursing. No more than four (4) credits in applied music, including ensembles, may be counted toward a degree of Bachelor of Science in Nursing.
102. Nursing in Acute Illness. Each sem. 3+6, Cr. 5. Emphasizes the identification and application of scientific principles in nursing care and a problem-solving approach in meeting the nursing needs of patients with acute medical and surgical conditions. Laboratory fee, $10.00.

103. Maternal-Child Health I. Each sem. 3+6, Cr. 5. Focuses on the reproductive function of the family and the concomitant relationships of the family members during the childbearing and childrearing phases of the health continuum. Laboratory fee, $10.00.

104. Maternal-Child Health II. Each sem. 3+6, Cr. 5. The application of growth and development principles to the total health care of a child with special consideration and understanding of the effects of illness and hospitalization on the child and his/her family.

105. Nursing in Chronic Illness. Each sem. 3+6, Cr. 5. Study and practice in the nursing care of persons who have a chronic illness with emphasis on the principles of rehabilitation, the aging process, and related psychosocial and physiological concepts. Laboratory fee, $10.00.

Note: The prerequisites for the following courses are Nursing 102, 103, 104, and 105.

106. Leadership in Nursing Care. Each sem. 3+9, Cr. 6. Focuses on the basic principles of administration, teaching, and research as they apply to the management of a nursing unit, to team leadership, and to the improvement of patient care. Laboratory fee, $10.00.

107. Mental Health—Psychiatric Nursing. Each sem. 3+9, Cr. 6. Focuses on the major concepts of mental health and on the role of the nurse in prevention and care of the mentally ill. Laboratory fee, $10.00.

108. Seminar in Clinical Nursing. Each sem. 3+9, Cr. 6. Focuses on planning and implementing comprehensive care to patients with complex health problems and on utilizing the interdisciplinary team. Laboratory fee, $10.00.

109. Community Nursing. Each sem. 3+9, Cr. 6. Delineates organized community efforts for the promotion of health and prevention of disease and focuses on the role of the public health nurse in the family and the community. Laboratory fee, $10.00.

110. Nursing in the Social Order. Sem. 2. 2+0, Cr. 2. Focuses on the influences of social, political, economic, and religious forces on the development of nursing and on the present status of nurses.

110. Topics in Nursing and Health Care. Cr. 1-3. An open topic course which may concern specialized areas of nursing (e.g. high-risk nursery care); current concepts (e.g. primary care); nursing concerns (e.g. play therapy, terminal illness); delivery of health services. Topics will be announced in advance. This course may be taken more than once, for a maximum of six credits, provided there is no duplication in topics. Prerequisites: junior standing, consent of the instructor, and consent of the Dean.
UNIVERSITY CALENDAR FOR 1979-1980

1979

Fall Semester

August 27, Monday, 8:00 A.M. Instruction begins.
August 28 and 29, Tuesday and Wednesday. Registration during free periods.
September 4, Tuesday, 5:00 P.M. Deadline for adding courses.
October 6, Saturday. Homecoming Day.
October 15, Monday. Last day to file application of candidacy for the Juris Doctor degree to be conferred in May or August, 1980.
October 26, Friday, 5:00 P.M. Deadline for withdrawing from courses with grade of W.
November 16, Friday, 6:30 P.M. Thanksgiving recess begins.
November 26, Monday, 8:00 A.M. Thanksgiving recess ends.
December 7, Friday, 5:00 P.M. Deadline to officially withdraw from the University for fall semester.
December 7, Friday, 6:30 P.M. Instruction ends.
December 8, Saturday, 8:00 A.M. Reading period begins.
December 11, Tuesday, 6:30 P.M. Reading period ends.
December 12, Wednesday, 8:00 A.M. Final examinations begin.
December 21, Friday, 6:30 P.M. Final examinations end. Semester ends.

1980

Spring Semester

January 7, Monday, 8:00 A.M. Instruction begins.
January 8 and 9, Tuesday and Wednesday. Registration during free periods.
January 15, Tuesday, 5:00 P.M. Deadline for adding courses.
February 29, Friday, 6:30 P.M. Spring recess begins.
March 17, Monday, 8:00 A.M. Spring recess ends.
March 21, Friday, 5:00 P.M. Deadline for withdrawing from courses with grade of W.
April 4, Good Friday. No classes.
April 15, Tuesday. Last day to file application of candidacy for the Juris Doctor degree to be conferred in December 1980.
April 25, Friday, 5:00 P.M. Deadline to officially withdraw from the University for spring semester.
April 25, Friday, 6:30 P.M. Instruction ends.
April 26, Saturday, 8:00 A.M. Reading period begins.
April 29, Tuesday, 6:30 P.M. Reading period ends.
April 30, Wednesday, 8:00 A.M. Final examinations begin.
May 10, Saturday, 6:30 P.M. Final examinations end. Semester ends.
May 14, Wednesday, Noon. Deadline for grades for candidates for the Juris Doctor degree.
May 18, Sunday. 106th Annual Commencement.
UNIVERSITY CALENDAR FOR 1980-1981

1980

Fall Semester
August 25, Monday, 8:00 A.M. Instruction beings.
August 26 and 27, Tuesday and Wednesday. Registration during free periods.
September 2, Tuesday, 5:00 P.M. Deadline for adding courses.
October 11, Saturday. Homecoming Day.
October 15, Wednesday. Last day to file application of candidacy for the Juris Doctor degree to be conferred in May or August, 1981.
October 24, Friday, 5:00 P.M. Deadline for withdrawing from courses with grade of W.
November 21, Friday, 6:30 P.M. Thanksgiving recess begins.
December 1, Monday, 8:00 A.M. Thanksgiving recess ends.
December 5, Friday, 5:00 P.M. Deadline to officially withdraw from the University for fall semester.
December 5, Friday, 6:30 P.M. Instruction ends.
December 6, Saturday, 8:00 A.M. Reading period begins.
December 9, Tuesday, 6:30 P.M. Reading period ends.
December 10, Wednesday, 8:00 A.M. Final examinations begin.
December 19, Friday, 6:30 P.M. Final examinations end. Semester ends.

1981

Spring Semester
January 5, Monday, 8:00 A.M. Instruction begins.
January 6 and 7, Tuesday and Wednesday. Registration during free periods.
January 13, Tuesday, 5:00 P.M. Deadline for adding courses.
March 6, Friday, 5:00 P.M. Deadline for withdrawing from courses with grade of W.
March 6, Friday, 6:30 P.M. Spring recess begins.
March 23, Monday, 8:00 A.M. Spring recess ends.
April 15, Wednesday. Last day to file application of candidacy for the Juris Doctor degree to be conferred in December 1981.
April 17, Good Friday. No classes.
April 24, Friday, 5:00 P.M. Deadline to officially withdraw from the University for spring semester.
April 24, Friday, 6:30 P.M. Instruction ends.
April 25, Saturday, 8:00 A.M. Reading period begins.
April 28, Tuesday, 6:30 P.M. Reading period ends.
April 29, Wednesday, 8:00 A.M. Final examinations begin.
May 9, Saturday, 6:30 P.M. Final examinations end. Semester ends.
May 13, Wednesday, Noon. Deadline for grades for candidates for the Juris Doctor degree.
May 17, Sunday. 107th Annual Commencement.

STAFF: Professor Ehren (Dean); Professors R. Baeppler, Bartell, Goodwin, Gromley, Hiller, A. W. Meyer, and Stevenson; Associate Professors Berner, Bodensteiner, Brietzke, Brockington, Levinson, and Stith; Assistant Professors Farago (Assistant Dean), Glenapp, Kmiec, Long, and Martz; Visiting Associate Professor Moskowitz; Acting Law Librarian: Assistant Professor Downs; Assistant Law Librarians: J. Walsh

GENERAL INFORMATION.

Statement of Goals and Principles. The School is dedicated to excellence in teaching scholarship and excellence in teaching. As a law school, in a church-related university, it seeks to manifest concern for the needs of its students and awareness of the problems faced by society and the profession.

By severely limiting enrollment, the faculty maintains a context for learning in which the rigidities of legal education are experienced in a setting that is supportive and humdrum. The School seeks a sense of community, of individuals with mutual interests working together toward shared objectives. Together with this value, the School respects each person's individuality and the importance of analytic, conceptual, and interpersonal skills in the training of new lawyers. Classes range from small seminars and discussion sections, with fewer than ten students, to large lectures conducted according to the traditional Socratic method with approximately one hundred students.

Thus, the School maintains a student-centered approach to learning the law. Students participate in many faculty committees and elect two of their number as voting representatives at faculty meetings. The student-faculty ratio of 17.5 to 1 permits an average first-year class size of approximately 50 students per class and a school-wide class average of fewer than 35 students per class. Students have ample opportunity to approach faculty members and many develop lasting friendships with their former teachers. Concern for every individual student is solidly founded on the School's Lutheran heritage and extends, without question, to students of all creeds or of no creed. At the School, celebrating its centennial in 1979, that heritage is reflected and embodied not only in student-centered education but in a concern with more than legal rules. The School encourages students to examine the philosophical and ethical underpinnings of the law in its required first-year curriculum, in a "perspective" course during the second year, and in required courses in Jurisprudence and Legal Profession in the third year. Furthermore, the first-year curriculum stresses training not only in the traditional analytic skill of the attorney but in client counseling, advocacy, and negotiation skills as well. This stress, on the human side of being a lawyer and on the responsibility of the profession to under-served portions of the population, is also evident in the School's strong elective program of clinical legal education. Finally, the School has maintained an active commitment to educating a diverse student population, with particular emphasis on seeking entering classes that include members of socioeconomic and ethnic groups which have traditionally been under-represented in the practicing bar.

As an integral part of the University, the School offers its students the opportunity to participate in the cultural and religious programs of the greater University community. For those who desire it, these activities make possible their active involvement in a consciously Christian milieu. For all law students, the School's ethical commitment serves to enrich the educational dialogue—professionally, intellectually, and personally.
Finally, the School is national in its orientation. Its alumni practice in all fifty states and abroad. The current student body hails from more than twenty states. The teaching approach is designed to prepare the School's graduates for the variety of jurisdictions that they will be entering and, therefore, the curriculum favors no single state's laws. Broad, general problems are stressed and the varying solutions adopted by different states are compared and analyzed. The School stresses the acquisition of the skills necessary for law practice, rather than the memorization of legal rules or changing regulations.

In sum, the School attempts to provide a unique context for legal education. Small, student-oriented, ethically-aware and concerned, the School offers a highly selective group of men and women the opportunity to become members of a responsible and learned profession. Competition is not banished but support is provided; the School seeks to challenge all its members, intellectually and affectively, to help each realize his/her abilities and talents to the fullest.

The Christian Educational Tradition. The legal profession is quintessentially secular and Valparaiso is a religiously affiliated university. How are these attributes conjoined? The curriculum includes elective coursework in law and theology and required courses in philosophy of law and professional responsibility, but the School's primary commitment to the University's Christian mission and purpose is not so much captured in isolated substantive courses as it is embodied in the School's educational philosophy and foundation.

The School's emphasis is on: personal, student-centered education; its inquiry into the underlying values and philosophy of the legal system; its involvement in the community through its Legal Aid Clinic; and its firm resolve to support the education of members of under-represented minority groups. These are the hallmarks of Christian concern at the University. This list is not meant to cabin the scope of the School's mission. Rather, it serves to simplify the practical ways in which that mission may be expressed and experienced by students at the School, ways that will enrich the lives of all students and will be of particular import to those who are attracted to the School by reason of its Christian tradition.

Accreditation. The School was approved by the American Bar Association in 1929, and, since that time, it has been accredited continuously by that Association. In 1930, it was admitted to membership in the Association of American Law Schools. The degree of Juris Doctor, which is granted by the School, is approved by the Board of Regents of the University of the State of New York. Valparaiso University, of which the School is a part, holds membership in the North Central Association of Colleges and Schools.

History, Locale, and Facilities. In 1979 the School celebrates its centennial, an event commemorated by a series of noteworthy contributions to scholarship in the law and in legal education. During this period, the School is re-evaluating its goals and its commitments, restructuring its first-year curriculum to address more directly the varied skills necessary to the practice of law, and reflecting the achievements of the past century. The celebration includes visits and addresses by noted scholars in the law, including addresses by Mr. Justice Stevens of the United States Supreme Court, President Robert Stevens of Haverford College, and Richard Neuhaus, the distinguished sociologist, theologian, and senior editor of Worldview.

The School was founded in 1879 as the Northern Indiana Law School and became a part of Valparaiso College, now Valparaiso University, in 1905. The School moved into quarters in DeMotte Hall in 1926 and into Wesemann Hall in September 1963.

The School is situated in Valparaiso, the seat of Porter County, Indiana, one of the fastest growing areas in the nation. The area offers students the best of many worlds. Slightly more than an hour from downtown Chicago, Valparaiso provides access to such cultural events and facilities as the Chicago Symphony, the Art Institute, and numerous theaters and films. It is less than half an hour away from the Indiana Dunes, a tree-shaded National Preserve along the south shore of Lake Michigan, which also includes several beautiful beaches. Much of the land in the counties to the east and south of the School is still farmed and throughout the summer local farmers sell fresh produce in the park surrounding the Courthouse. To the northwest lies Lake County, a heavily industrialized area.

The locale provides law students with more than just a varied backdrop for their legal education. The court system ranges from county trial courts located in Valparaiso itself to the Seventh Circuit Court of Appeals, sitting in Chicago. Students may observe (and, through the clinical program, participate in) legal matters ranging from simple civil and criminal cases to complex federal impact litigation in the federal district courts and the Circuit Court.

The School occupies its own modern building on the University campus. This facility includes the law library, classrooms, faculty and student offices, and lounges. Development of the School was made possible by the gifts of loyal alumni, friends of Valparaiso University, many congregations of The Lutheran Church-Missouri Synod, and especially the generosity of the late Mr. Adolph H. Wesemann and his wife Janette, of LaGrange, Illinois, in whose honor the building is named. The library wing was enlarged in 1976 and this addition was named after benefactors Clara and Spencer Werner. This building is evidence of the determined policy of the Valparaiso University Administration to develop and maintain, as part of its educational complex, a quality school for the training in law of those who desire it.

The law building also includes a "courtroom" designed to provide an appropriate environment for the Moot Court program and other simulations included as part of the School's curriculum. On occasion, the Indiana Court of Appeals has used the Courtroom for the hearing of oral argument in ongoing litigation, providing students with a first hand look at the judicial process.

The law library contains approximately 73,000 volumes and government documents, including the official and unofficial reports of the Supreme Court of the United States; the official reports of all state appellate courts up to the establishment of the National Reporter System, which now provides complete coverage of all federal and state appellate court reports; English appellate cases to date, as well as English digests and statutes; Canadian reports and Canadian Abridgment; the Federal Code Annotated; the United States Code Annotated, and earlier compilations of federal statutes; the United States Statutes at Large; the current statutes of all of the states and
the District of Columbia; the American Digest System; state and special sub-
ject digest; a complete set of Shepard's Citators; 625 legal periodicals,
most in complete bound sets; the standard law encyclopedias; and a collec-
tions of state trials, legal histories, and treatises on law, jurisprudence,
related subjects.

CURRICULUM.

Background. The curriculum of the School reflects the School itself. Classes
are small, the education personal. The goal is to provide excellent and in-
stance of the law, and the opportunity for advanced study in areas
of specific student interest. In seeking to achieve this goal, the School en-
compasses four distinct strands of legal education which run through the
three years of coursework: legal analysis, practical training, perspectives on
law, and legal writing and research.

The analytical strand runs through all substantive courses. It is most clearly
expressed in the Socratic method, whereby a professor engages the class in
which lies at the intersection of lecture, conversation, and debate.

Practical training is an integral part of the School's first-year curriculum,
which combines exercises in legal research and writing with an introduction
to the practical aspects of the legal system. Upperclass offerings in trial
counseling, appellate advocacy, and clinical work also stress the practical
aspects of the law.

Perspectives. Building on the introduction to the interdisciplinary study of
law provided by the first-year Perspectives and Problems course, all stu-
dents, during the second year, take one of three courses—legal history,
comparative law, or legal process—which examine the law and the legal
system as a whole. In addition, during the third year, students take Juris-
prudence, which offers a philosophical framework from which the law may
be viewed. Students who wish to reverse this sequence (and take Juris-
prudence in the second year, a perspectives course in the third) may do so
upon notifying the Office of the Dean to that effect. However, the courses
may not be taken during the same year. This is to assure that, in each of
the three years of study, there will be at least one course that invites the
student to stand back and observe the process and structure of the legal
system itself. The requirement underscores the School's commitment to an
inquiry into values and its concern that students not view the legal system
as unchangeable and untouched by their own ethical and intellectual
analyses.

Seminars. The School requires that each student take one of a variety of
seminar offerings available in their last year of study. These offerings vary
from year to year, reflecting the current research interests of the faculty.
They are full-year courses, one credit each semester, and require the com-
pletion of a substantial piece of writing by the end of the year.

The seminars are designed to serve a number of different but consonant
functions. They afford each student the opportunity to work closely with at
least one faculty member in a substantive area of interest to the student.
In addition, they provide an avenue for students to demonstrate at the end
of their legal education the fruits of their work in the area of legal writing
and research. They provide a different sort of interaction between and
among students who often carry a significant amount of the responsibility
for leading the course. Finally, they offer intensive analyses of relatively
narrow areas of the law to supplement the more general education provided
by the remainder of the curriculum.

Participation in Law 306-307, Law Review, during the third year fulfills the
seminar requirement (see the section on Law Review, p. 249). On a space
available basis, students in the second year may take a seminar, though
during so does not fulfill the requirement that all students, not otherwise
exempted, take a seminar in the third year. Similarly, students may, on a
space available basis, take more than one seminar if they so choose. Finally,
where no seminar is available in an area of the student's interest, the Office
of the Dean may allow an independent study project to be substituted for
the seminar requirement in the third year (see the course description for
Law 197-198, Seminar).
Detailed descriptions of the seminars to be offered in any given year become available prior to registration for the fall semester of that year.

Required Upperclass Courses. In addition to the requirements detailed already, students are required to take Constitutional Law I and II (usually taken during the second year), Evidence (usually taken during the second year), and Legal Profession (usually taken in the third year). Other requirements may be added after this catalog goes to press and students should be aware of that possibility.

Clinical Education. Clinical education at the School is an important and valued part of the curriculum. It is integrated into many segments of the curriculum, most notably in the Perspectives and Problems first-year course, the Legal Aid Clinic, the Trial Advocacy course, and student activities such as Moot Court, Mock Trial, and Client Counseling. During the first two years, students participate in a variety of simulated areas of legal practice. In the third year, through the clinic curriculum, and under the auspices of the Indiana student practice rule, students may represent clients before various courts.

The School's Clinic provides close supervision and training for students who enroll in the elective Clinic program. This program carries from three to six hours per semester in the final year of study (no more than a total of twelve hours of clinical work may be counted towards the degree), depending on the amount of time the student devotes to the Clinic. Students working in the Clinic routinely gain exposure to both the state and federal court systems. In the state courts, students represent indigent clients in civil or criminal matters and represent the State in criminal prosecutions. In federal court, students provide aid and supervised representation in a number of significant pieces of federal class-action and other impact litigation. In addition, students may seek to find placements in other, non-judicial substantive clinical settings, such as labor law, environmental law, education law, and municipal government.

Clinical work is as varied and as demanding as the actual practice of law. The School believes, however, that its value is far greater than the simple provision of practical experience for law students. By assuring students of close supervision during their early experience representing clients, the clinic program helps students develop skills in advocacy, negotiation, and counseling that are stressed less in the remainder of the curriculum. It also provides a context for close scrutiny of the questions of professional responsibility that are a necessary part of the experience of beginning to practice law. Students address these ethical issues, individually and in small groups, under the supervision of the clinical faculty. In so doing, they learn not only how to become more skillful practitioners but also how to become thoughtful and concerned members of the legal profession.

Thus, the program of clinical education focuses not so much on the substance of the cases that students represent as it does on the process of becoming and being a lawyer. For this reason, intense supervision is available and students and faculty work closely to develop a program of maximum challenge and enrichment. The School's social concern is addressed by means of the Clinic's selection of clients from among under-served portions of the population and by means of its involvement in impact litigation designed to influence the evolution of the law.

While these are the objectives of the program of clinical education at the School, they are not served at the expense of practical experience on the part of the participating students. Clinical work begins with simulations and substantive exercises in the course, Introduction to Clinic (Law 255, a prerequisite to registering for clinic in the third year; Law 161 is also required) and courses in Law 253, Law 269, and Law 285 are strongly recommended, and continues with a wide spectrum of experience in the third year. One student has described her experience in the clinic as follows:

Under proper supervision, I represented the State in many misdemeanor trials, probable cause hearings, a post-conviction relief hearing and arrangements two to three times a week. I conducted civil proceedings, such as dissolution of marriage hearings. My court appearances were only a part of my work, however. For instance, I:

- investigated the facts of many cases;
- conducted plea negotiations;
- researched various legal principles;
- wrote and filed civil complaints, petitions, and orders;
- advised laypersons on how to file claims in the Small Claims Court;
- organized and helped conduct training sessions for police officers;
- researched, wrote, and argued briefs;
- advised laypersons on social security and disability insurance claims;
- researched and arranged an extradition hearing.

Independent Study. Occasionally, one or more students may develop an interest in an area of the law which is neither extensive enough nor sufficiently enduring to justify the development of a separate course in the curriculum. For this reason, the School has a program of independent study—Law 300. Students may register for this course, after developing a specific project proposal.

Permission of a supervising faculty member and of the Office of the Dean are required, and the course, which may be taken more than once, carries one to three credits. It is graded like any other course and requires a substantial piece of writing. Registration for this course may not be used to satisfy the seminar requirement (independent study in lieu of seminar may be permitted, pursuant to the rules described in the course description for Law 197-198).

State Bar Admission Requirements. As a national law school, the School prepares its students to practice in any state. Individual states, however, have specific requirements for people wishing to become members of the bar in their jurisdictions. Students should be aware of these requirements for whichever state they plan to practice in.

For example, they should note that Indiana has a series of explicit requirements governing a minimum course-work distribution for persons seeking to take the Indiana bar examination. These requirements have varied some-
what from year to year and are phrased in terms of subject areas rather than course titles. For this reason, the School makes available a worksheet describing the requirements for certification to the Indiana Board of Law Examiners, together with a list of the courses offered at the School that satisfy those requirements. These courses are not required by the School (though all of the School’s required courses may be counted as credit towards the Rule 13 requirements). Anyone who is considering practicing in Indiana is strongly urged to avoid possible difficulty by taking the necessary courses.

Similarly, the requirements of other jurisdictions (and of some federal courts) should be taken into account as students plan their schedules. The Place of admission to practice in all jurisdictions in the United States and Canada.

Attendance. Every student is expected to attend every one of his/her classes unless his/her absence has been approved by the instructor concerned or by the Office of the Dean.

Absence from class is primarily a matter between the student and the instructor of the class. It is the student’s responsibility to discuss with his/her instructor the reason for his/her absence and to learn what make-up work may be required.

Auditing Courses. Students are permitted to audit courses at the School, upon the permission of the instructor and the Office of the Dean. Auditors are required to attend at least three-fourths of the class meetings and to sign a statement to that effect upon completion of the course. They are not permitted to take the final examination. No additional fee is charged to auditors who pay tuition for full-time enrollment in the School. No credit is received for auditing a course and audited courses are not counted toward the student’s required load in any given term or toward the number of hours required for residence or graduation. An auditor who complies with these regulations will have audited courses recorded on his/her transcript with the grade of “Audit.”

Courses Outside the School of Law. Students may register for courses in the University outside the School. Full-time students will not be charged additional tuition for doing so. Such courses will not be counted toward the law degree, will not be credited to the student’s load, residency, or hours for graduation requirements and will not be included in the student’s cumulative average. If a student wishes to count a non-School of Law course towards the J.D. degree, a request must be made by petition to the faculty.

Summer School. The School may offer a summer session, during which students at the School may normally register for no more than six hours of credit. The summer session is open to all registered students at the School and credit received may be counted towards all requirements of the School. Course work at other law schools, including summer sessions sponsored by other law schools, will be counted in fulfillment of any of the requirements of the School only upon approval of the Office of the Dean (transfer students should see the section entitled Course Load). Summer school work may, according to the regulations detailed in the section on required course load, be counted towards the load requirements.

ACTIVITIES AND AWARDS.

Student Bar Association. This Association of the School is one of the oldest organizations for student self-government among the law schools of the Middle West. It is affiliated with the Law Student Division of the American Bar Association. Each year the Student Bar Association sponsors the annual observance of Law Day and makes all arrangements for the Day’s activities. In addition, the Association sponsors numerous speakers and social events for its members. All students are members of the Association and have an opportunity to participate in the activities and share the responsibilities of the organization.

Law Review. The Valparaiso University Law Review is published three times each year by students at the School. It is a scholarly journal, publishing articles by professors, practitioners, and students on topics of interest to the profession. Membership on the Review is simultaneously a high honor and an opportunity to learn about the law.

Membership on the Review is by invitation of the editorial board. Invitations are issued to those students who attain the highest academic record at the end of their first year of study and those students who receive the highest grades in the first-year legal writing course. Students are invited to write an article (called a “note”) which will represent a significant piece of legal scholarship. Those students whose notes are deemed worthy of publication are then invited to join the staff of the Review. The eligible accept the offer, become members of the Board of Editors. Work on the Review represents a substantial time commitment.

In addition to their own writing, students who work on the Review: evaluate and edit the authors of articles submitted by professors and practitioners to the Review for possible publication; edit and check material for substantive validity; and edit citations for conformity to the requirements of legal form. In so doing, they gather substantial experience in legal research, writing, and scholarship, experience that will aid them in any area of practice.

Students who write notes for the Review receive academic credit for doing so. During the semester that they are invited to write for the Review (usually their second year), they register for Law 305 and receive two hours of credit (graded S/U). Students who are appointed to the Board of Editors register for Law 306-307 during their third year, receive two hours of credit for their work, and are exempted from the seminar requirement. No more than two hours of credit are granted for work on the Review in any one academic year.

Students not invited to write a note may, nevertheless, seek membership on the Review by writing a shorter piece of legal scholarship (a comment). If the comment is deemed publishable, the writer is invited to participate in the note writing competition. On completion of a publishable note, the person becomes a member of the staff of the Review.

Moot Court. All first-year students, as part of the Perspectives and Problems course, participate in moot court. Moot court is a simulation of appellate practice and includes the preparation of research, the writing of briefs, and the presentation of oral argument, all based on a hypothesized fact situation. The arguments and briefs are evaluated by student and faculty judges.
In addition, during the second and third years, students may participate in
the National Moot Court Competition sponsored by the Association of the
Bar of the City of New York. This national contest allows students from ac-
ccredited law schools to compete in simulated appellate advocacy directed
at a single, given fact situation.

Mock Trial. Since its inception, the School has, each year, participated in
the competition sponsored by the Texas Young Lawyers Association. The
purpose of the competition is to foster the development of trial advocacy
skills.
The team representatives are chosen on the basis of an intramural con-
petition designed to select those students best prepared to participate. The
first and second place teams in each of the several regional competitions
are eligible to compete in the National Trial Competition.

Client Counseling. The School has been a frequent competitor in the
American Bar Association Client Counseling Competition. The competition
promotes greater knowledge and interest among students in the preventive
law and counseling functions of law practice and encourages students to
develop interviewing, planning, and analytical skills necessary in the lawyer-
client relationship. In the competition, a law office consultation is simulated
and law students, acting as attorneys, are presented with a typical client
problem. The students conduct an interview with a person in the role of the
client and determine how they would proceed in the hypothetical situation.
The competition is judged each year by prominent members of the legal
community, as well as individuals from related professions. Traditionally,
Valparaiso law students have done particularly well in the competition.

The American Bar Association selected the School as the site of the 1979
Regional Client Counseling Competition.

Fraternities. Two intercollegiate law fraternities have chapters on the cam-
pus: Phi Alpha Delta and Delta Theta Phi.

Law Day. In the spring of each year, the School celebrates Law Day, U.S.A.
The day's activities include arguments of a moot appellate case, a banquet,
and a talk by a distinguished member of the bench or bar.

Awards. The School awards several named scholarships and awards to
students each year. These include:

1. The John E. Christen Memorial Scholarship. Mr. and Mrs. F. E. Christen
established this scholarship in memory of their son, John E., who was
graduated from the School in 1965 and who had been elected President of
the Law Alumni Association in the month preceding his untimely death
in November 1969. The scholarship is made annually to a third-year law
student whose law school performance has manifested substantial im-
provement and whose financial need makes him/her a worthy candidate
for financial assistance.

2. The John L. DeVoss Memorial Scholarship. Mr. Jay M. DeVoss estab-
lished this award in memory of his father, who was engaged in the gen-
eral practice of law in Adams County, Indiana, for 40 years. Preferential
recipients will be those third-year law students who are from Adams
County or who intend to practice in the Adams County area.

3. The Charles L. Vaughan Memorial Award. Mr. Charles R. Vaughan, an
alumnus of the School, established this award in memory of his father
who was a prominent trial attorney. The award is presented annually to
the student whose performance in Trial Advocacy merits special recog-
nition.

4. A number of other awards are available in the School for outstanding
scholarship and achievement. Among those being currently offered are
the following: Indiana State Bar Foundation scholarships; the Student
Bar Association Award; the Nathan Burkan Memorial Prize; the Lawyers
Cooperative Publishing Company and Bancroft-Whitney Company Award;
the West Publishing Company Award; the Prentice-Hall Taxation Award;
the U.S. Law Week Award; the Lutheran Layman's League Award.
Awards are also presented to the top oral advocates in the moot court
competition by the West Publishing Company and the Bobbs-Merrill
Company.

School of Law Alumni Association. This Association was organized in
1938 and has been devoted ever since to the task of supporting the School.
In 1963, the Association established the Student Assistance Trust, an educa-
tion loan fund available to law students. The Association, which holds an-
ual meetings, maintains a close relationship with the faculty and adminis-
tration of the School at all times.

ADMISSIONS, FINANCIAL AID, PLACEMENT.

Admissions. Lawyers are often professional advocates and applicants to
teaching. They should be aware of the admissions process and its role in
developing an advocacy system. Like lawyers representing a client, applicants to law
school should gather and organize the relevant facts for presentation in the
most persuasive manner. The School is seeking people who will make able
professionals and the submitted application is one way of gauging that
aptitude.

The faculty of the School has delegated responsibility for admissions to its
Admissions Committee. This Committee considers all applications. Students
should recognize that the Committee only sees those things that the student
places before it and that no one, other than the applicant, will be acting as
an advocate for the applicant's admission. Good advocacy is lean and to the
point.

Careful advocacy makes certain that all relevant facts are in and that they
are presented as effectively as possible.

At Valparaiso, the relevant facts begin with the objective evidence of scho-
lastic aptitude, but they certainly do not end there. Part of the School's
commitment to student-centered education is expressed in an admissions
policy that carefully evaluates the entire application, not merely the statis-
tics. For this reason, while the objective criteria may facilitate a candidate's
acceptance, they will never serve as an absolute bar against consideration
and possible admission. Thus, although the School is highly selective, the
class is relatively broad.

The application form (and particularly the recommendation form included
with it) detail the kinds of subjective criteria that the Committee may find
important. Although building on its Lutheran tradition, the School is interested in a diverse student body, whose members represent a wide variety of social, economic, ethnic, religious, and experiential backgrounds. In recent years, members of minority groups have comprised between fifteen and twenty percent of the entering class at the School.

This admissions policy is designed to serve the School's commitment to providing a rigorous and distinguished legal education. Because objective criteria are not perfect predictions of success in law school and are even less exact as measures of potential for success in law practice, the Committee makes educated guesses, based on the total application, as to which students are likely to become the best practitioners.

This policy is meant to enhance, not to undercut, the intellectual caliber of the entering class and the curriculum to which all students are exposed.

Special Tutorial Program for Some First-Year Students. The School bases its admissions decisions not merely on the statistical predictions of success that it derives from the LSAT and undergraduate grade-point average but also upon the wide variety of subjective criteria described above and in the admissions materials. Each year an assessment of these subjective factors in individual applications will lead the Committee to admit a number of people for whom the statistical data alone would predict difficulty in the first year of study. They are admitted because the Committee feels that they will not only contribute to the breadth and diversity of the School's community but will also ultimately be able to meet the School's rigorous academic requirements. Recognizing that these students may, however, encounter particular difficulty in the first year, the faculty has provided that students whose predicted first-year average falls below a certain point (75.0 in 1979-1980) will be offered two types of assistance during the first year. First, they will be invited to attend special tutorial sessions in each of the first-year courses. Second, they will be permitted to register for less than the required curriculum, by postponing Law 105-106 until the second year. Students eligible for this program will be notified prior to registration for the first year.

Pre-Legal Education. No particular course of study is prescribed for students planning to enter schools of law. The attention of the pre-law student is directed to the recommendations of the Committee on Pre-Legal Education of the Association of American Law Schools, which states pre-law education should be concerned with the development of basic skills and insights involving education for:

A. Comprehension and expression;
B. Critical understanding of the human institutions and values with which the law deals; and
C. Creative power in thinking.

The law schools seek, in their entering students, ability to understand, ability to think for themselves, and ability to express their thoughts clearly and forcefully, both orally and in writing.

Application for Admission. The School admits students solely to its full-time program and commencement of study must be at the beginning of the fall semester. Applications for admission to the School may be obtained by writing to the School of Law Admissions Office, Valparaiso, Indiana 46383. Applications will be accepted starting October 1.

Applications will be considered only from those persons who have received a bachelor's (or higher) degree from a college or university accredited by one of the regional associations of colleges. In extraordinary cases, applicants who do not hold a bachelor's degree may be admitted as "special students" provided that: (A) they are at least 23 years of age and (B) there is evidence that their experience and training have equipped them to engage successfully in the study of law despite the lack of required college credit. Special students who successfully complete the first year of law school may petition the faculty to become regular students.

Application for admission to the School is accomplished by filing the application with the School and by registering with the Law School Data Assembly Service (LSDAS) of the Educational Testing Service, Princeton, N.J. The LSDAS registration involves supplying LSDAS with a transcript from each college and university attended. No application to the law school will be processed unless accompanied by a Law School Application Matching Form, which is found in each applicant's LSAT/LSDAS registration packet. Except in unusual cases, transcripts should not be supplied until they include a record of three full academic years. If admitted, the applicant must supply a final transcript certifying the receipt of a bachelor's degree directly to the School. The LSDAS registration must also include a report of the applicant's score on the Law School Aptitude Test which is administered by the Educational Testing Service at various testing centers throughout the country in October, December, February, April, and July. The LSAT is administered on the campus of Valparaiso University in October and February. Application forms for taking the test are supplied with the LSDAS registration materials or may be obtained from the School or the Educational Testing Service. The applicant should indicate on the test application form and on the LSDAS registration form that the score is to be reported to the Valparaiso University School of Law.
Deadline for Submission of Application Materials is March 15. This deadline will be considered met if all materials have been received by the Law School Data Assembly Service and an application for admission received by the Law School on that date. Applicants should note that reports from the LSAT or from the Law School Admissions Test (LSAT) are often too late to be considered. Applications submitted after the deadline will be accepted but will not be considered until after all other applications have been read by the Committee. For this reason, persons who apply after March 15 substantially reduce the likelihood of their admission.

Deposit Requirement. Upon admission, the School requires a tuition deposit of $100.00. The deposit must be postmarked no later than the 15th day of the month following the month of receipt of the notification of admission or April 1, whichever is later. If, after the date of the letter of admission or April 1, whichever is later, the student no longer wishes the School to reserve a place in the entering class, the deposit may be partially refunded according to the following schedule:

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>School of Law by:</td>
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<tr>
<td>May 15</td>
<td>$75.00</td>
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<tr>
<td>July 1</td>
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<td>August 1</td>
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<tr>
<td>August 15</td>
<td>$ 5.00</td>
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</table>

After August 15, the deposit is not refundable (except for extraordinary reasons such as illness) but will be credited to the applicant’s tuition upon registration. Failure to remit the deposit within the time specified will result in cancellation of the offer of admission.

Transfer Applications. A student transferring to the School from another law school may receive credit ordinarily not exceeding one year, provided: (1) the law school from which he/she is transferring is a member of the American Bar Association; (2) that the student meets the scholastic average required for graduation by that law school and all other conditions and requirements for graduation at that school; (3) that the student’s requirements for continued attendance at that school; (4) that the student meets the requirements of the University for advanced standing; (5) that the work which the student has completed is similar in standing; (6) that the character of that which is given at the University’s Law School; and (7) that the student has met the entrance requirements of the School for advanced standing. Failure to meet any of these requirements may result in the student being required to attend another law school.

Financial Aid. Students who enter with advanced standing because of credits transferred from another school must earn a numerical average of at least 70 in all upper division courses. Students who do not enter with advanced standing must earn a numerical average of at least 55 in all upper division courses to maintain eligibility for financial aid.

Students who wish to drop courses after the first seven days of classes of the semester will be permitted, upon the approval of the Dean and of the instructors concerned, to withdraw from courses with a grade of W up to and including the end of the ninth week of a semester.
Students who wish to drop courses after the first seven days of classes of the semester should read the regulation regarding a grade of W. All applications for changes in enrollment must be made by the student on proper forms and filed at the Office of the Registrar.

Withdrawal from the School of Law. A student who wishes to withdraw from the University for the remainder of a semester (see official calendar, pages 239-240, for deadline date) should apply to the Dean for a permit to withdraw. Upon return of the permit properly signed to the Office of the Registrar, the Registrar will authorize the return of such fees as are refundable.

The term "honorable dismissal" refers to conduct and character only, not to class standing and grades. It will not be granted unless the student's conduct and character are such as would entitle the student to continue in the University.

A student who withdraws from the University without authorization is not entitled to refunds of any kind and the instructor of each subject in which the student is enrolled is required to report a final grade of 55 to the Registrar.

Course Load. All first-year students are normally required to take all first-year courses. Second- and third-year students must carry a minimum of fourteen credit hours in each semester and may not register for more than seventeen hours in any semester. Students wishing to take fewer than fourteen or more than seventeen hours may only do so upon receiving permission from the faculty pursuant to a petition submitted by the students. Students who enroll in the summer school at the University's School of Law (or at another law school with the approval of the Office of the Dean) and who receive a grade of 70 or better (or who receive transfer credit from the summer program approved by the Office of the Dean) may reduce their load by no more than four hours per term. The total cumulative reduction in load may not exceed the number of hours for which credit is received during summer sessions. In addition, students must fulfill all other requirements of the School, including course, credit, and residence requirements (see section on Residence Requirements).

Examinations. The regular written examinations of the School of Law are held at the close of each semester.

The semester examinations are conducted according to a published schedule and pursuant to regulations issued each semester by the Office of the Dean.

Marking System. The grade marks reported and recorded in the Registrar's Office are as follows:

- 84 and above: Excellent.
- 77-83: Good.
- 70-76: Satisfactory.
- 56-69: Poor; indicates a deficiency but gives hour credit for graduation.
- 55: Failure.

I. Incomplete. The grade I (Incomplete) may, at the discretion of the instructor, be given to a student whose completed work in a course indicates the probability of the student's passing the course but who has failed to complete a segment of the assigned work of the course because of circumstances beyond the student's control. An I (Incomplete) received in one semester or summer session must be removed by the beginning of the official examination period of the next succeeding semester or it will automatically become a grade of 55. The student's deadline for submitting the outstanding work to the instructor shall be one full week prior to that date.

W. An authorized withdrawal. (See Change of Program.) This mark carries no credit.

Any student withdrawing from a subject without first securing the official permission of the Dean will receive a grade of 55 in that subject for the semester.

Only in exceptional cases, such as prolonged or serious illness, will the appropriate committee permit a student to withdraw from a course without a grade of 55 after the end of the ninth week of the semester.

S. Satisfactory; meets course objectives. Hours with grade of S count toward graduation but are not counted in computing the student's standing. It is assumed that this work should be of 70, or better, quality to warrant the grade of S.

U. Unsatisfactory; does not meet course objectives. Hours with grade of U do not count toward graduation and are not counted in computing the student's standing.

Grades of S and U are used in courses which are so designated in the course descriptions contained in the University Bulletin. They may be used in other courses only in exceptional cases when approved by the Dean and the Vice-President for Academic Affairs.

Cumulative Average. The School calculates a cumulative average for each student. This is the average of all courses taken for a numerical grade at the University's School of Law.

The average is calculated by multiplying the numerical grade in each subject by the credit value of that subject and dividing the total by the total number of graded hours attempted. Grades in courses at other law schools, or in courses graded non-numerically, are not included in the calculation of the cumulative average.

Honors in Scholarship. A student who achieves an average numerical grade of 86 in any semester (except the last semester prior to graduation) will be awarded honors, provided that the student has received no grades of I or U at the official end of the semester concerned, and was registered for at least 12 hours of work for the semester.

Graduating honors for third-year students are announced at Commencement and are based on the work of the last two semesters. This particular honor is based on the same rules as for class honors except that the student must have been registered for at least 24 hours.
Retention and Academic Deficiency. A student in the School will be denied permission to continue if a student's cumulative numerical average is less than 68 at the end of the second semester; 69 at the end of the third semester; or 70 at the end of the fourth semester or any semester thereafter.

For fewer than four semesters, the standards for retention are governed by faculty rules, copies of which are available in the Office of the Dean and are distributed at the beginning of each academic year. In no event, however, are those standards more stringent than the standard at the end of the fourth semester.

Any student whose numerical average falls below 70 is academically deficient and considered to be on scholastic probation.

Readmission. Students who have been required to leave by reason of academic deficiency may petition for readmission. Such petitions will be heard by the Readmissions Committee and are governed by faculty policy and Committee regulations, copies of which may be obtained from the Office of the Dean.

Term-time Employment. It is a requirement of the School and of the American Bar Association that full-time law students not be employed in excess of fifteen hours per week during the school term.

GRADUATION.

Degree. The University offers a three-year (six-semester) curriculum leading to the degree of Juris Doctor (J.D.). The degree is conferred upon recommendation of the Faculty of the School of Law. All work toward a degree must be completed to the satisfaction of the Faculty. In all cases, the student is responsible for meeting the requirements for graduation.

A student who returns to the School after an absence of three or more years may no longer be a candidate for a degree on the basis of the catalog under which the student first entered the University, but must fulfill for graduation all the requirements and provisions of the catalog of the year in which the student re-enters the University.

Course, Credit, and Numerical Grade Requirements. A candidate for graduation must have: (A) undertaken a total of 90 credit hours and received numerical grades of 56 or better in a minimum of 85 credit hours; (B) received passing grades in the courses required for graduation; and (C) attained a cumulative average of at least 70 in all law work undertaken at Valparaiso University.

Residence Requirements. To be eligible for graduation from the School, a student must have been enrolled as a full-time student in an accredited law school for six semesters (excluding summers). In addition, the student must complete all required courses and the last two full-time semesters (exclusive of summer sessions) in residence at Valparaiso. (Transfer students are exempted from the residence requirement in respect to required courses to the extent they have successfully completed such courses before matriculating.) Students who have been permitted by the faculty to count part-time attendance at an accredited law school towards their degree must nevertheless comply with the full-time residence requirements of the American Bar Association. These requirements call for a minimum of six semesters of work during each of which the student must have been enrolled in a minimum of ten hours of credit. Summer semesters in which a student is enrolled for five or more hours of credit may not be counted as more than half of such a semester for these purposes. Semesters in which the student is registered for fewer than ten hours are counted as pro rata fractions of a semester for this purpose. Summer semesters in which a student is registered for fewer than five hours of credit are counted as pro rata fractions of half a semester for this purpose.

Application For Degree. A student who wishes to receive the degree at the end of a Fall Semester must make formal application for the degree on a form provided for this purpose by the Registrar's Office not later than the preceding April 15th. A student who wishes to receive the degree at the end of a Spring Semester or a Summer Session, must make formal application for the degree on a form provided for this purpose by the Registrar's Office not later than the preceding October 15th.

If, for any reason, a student does not meet the requirements for graduation after filing the application, the student must file a new formal application (at no charge) by the beginning of the session in which the student now expects to receive the degree.

Commencement. A candidate for graduation at the end of the spring term must be present at commencement in order to receive his/her degree. Degrees are not conferred in absentia, except on special permission from the President.

A student who has been in attendance at Valparaiso University at least three years and who has maintained a numerical average of 86 in the work at this institution will be graduated "With High Distinction." A student who has been in attendance for only two years must maintain a numerical average of 88 to be eligible for this honor.

A student who has been in attendance at least three years and who has maintained a numerical average of 84 in the work at Valparaiso University will be graduated "With Distinction." A student who has been in attendance for only two years must maintain a numerical average of 86 to be eligible for this honor.

MISCELLANY.

School Policies and University Policies. Exceptions to School faculty policies may only be made by petition to the faculty or a duly designated Committee of the faculty. Exceptions to University policies will only be made at the recommendation of the faculty of the School to the appropriate University body. Petitions for such exceptions should be presented to the Office of the Dean.

Nondiscrimination Statement. It is the policy of the University's School of Law not to discriminate on the basis of sex, handicap, race, color, religion, age, veteran status, marital status, or national or ethnic origin in its educational programs, admissions policies, employment policies, financial aid, or other school-administered programs. This policy is enforced by federal
Information about race and sex of all applicants is useful to the school for statistical purposes. The School believes that the race of an applicant is one of several factors that legitimately can be taken into account in the admissions process to promote diversity in the student body and the legal profession. Neither sex nor race will be used as the sole criterion for making any admission decisions. You are assured, by School policy and by the Family Educational Rights and Privacy Act, that the information you provide, and authorize others to provide, will be held confidential and accessible only to School officials and agents, government agencies, and others with a legitimate educational interest in the information.

Student Records. All students and former students of the School of Law may view all educational records pertaining to them that are maintained by the School. (The sole exceptions are confidential letters of recommendation to which the student has specifically, and in writing, waived access, and those received by the School prior to January 1, 1975.) They may make, at their own expense, copies of all such records and may object to any such records that they allege to be inaccurate, misleading, or inappropriate. Such objections are to be made to the Office of the Dean. If the objection is not sustained, the student may request a hearing seeking the removal of the information from the record, pursuant to existing School regulations. Should such a hearing not hold in favor of the student, the student has the right to enter a response into the student's permanent file. In addition, there are further administrative appeals that may be available to such a student pursuant to the Family Educational Rights and Privacy Act. Finally, no student information will be revealed to any person not affiliated with the University without the permission of the student (except as required by law).

Student Consumer Information. Information required to be maintained by the School pursuant to federal regulation is gathered and maintained by the Placement Director. This information includes information on: (1) all financial aid programs administered by the institution including federal, state, and institutional programs; (2) procedures and forms to be completed, criteria for selection and for determining the amount of the award; (3) rights and responsibilities of students under the federal programs including criteria for eligibility, determining "good standing" and "satisfactory progress" and how to re-establish "good standing", means of making payments and frequency of payments, terms of loans and sample repayment schedules, general terms and conditions of work if applicable; (4) the cost of attending, including tuition, fees, books, supplies, estimated costs of typical room and board charges and transportation for students living on-campus, off-campus, or at home and any additional costs of specific programs in which the student indicates an interest; (5) the refund policy; (6) the academic program including current degree programs, the instructional laboratory and physical facilities and faculty; (7) retention data; (8) number and percentage of students completing the program in which the student is interested (if available); (9) the title of the person designated to assist students in obtaining this information and how and where such person may be contacted. Inquiries should be addressed to the School of Law, Director of Placement, Valparaiso University, Valparaiso, Indiana.

COURSE DESCRIPTIONS.

The following courses are those approved by the faculty of the School of Law and by the University. Not all courses are offered every year and additional courses may have been added since this catalog was printed. An accurate description of the courses currently offered is published by the School of Law prior to registration for the semester in question and may be obtained from the Office of the Dean.

The numbering system is as follows:
1) Courses 101-150 are required first-year courses;
2) Courses 151-199 are part of the required second- and third-year sequences;
3) Courses 200-299 are elective courses;
   a. Business, Taxation, and Commercial Law (200-230);
   b. Property (231-240);
   c. Legislation and the Law of Administrative Agencies (241-250);
   d. Clinical (251-264);
   e. Procedure (265-274);
   f. Government and Legal Theory (275-284);
   g. Miscellaneous (285-299);
4) Courses 300-399 are writing and research courses.

Professional Credit.

REQUIRED FIRST-YEAR COURSES.

N.B. At the time this catalog goes to press, the School is in a period of transition between two required first-year sequences. Students will be required to take either Law 121-122, Law 109-110, or Law 125-126 depending on faculty policy during the year of initial registration. Students taking Law 125-126 will be required to take Law 109 during their second year.

101. (Formerly 122.) Contracts I. Sem. 1. Cr. 3. The general scope and purpose of the legal protection accorded contracts; mutual assent and consideration; the rights of third parties; assignment; the effect of changed circumstances; conditions; specific performance; the Statute of Fraud. Economic and psychological aspects of the subject are considered.

102. (Formerly 124.) Contracts II. Sem. 2. Cr. 2. A continuation of Law 101.

103. (Formerly 121.) Criminal Law I. Sem. 1. Cr. 2. General considerations; solicitation and attempt; assault, battery, and mayhem; false imprisonment; homicide; rape; larceny; offense of persons.

104. (Formerly 122.) Criminal Law II. Sem. 2. Cr. 2. A continuation of Law 103.

105. (Formerly 121.) Procedure I. Sem. 1. Cr. 3. Jurisdiction; venue; immunity; variance; theory of pleading; nature and scope of equity; amendments; alternative pleading.

106. (Formerly 122.) Procedure II. Sem. 2. Cr. 3. Allocation of burden; detail required in pleading; discovery; pre-trial conference; adjudication without trial; joinder and splitting of parties.

113. (Formerly 125.) Property I. Sem. 1. Cr. 3. Real Property; easements and profits; licenses, water; adverse possession and prescription; conveyancing, execution of deeds; subject-matter, estates created; creation of easements by implication, covenants for title, estoppel by deed, priorities.
114. (Formerly 126.) Property II. Sem. 2. Cr. 3. Personal property; possessory interests in chattels; finding, bailment, lien, acquisition of ownership; emblements: fixtures. Real property, general introduction, types of estates in land, equitable estates. Statute of Uses and its effects, waste, covenants running with land.

117. (Formerly 119.) Torts I. Sem. 1. Cr. 2. Civil liability for damage to persons and property resulting from intentional or negligent conduct. Limitations on liability. Liability of landowners and occupiers of land. Strict liability. The impact of legislation on common law owners and occupiers of land. Strict liability. The impact of legislation on common law

118. (Formerly 121.) Legal Problems I. Sem. 1. Cr. 2. A problem course designed to develop the basic legal skills required in the preparation of memoranda and other legal documents which necessitate the search for and synthesis of legal and nonlegal materials.

121. (Formerly 135.) Legal Problems II. Sem. 2. Cr. 2. A problem course designed to develop the basic legal skills required in the preparation of memoranda and other legal documents which necessitate the search for and synthesis of legal and nonlegal materials.

125. Perspectives and Problems in the Law I. Sem. 1. Cr. 5. An intensive introductory course providing training in the processes and other technical aspects of legislation and administrative law, and examining social, ethical, political, economic, and philosophical perspectives on the law. Skills will be developed in legal writing, research, interviewing, and counseling. Teaching methods may include lectures, discussions, simulations, fieldwork, and small group activities.

126. Perspectives and Problems in the Law II. Sem. 2. Cr. 5. Continuation of Law 125. In addition, students will begin the study of appellate advocacy. A substantial portion of the course time will be devoted to a discussion of civil procedure, including pleadings, discovery, pretrial conference, adjudication without trial, joinder and splitting, and parties.

REQUERED UPPERCLASS COURSES.

155. (Formerly 171.) Constitutional Law I. Cr. 3. Relations between the federal government and the states; scope of legislative, judicial, and executive powers; interstate commerce; money; federal taxation; territories and dependencies; constitutional limitations in favor of life, liberty, and property; due process of law and equal protection of laws; powers of states.

156. (Formerly 172.) Constitutional Law II. Cr. 3. A continuation of Law 155.

161. (Formerly 166.) Evidence. Sem. 1. Cr. 4. Rules of exclusion of evidence; functions of court and jury; burden of proof; circumstantial evidence; hearsay; examination of witnesses, with demonstrations thereof. Prerequisite to Trial Advocacy and Clinical Program.

171. (Formerly 173.) Legal Process. Cr. 2. A problem course study designed to heighten student awareness and understanding of the main institutions and processes (courts, legislature, executive, administrative, private law making) of the American legal system in the perspective of their everyday working inter-relationships.

172. (Formerly 175.) American Legal History. Sem. 2. Cr. 2. A study of the sources and development of Anglo-American law, with particular emphasis on the evolution of American legal institutions since the founding of the Republic and their relation to the social process in the United States.

173. (Formerly 176.) Comparative Law. Cr. 2. An examination and comparison of the law of selected jurisdictions on certain specific topics, with special emphasis upon the approaches and objectives of various systems of law.


190. (Formerly 220.) The Legal Profession. Cr. 2. The study of the individual canons of professional ethics adopted by the American Bar Association and other materials on the lawyer's professional responsibility. S/U grade.

197-198. (Formerly 288-289.) Seminar. Sem. 1. Cr. 1. Seminar. 2. Cr. 1. The seminar requirement is designed to afford third-year students an opportunity to build on the knowledge they have gained during their first two years of law study, by permitting them to make in-depth studies in specialized subjects. Since a substantial paper is required in all seminars, students also gain practice in advanced research and writing. The seminar runs throughout the year, thus permitting adequate time for critiques and redrafts of the papers. In past years, seminars have been offered in Securities Regulation, Church and State, Civil and Political Rights, Social Legislation, Commercial Arbitration, Commercial Law, Business Problems, Federal Antitrust Laws, and Natural Resources. These seminars will be supplemented from time to time in accordance with faculty and student interest. With permission of the Dean and instructor, a student may arrange for an independent seminar to be given in the third year in lieu of the seminar requirement. The supervising instructor will prescribe the student's responsibilities in the project in addition to the substantial research paper which is required.

ELECTIVES.


201. (Formerly 236.) Admirailey. Cr. 2. A study of the doctrines of admiralty as administered by the federal courts under the Constitution. Consideration is given to the jurisdiction, carriage of cargo and passengers, rights and duties of maritime workers, salvage, insurance, and the conflict of laws at sea.

203. (Formerly 165.) Business Associations. Cr. 4. The principal forms of all the various business associations are analyzed and studied.

205. (Formerly 254.) Business Planning. Cr. 3. The object of the course is to teach a basic understanding of corporate taxation in a context of problems likely to be encountered by a lawyer. Related law and principles of corporations, accounting, and securities regulation will be covered to the extent they relate to the problems. Prerequisite: Law 221.

207. (Formerly 161.) Commercial Transactions and Consumer Protection I. Cr. 1. Legal problems in modern commercial practice: the financing and marketing transactions by which goods are produced, moved, stored, protected, and distributed. Particular attention is given to the effects of Uniform Laws and the Uniform Commercial Code.

208. (Formerly 162.) Commercial Transactions and Consumer Protection II. Cr. 3. A continuation of Law 207.

211. (Formerly 278.) Debtors' Protection and Creditors' Rights. Cr. 3. The legal position of the debtor, secured and unsecured, and his legal and equitable remedies. Fraudulent conveyances, general assignments, creditors' agreements, receiverships, and bankruptcy.

213. (Formerly 256.) Federal Estate and Gift Taxation. Cr. 2. A detailed study of the federal taxation of estates and gifts. Prerequisite to Law 231, Estate Planning.

215. (Formerly 240.) Insurance. Cr. 3. A study of insurable interest, concealment, representation, warranty, cause of invalidity, increase of hazard, the peril insured against, the amount of recovery, subrogation, conditions applicable after loss, waiver and estoppel, assignment of policies, and rights of beneficiaries.

217. Products Liability. Cr. 3. Governmental regulation of the design, manufacture, and marketing of products. Statutes such as the Consumer Product Safety Act and the National Vehicle and Motor Vehicle Safety Act will be discussed. Causes of action for personal injury or property damage caused by products. Theories of recovery: warranty, misrepresentation, negligence, strict liability in tort. The relationship of negligence concepts to strict liability in tort, e.g., causation, including intervening acts, contributory negligence and assumption of risks, scope of duty.

219. (Formerly 237.) Securities Regulation. Cr. 3. Federal and state regulation of issuance and subsequent sales of corporate securities.

221. (Formerly 167.) Taxation. Cr. 4. A study of the basic principles of the federal income taxation of individuals. Prerequisite to Law 205, Business Planning.

Property (231-240).

231. (Formerly 258.) Estate Planning. Cr. 2. The principles of lifetime and testamentary planning are presented. Emphasizes the principles of the law of property. Plans and gifts, and trusts, consider the favorable and unfavorable aspects on such planning, of state and federal taxes. Prerequisite: Law 213.
233. Land Transfer and Finance. Cr. 3. An application of property concepts to real estate transactions, including an analysis of the roles played by lawyers, brokers, and financing institutions. Basic considerations relevent to the drafting of listing agreements, contracts, transactions, including an analysis of the roles played by lawyers, brokers, and financing institutions. The ownership of shared facilities, such as condominiums and cooperatives, will also be reviewed.

234. Land Use. Cr. 3. An in-depth analysis of the control of land use and land development. The policies, procedures, and terminology explored, together with private land use controls. The ownership of shared facilities, such as condominiums and cooperatives, will also be reviewed.

237. Patent, Trademark, and Copyright Law. Cr. 3. Patents, trademarks, and copyrights are examined from the following perspectives: the objectives of constitution, statutes, and the common law; the prerequisites to federal protection including standards of patentability and the subject matter of copyrights; applications and regulation procedures; the administrative process; judicial reviews; the protection of ideas; rights of holders of patents, trademarks, and copyrights; grants, licenses, and assignments; infringement, plagiarism, and unfair competition; the doctrine of fair use.

239. (Formerly 169.) Trusts and Estates I. Cr. 3. A study of the essential tools of lifetime and testamentary planning of estates: (1) intestate succession; (2) wills and testamentary trusts; (3) uses and trusts, express, resulting, and constructive; (4) future interests in real property; (5) perpetuities and restraints on alienation; (6) powers or appointment; and (7) gifts, charitable and causa mortis. Prerequisite to Law 240, Trusts and Estates II.

240. (Formerly 170.) Trusts and Estates II. Cr. 3. A continuation of Law 239.


241. (Formerly 227.) Administrative Law. Cr. 3. The development of administrative law; delegation of legislative power; administrative rulemaking, adjudication and enforcement; judicial review of administrative determinations; extraordinary remedies in administrative cases; various doctrines, long established and new, applying to the administrative process; review of specific cases illustrating the foregoing matters.

243. (Formerly 285.) Economic Regulation. Cr. 3. A study of the statutes and legal theories involved in the preservation of competition. Monopoly; exclusive dealing; resale price maintenance; mergers; stock acquisitions.

245. (Formerly 273.) Labor Law. Cr. 3. Organization, including the right to organize; protection against interference; discrimination and employer domination; selection of representatives. Collective bargaining, including the requirement of bargaining; provisions and enforcement of collective agreements. Strikes, picketing, and boycotts. Intra-union and inter-union relationships.

246. (Formerly 274.) Advanced Topics in Labor Law. Cr. 3. The use of arbitration as a means of self-regulation of the employment relationship; remedies available for discrimination on the basis of race, sex, and age under Title VII of the Civil Rights Act of 1964 and other state and federal laws; pay requirements and other criminal and civil sanctions relating to the employer-employee, employer-labor organization relationship.

248. (Formerly 262.) Law and Environmental Controls. Cr. 3. A study of the response of the legal system to conflicting demands upon environmental resources. While the course will also be focused on the control of air pollution, other areas of environmental concern will also be discussed. The course will evaluate and compare the adequacy and efficiency of court law, the National Environmental Policy Act. The administrative law aspects of environmental law, including the right to initiate and intervene in agency proceedings, will also be considered. Alternatives to regulation, such as subsidies, emission fees, and transferable permits, will be examined. Finally, the economic incentives to control pollution as well as the limitations of economic analysis in environmental policy will be explored.

250. (Formerly 203.) Legislation. Sem. 2. Cr. 3. Sources of statute law; legislative procedure, together with limitations thereon; constitutional limitation upon legislative action; interpretation of statutory language and mechanics of drafting.

Clinical (251-264).

251. (Formerly 188.) Appellate Advocacy. Cr. 3. The preparation of briefs and presentation of oral arguments at the appellate level. The problems are assigned in the form of records on appeal. Students are required to prepare written briefs and present oral arguments on a competitive basis.

253. (Formerly 190.) Trial Advocacy. Cr. 2. A training course designed to develop the practical and professional skills of a trial lawyer. Specific skills: pre-trial preparation; proving facts in court; closing arguments; attention to the tactical and ethical aspects involved. S/U grade. Prerequisite: Law 161.

255. (Formerly 185.) Introduction to Clinic. Cr. 3. Graded. Required prerequisite for participation in the Clinical Program (257, 258, 259). A course which combines substantive, procedural and practical aspects of client representation with particular emphasis on legal problems of the poor. Substantive areas are welfare, housing, consumer, and family relations, including juvenile and neglect matters. Students will receive training in interviewing, drafting of pleadings, and gathering discovery information. The problems will center on the representation of clients in these substantive areas.

257-258. (Formerly 290-291.) Clinical Program in Legal Problems of the Poor I and II. Cr. 3-6. A student must enroll for at least three hours in each semester. Authorization to enroll for more than three hours in a given semester must be obtained in advance from the Faculty Clinic Committee. A student may not take more than a total of 12 hours of clinical work.

259. (Formerly 292.) Clinical Program in Legal Problems of the Poor III. Cr. 3. A continuation of Law 257 and 258.

261. (Formerly 260.) Current Litigation I. Cr. 2. A clinical course in which students will be assigned various tasks to assist practicing attorneys in current litigation problems. Students will work under the supervision of a member of the faculty and the practicing attorney. Enrollment is by invitation only and preference will be given to students not currently enrolled in the Clinical Program courses in the third year. Students registered for the Clinical Program courses may not also take the Clinical Litigation course and count the 2 credit hours toward the 90-hour graduation requirement.

262. (Formerly 261.) Current Litigation II. Cr. 2. A continuation of Law 261.

Procedure (265-274).

265. (Formerly 224.) Conflict of Laws. Cr. 3. A study of the territorial jurisdiction of courts; the enforcement of foreign judgments; the problems arising when the operations of one state are connected with jurisdictions having different rules of law; the control exercised by the federal government.

267. (Formerly 235.) Federal Practice. Cr. 3. A study of the federal courts with respect to the part played by them in achieving a workable federalism. Special attention will be given to the original jurisdiction of the federal district courts, the relationship of the federal courts to state courts, substantive law, and the permissible and desirable range of federal judicial power. (Strongly recommended as a second-year course for those students intending to register for the Clinical Program courses in the third year.)

269. (Formerly 235.) Federal Practice. Cr. 3. A study of the federal courts with respect to the part played by them in achieving a workable federalism. Special attention will be given to the original jurisdiction of the federal district courts, the relationship of the federal courts to state courts, substantive law, and the permissible and desirable range of federal judicial power. (Strongly recommended as a second-year course for those students intending to register for the Clinical Program courses in the third year.)

271. (Formerly 284.) Remedies. Cr. 3. Forms of judicial and equitable relief which courts may grant by way of redress of those who have been or may be injured including legal doctrines to prevent unjust enrichment; alternate choices and tactical advantages of each.

Government and Legal Theory (275-284).

275. Constitutional Theory. Cr. 3. Traditions of American political philosophy; American constitutional structure contrasted with, e.g., judicial interpretations of the unwritten British constitution; the legitimate and political and judicial acts; the context and purpose of judi-
cial review, with brief comparisons under the constitutions of other countries; recourse to economic and political argumentation in constitutional adjudication; theories of economic welfare and their relevance to constitutional decision-making; and the conflict between liberty and equality in constitutional theories.

277. (Formerly 229.) International Law. Cr. 3. A study of the role of authority in the decision-making processes of the world community. Consideration is given to formal prescription and effective practice with respect to the participants in such processes (nation-states, international governmental organizations, political parties, pressure groups, private associations, individuals); arenas of interaction; bases of power, practices; and effects. The principal emphasis is upon the many roles of the nation-state in the value shaping and sharing processes of the world community.

279. Law and Economics. Cr. 3. Principles of economic analysis in their legal context; the influence of economic principles of legislation and administrative and judicial decisions; the role of contract laws in the economy; business organizations as a cause and effect of contracts and other market activities; private and public law regimes governing economic activity compared and contrasted; an evaluation of administrative law techniques—the deregulation controversy; a critique of the methodology and policy prescriptions offered by law and economics analyses. An adequate knowledge of the basic principles of economics is assumed.

281. (Formerly 233.) Municipal Corporations. Cr. 3. Incorporation and incidents of existence; types of organizations; legislative control; corporate agencies, expressed and implied powers; revenue and indebtedness; acquisition and control of property; liability in contract and tort; remedies; home rule.

Miscellaneous (285-299).

285. (Formerly 223.) Family Law. Cr. 3. The promise to marry and the breach thereof; husband and wife; parent and child; liability of minors in contract and tort. (Strongly recommended as a second-year course for those students intending to register for the Clinical Program courses in the third year.)

290. (Formerly 205.) Advanced Study: (Topic.) Cr. 1. To be offered on an occasional basis as announced by the Dean, this course will offer the opportunity for advanced study in particular subject matter areas. The prerequisite is the successful completion of the basic course. A student may not use credit earned in this course in satisfaction of the Seminar requirement.

295. (Formerly 204.) Contemporary Legal Problems. Cr. 1-3. A course in which a special topic in law will be given intensive study. The topic will vary from year to year and will be determined by recent developments in the legal system and by joint interests of faculty and students.

Reading and Research (300-399).

300. Independent Reading and Research. Cr. 1-3. Individual directed study, supervised by a member of the faculty. Design of the specific program is the responsibility of the student, who should submit a written outline of the project to a faculty member for approval. Faculty approval will be subject to the particular member's interest and availability. A substantial paper will be required, and the amount of credit granted will be determined jointly by the student and supervising faculty member at the time the project is initially approved by the supervising faculty member. Projects which have been approved by a faculty member must then be submitted to the Office of the Dean for final approval prior to registration. This course may not be substituted in lieu of the Seminar requirement.

305. (Formerly 180.) Law Review. Cr. 2. Participation in Law Review activities, including the writing, editing and publication of legal notes and articles. Admission by invitation only. S/U grade.

306-307. (Formerly 271-272.) Law Review. Sem. 1. Cr. 1, Sem. 2. Cr. 1. Participation in Law Review activities, including the writing, editing, and publication of legal notes and articles. Admission by invitation only. (Note: This course may be offered in satisfaction of the Seminar requirement.) S/U grade.
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2073

STATISTICS.
Summary of Attendance.

The College of Arts and Sciences

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Special Programs

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*Day Program
FACULTY

Robert V. Schnabel, Ph.D.
President and Professor of Philosophy
Bowdoin College (B.A., 1944); Fordham University (M.S., 1951; Ph.D., 1955); Concordia College, Bronxville; Concordia Theological Seminary, St. Louis; Indiana University; University of Michigan.

Albert G. Huegli, Ph.D., LL.D., D.D.
President Emeritus
Concordia (Junior) College, Fort Wayne, Indiana (Diploma, 1932); Concordia Theological Seminary, St. Louis, Missouri (M.Div., 1936; D.D. [Hon.], 1968); Wayne State University (A.B., 1938); University of Michigan (M.A., 1837); Northwestern University (Ph.D., 1944); Concordia Teachers College, River Forest, Illinois (LL.D. [Hon.], 1964).

The Faculty Emeriti

Kathryn Epsy Aller, M.S. in ED, Assistant Professor Emerita of Music Northwestern University (B.M.E., 1951; M.S. in Ed., 1980); Valparaiso University; American Conservatory of Music.

Emory G. Bauer, M.A., Professor Emeritus of Physical Education Valparaiso University (A.B., 1934); University of Colorado; State University of Iowa (M.A., 1939).

Walter E. Bauer, Ph.D., Dean Emeritus of the Faculty; Distinguished Service Professor Emeritus of History Concordia (Junior) College, Fort Wayne, Indiana (Diploma, 1917); Concordia Theological Seminary, St. Louis, Missouri (Diploma, 1921); The University of Chicago; Columbia University (A.M., 1922); Harvard University; Cornell University (Ph.D., 1932).

Vera Rose Bushing, B.L.S., Assistant Librarian Emerita with rank of Assistant Professor Emerita Valparaiso University (B.A., 1946); The University of Chicago (B.L.S., 1947); Indiana University.

Walter George Friedrich, Ph.D., LL.D. (Hon.), Distinguished Service Professor Emeritus of English Indiana University (A.B., 1920); Columbia University (M.A., 1923); Johns Hopkins University (Ph.D., 1924); Valparaiso University (LL.D. [Hon.], 1974).

Erwin Elmer Goehring, M.A., Professor Emeritus of Administration and Economics University of Missouri (B.S. in Bus. Adm., 1927); The University of Chicago (M.A., 1938).

Hazel Tallman Guillaumant, M.A., Professor Emerita of Foreign Languages Montana State College (B.S., 1925); State University of Iowa (M.A., 1929); Universidad Nacional Autonoma de Mexico; La Sorbonne, Paris (Diploma, 1934); Le College de France.

Vera Therese Hahn, Ph.D., Professor Emerita of Speech and Drama Progressive School of Music (Certificate, 1925); South Dakota Teachers College; Stanford University (A.B., 1930; M.A., 1931); Louisiana State University (Ph.D., 1939).

Karl Henry Henrichs, M.A., LL.D. (Hon.), Director of the Round Table, Division of Public and Alumni Affairs with rank of Professor Emeritus Concordia (Junior) College, Fort Wayne, Indiana (Diploma, 1917); Concordia Theological Seminary, St. Louis, Missouri (Diploma, 1920); Columbia University; Western Reserve University (M.A., 1929); The University of Chicago; Valparaiso University (LL.D. [Hon.], 1971).

Theodore Hoefly-Nickel, Mus.D. (Hon.), D.D. (Hon.), Distinguished Service Professor Emeritus of Music Concordia (Junior) College, Adelaide, Australia (Diploma, 1912); Concordia Theological Seminary, Adelaide, Australia (Diploma, 1916); Trinity College of Music, London (License, 1916); Leipzig Konservatorium der Musik—Kirchenmusikalischen Institut (Diploma, 1927); Luther College (Mus.D. [Hon.], 1958); Concordia Theological Seminary, St. Louis, Missouri, (D.D. [Hon.], 1958).

Robert Leslie Isbell, M.S.Ed., Professor Emeritus of Mechanical Engineering Purdue University; Ball State Teachers College; Goshen College (B.S, in Ed., 1952); Ball State Teachers College (M.S.Ed., 1962).

Erwin Arthur Jones, J.D., Professor Emeritus of Law University of Nebraska (A.B., 1928; J.D., 1928).

Alfred C. Koester, M.A. in Ed., Director Emeritus of Evening Division and Summer Session and Director Emeritus of Institutes and Conferences; Professor Emeritus of Education Concordia Teachers College, River Forest, Illinois (Diploma, 1932); Denver University; Ball State Teachers College (B.S. in Ed., 1952; M.A. in Ed., 1954); Indiana University.

1Appointed August 1, 1978.
2Retired as President August 1, 1978.
John Henry Krause, M.S., Associate Professor Emeritus of Physical Education Concordia (Junior College), Milwaukee, Wisconsin (Diploma, 1933); Concordia Theological Seminary, St. Louis, Missouri; American College of Physical Education (B.P.E., 1936); Seatte Pacific College (B.A., 1938); Washington University (M.S., 1950).

Paul William Lange, Ph.D., Professor Emeritus of Education Concordia Teachers College, River Forest, Illinois (Diploma, 1927); The University of Chicago (Ph.B., 1930; M.A., 1933; Ph.D., 1940).

Alfred H. L. Meyer, Ph.D., Distinguished Service Professor Emeritus of Geography University of Illinois (A.B., 1912; Ph.D., 1930); The University of Chicago; Northwestern University; University of Michigan (Ph.D., 1934).

Gustav Must, Ph.D., Professor Emeritus of Foreign Languages University of Dorpat (Ph.M., 1938); University of Budapest, Hungary; University of Minnesota, University of Hamburg, Germany; University of Goettingen, Germany (Ph.D., 1948); University of Michigan.

Helen Mae Olson, M.A., Director Emerita of Valparaiso Union and Director Emerita of Social Service with rank of Assistant Professor Emerita Northwestern University (B.S., 1934); Columbia University (M.A., 1941); Illinois Normal University; The University of Chicago.

Frederick H. Rechlin, M.A., Director of Admissions Emeritus with rank of Assistant Professor Emeritus Concordia College, St. Louis, Missouri (Diploma, 1931); Washington University; Columbia University (M.A., 1932); University of Heidelberg, Germany.

Edgar Carl Reinke, Ph.D., Professor Emeritus of Foreign Languages The University of Chicago (A.B., 1929; Ph.D., 1934); University of Minnesota, Library School (A.M., 1957); Verona Classical Summer School, Naples, Italy; American School of Classical Studies, Athens, Greece.

Dana B. Schwanholt, M.S., Professor Emeritus of Education Indiana University (A.B., 1929; M.S., 1934).

Lois Juliette Simon, M.A., Professor Emerita of Home Economics Wittenberg College (A.B., 1928); University of California, Berkeley (M.A., 1938); Kent University; Cornell University; Syracuse University.

John Robert Slager, M.A., Assistant librarian Emeritus with rank of Assistant Professor Emeritus University of Riga, Latvia (Mag. Occ., 1930; Mag. lur., 1933): The University of Chicago, Graduate Library School; Western Michigan University (M.A., 1963).

Margaretta Sackville Tangeman, M.A.S.W., Professor Emerita of Social Work Northwestern University; Indiana University (B.A., 1946); The University of Chicago School of Social Service Administration (M.A.S.W., 1947). A.C.S.W.

Allen Edmond Tuttle, Ph.D., Professor Emeritus of English Wabash College (A.B., 1938); The University of Chicago; Northwestern University (M.A., 1947; Ph.D., 1950).

Herbert H. Umbach, Ph.D., Professor Emeritus of English Concordia (Junior College), Fort Wayne, Indiana (Diploma, 1926); Concordia Theological Seminary, St. Louis, Missouri (M.Div., 1929); Washington University (M.A., 1936); Cornell University (Ph.D., 1945); American University.

In order to encourage creative work and research on the part of its faculty members, Valparaiso University offers opportunity for appropriate recognition and financial assistance for such work through three award programs: a) University Research Professorships, b) Summer Fellowships for Creative Work and Research, and c) O.P. Kratzmann Memorial Fund for Research in the Healing Arts and Sciences (Wheat Ridge Foundation-Doner).

The University Faculties**

**Indicates member of the University Senate—1977-1978.
*Indicates member of the University Senate—1978-1979.
**Summer Session 1977 to Spring Semester 1978-1979, inclusive.

†Indicates member of the University Senate—1978-1979.
**Summer Session 1977 to Spring Semester 1978-1979, inclusive.


†Deceased, January 28, 1979.
†For Fall Semester 1977-1978 only.
*For Fall Semester 1977-1978 only.

276
Lyle Edward Franzen, M.S.W., Assistant Professor of Social Work University of Omaha (B.A., 1961); McCormick Seminary (B.D., 1965); University of Illinois (M.S.W., 1965); The University of Chicago.

John E. Freie, Ph.D., Assistant Professor of Political Science University of Northern Iowa (B.A., 1969); Miami University (M.A., 1971); University of Missouri (Ph.D., 1976).

Frederick Lawrence Frey, M.F.A., Assistant Professor of Art University of Wisconsin (B.S., 1962; M.F.A., 1965).

Richard L. Frynas, Ph.D., Assistant Professor of Psychology University of Iowa (B.A., 1970; M.A., 1973; Ph.D., 1976).

Daniel R. Gahl, Ph.D., Associate Professor of Journalism Bay City Junior College (A.A., 1965); Valparaiso University (B.A., 1957); University of Wisconsin, M.S. (1988); Oklahoma State University (Ph.D., 1973).

Batty B. Gehring, M.M., Assistant Professor of Music Oberlin Conservatory (B.M., 1950); Syracuse University (M.M., 1961).

Philip Kleger Gehring, Ph.D., Professor of Music Franklin and Marshall College; Oberlin College (A.B., 1950; Mus.B., 1950); Syracuse University (Mus.M., 1955; Ph.D., 1963).

Michele Guffman, M.S., Adjunct Instructor in Physical Education Northeastern State University (B.S.E., 1976); Indiana University (M.S., 1977).

Steven L. Gerken, B.S.C.E., Part-time Instructor in Mechanical Engineering Valparaiso University (B.S.C.E., 1976).

Gary S. Germain, J.D., Adjunct Professor of Law Purdue University (B.A., 1970); Valparaiso University (J.D., 1973).


William H. Griffen, M.A., Adjunct Lecturer in Theology Immanuel Lutheran College (B.D., 1951); Concordia Teachers College, River Forest (M.A., 1966).

Michael J. Griffl, B.S. In Ed., Adjunct Lecturer in Journalism Arkansas State University; Indiana University (B.S. in Ed., 1971).

Jean Edgar Grogg, M.S.W., Part-time Assistant Professor of Social Work Wabash College (B.A., 1968); Indiana University (M.S.W., 1974).

Philips D. Grogg, M.S.W., Part-time Assistant Professor of Social Work Valparaiso University (M.S.W., 1969); Indiana University (M.S.W., 1974).

Charles Robert Gromley, LL.M., Professor of Law Kent State University (B.S., 1948); University of Kentucky (LL.B., 1951); Georgetown University (LL.M., 1950). 

Alanna Grouse, B.S., Assistant Professor of Speech and Drama Wisconsin State University, Oshkosh (B.S., 1959); Indiana University (M.A., 1961).


Thomas G. Hall, Ph.D., Assistant Professor of English San Francisco State University (B.A., 1965; M.A., 1965); Washington State University (Ph.D., 1971); Stanford University.

Arthur Edward Hallberg, Ed.D. in Math., Vice-Chairman of the University Senate 1977-1979; Professor of Mathematics Illinois College (A.B., 1940); University of Illinois (A.M., 1941); The University of Chicago; University of Michigan (Ed.D. in Math., 1957).

Carl Frederick Halter, M.M., LLHD. (Hon.), Director of Continuing Education with rank of Professor Concordia Teachers College, River Forest, Illinois; Baldwin-Wallace College (B.M., 1941); Northwestern University (M.M., 1945); Concordia Teachers College, Seward, Nebraska (LlD. [Hon.], 1984).


Norman L. Hannewald, Ed.D., Associate Professor of Music Valparaiso University (B.A., 1951); Johns Hopkins University; Indiana University (M.S., 1954; Ed.D., 1974).

Richard A. Hansis, Ph.D., Assistant Professor of Geography Rutgers University; University of New Mexico (B.A., 1966); University of Florida (M.A., 1968); Pennsylvania State University (Ph.D., 1976).

Robert J. Hansen, Ph.D., Coordinator, St. Louis Nursing Division; Professor of Biology Valparaiso University (B.A., 1948); University of Illinois (M.S., 1949; Ph.D., 1955); University of Delaware; Webster University; Syracuse University; Cornell University.


John Walter Harris, Ph.D., Associate Professor of Psychology Valparaiso University (B.A., 1963); Illinois Institute of Technology (M.S., 1965; Ph.D., 1969).

Daniel W. Hart, M.S. in E.E., Adjunct Assistant Professor of Electrical Engineering Valparaiso University (B.S. in E.E., 1970); Purdue University (M.S. in E.E., 1975).


Marshall L. Harvey, M.A., Assistant Professor of English Williams College (B.A., 1972); Indiana University (M.A., 1974); The University of Chicago.

Mohamed A. Hassab, Ph.D., Assistant Professor of Mechanical Engineering University of Alexandria (B.S., 1970; M.E., 1974); North Carolina State University (Ph.D., 1978).

Edward H. Heinze, Ph.D., Associate Professor of Economics Marquette University (B.A., 1965); Michigan State University (M.A., 1968); Fordham University (Ph.D., 1976).

Johannes Heims, Ph.D., University Marshal; Professor of Foreign Languages Valparaiso University (B.A., 1953); University of Michigan (M.A., 1954; Ph.D., 1963).

James P. Henderson, Ph.D., Assistant Professor of Economics Beloit College (B.A., 1960); Northern Illinois University (M.A., 1967; Ph.D., 1977).

Eugene H. Hennig, J.D., Visiting Assistant Professor of Law Valparaiso University (B.S.M.E., 1966; J.D., 1974).

Karl Henry Henrichs, M.A., LL.D. (Hon.), Director of the Round Table, Division of Public and Alumni Affairs with rank of Professor Emeritus Concordia (Junior College), Fort Wayne, Indiana (Diploma, 1917); Concordia Theological Seminary, St. Louis, Missouri (Diploma, 1920); Columbia University; Western Reserve University (M.A., 1929); The University of Chicago; Valparaiso University (LL.D. [Hon.], 1971).


Daryll Dwayne Herseman, Ph.D., Vice-President for Student Affairs with rank of Associate Professor University of Illinois (B.S., 1982); Northwestern University (M.A.; 1965; Ph.D., 1969).

Scott H. Hershman, M.S.W., Adjunct Assistant Professor of Social Work Indiana University (B.S., 1969); Tulane University (M.S.W., 1971).

Elmer Beall Hess, M.S., M.S.L., Law Librarian with rank of Associate Professor Western Michigan University (B.S., 1952; M.S.L., 1972); The University of Chicago (M.S., 1953); University of Michigan; Wayne State University; Indiana University.

Charles F. Hoge, Ph.D., Assistant Professor of Mechanical Engineering Purdue University (B.S., 1963); University of Missouri, Rolla (Ph.D., 1970).

For 1977-1978 only.

For 1977-1978 and Fall Semester 1978-1979 only.

For Fall Semester 1978-1979 only.

For Fall 1978-1979 only.

For 1978-1979 only.

For 1977-1978 only.

For 1978-1979 only.

For 1977-1978 only.

For Fall Semester 1977-1978 only.

For Fall Semester 1977-1978 only.

For 1977-1978 only.

For Fall 1978-1979 only.

For 1978-1979 only.

For 1977-1978 only.

Joyce Ellen Hicks, M.A., Instructor in English St. Lawrence University (B.A., 1967); Michigan State University (Ph.D., 1975).

Jack Arthur Hillier, LL.M., Professor of Law Valparaiso University (B.A. 1953; J.D., 1955); University of London; Yale University (LL.M., 1963).

Bernhard Hillila, Ed.D., Professor of Education Suomi Junior College; Suomi Theological Seminary (Diploma, 1941); Boston University (A.B., 1943); Western Reserve University (M.A., 1945); Columbia University (Ed.D., 1955).


Debra K. Howe, M.S., Adjunct Instructor in Physical Education Indiana State University (B.S., 1976; M.S., 1977).

Leslie V. Hudson, Ph.D., Instructor in Accounting Valparaiso University (B.S. in B.A., 1972).

Norman L. Hughes, M.S., Director of Computer Laboratory; Associate Professor of Mathematics Ohio Northern University (B.S., 1953); University of Wisconsin (M.S., 1958); University of California, Los Angeles; University of California, Santa Barbara.

Willbur Hoover Hutchins, J.D., Professor of Administrative Sciences Western Michigan University (A.B., 1934; University of Toledo J.D., 1942).

Matthew S. Ikeda, Ph.D., Associate Professor of Psychology Tokyo Bible Seminary; Cincinnati Bible Seminary (A.B., 1953); Lincoln Christian Seminary; Valparaiso University (M.A.L.S., 1966); The University of Chicago (M.A., 1970; Ph.D., 1976).


Ronald Arthur Janke, Ph.D., Assistant Professor of Geography Marquette University (B.A., 1958); University of Wisconsin (M.A., 1967); University of Minnesota (Ph.D., 1970).

Edwin A. Johnson, M. Mus., M.A., Assistant Director of Libraries and Assistant Librarian with rank of Associate Professor Valparaiso University (A.B., 1938); Northwestern University (M. Mus., 1938); Western Michigan University (M.A., 1964).

Jeffie F. Johnson, Ph.D., Professor of Sociology California Concordia (Junior College); Concordia Theological Seminary, St. Louis, Missouri (B.A., 1948); St. Louis University; Washington University; University of California at Los Angeles; University of Southern California; University of Michigan (A.M., 1955; Ph.D., 1951).


Sarah L. Johnson, M.A., Instructor in Foreign Languages Southeast Missouri State College (B.A., 1969); Colorado State University (A.M., 1971); University of Colorado.

James L. Jorgensen, J.D., Adjunct Professor of Law St. Olaf College (B.A., 1969); University of Washington (M.A., 1970); Valparaiso University (J.D., 1974).

Jenna Juneja, Ph.D., Assistant Professor of English University of Delhi (B.A., 1964; M.A., 1966); Pennsylvania State University (Ph.D., 1974).

Theodore Robert Jungkuntz, Dr. Theol., Professor of Theology Northwestern College (B.A., 1953); University of Missouri (M.A., 1954); Lutheran Theological Seminary (B.D., 1958); University of Erlangen/Nuernberg, Germany (Dr. Theol., 1962); University of Heidelberg, Germany; University of Wisconsin; Central Missouri State College; University of Kansas.

Perenz Paul Kallay, Ph.D., Professor of Geography Wayne State University (A.B., 1950; M.A., 1952); University of Michigan (Ph.D., 1955); University of Rome.

John A. Karpicke, Ph.D., Assistant Professor of Psychology Michigan State University (B.S., 1972); Indiana University (Ph.D., 1976).


Garland F. Hicks, Jr., Ph.D., Assistant Professor of Biology St. Lawrence University (B.S., 1967); Michigan State University (Ph.D., 1975).

James L. Jorgensen, J.D., Adjunct Professor of Law St. Olaf College (B.A., 1969); University of Washington (M.A., 1970); Valparaiso University (J.D., 1974).

Jenna Juneja, Ph.D., Assistant Professor of English University of Delhi (B.A., 1964; M.A., 1966); Pennsylvania State University (Ph.D., 1974).

Theodore Robert Jungkuntz, Dr. Theol., Professor of Theology Northwestern College (B.A., 1953); University of Missouri (M.A., 1954); Lutheran Theological Seminary (B.D., 1958); University of Erlangen/Nuernberg, Germany (Dr. Theol., 1962); University of Heidelberg, Germany; University of Wisconsin; Central Missouri State College; University of Kansas.

Perenz Paul Kallay, Ph.D., Professor of Geography Wayne State University (A.B., 1950; M.A., 1952); University of Michigan (Ph.D., 1955); University of Rome.

John A. Karpicke, Ph.D., Assistant Professor of Psychology Michigan State University (B.S., 1972); Indiana University (Ph.D., 1976).


*For Fall Semesters 1977-1978 and 1978-1979 only.


*For Fall Semesters 1977-1978 and 1978-1979 only.


*For Spring Semester 1977-1978 only.


*For Spring Semester 1977-1978 only.

*For Spring Semester 1978-1979 only.
Sandra L. Kowalski, M.S.N., Assistant Professor of Nursing Purdue Calumet College (B.S.N., 1973); St. Xavier College (M.S.N., 1977).

John Henry Krause, M.S., Assistant Director of Athletics; Associate Professor of Physical Education Concordia (Junior) College, Milwaukee, Wisconsin (Diploma, 1983); Concordia Theological Seminary, St. Louis, Missouri; American College of Physical Education (B.P.E., 1936); Seattle Pacific College (B.A., 1938); Washington University (M.S., 1950).


Diane Hoermann Krebs, M.S., Assistant Professor of Mathematics Valparaiso University (B.S., 1956); University of Michigan (M.S., 1957).

Carl H. Krekel, Ph.D., Vice-Chairman of the University Senate 1978-1979; Professor of Biology St. John's (Junior) College (Diploma, 1930); Concordia Theological Seminary, St. Louis, Missouri (B.A., 1941; Diploma, 1945); University of Kansas; University of Arkansas; Washington University; The University of Chicago (Ph.D., 1955).

Gottfried G. Krodel, Th.D., Professor of History, Occupant of the Martin Luther Chair in Reformation History Oberrealschule mit Gymnasium, Neumarkt/Oberpfalz, Germany (Abitur, 1949); Friedrich Alexander University, Erlangen, Germany (Th.D., 1975).

William H. Kroeger, M.Mus., Associate Professor of Music Augustana College (B. Mus., E., 1942); Chicago Musical College (M. Mus., 1950); Juilliard School of Music.

Fred W. Kruger, M.S. in M.E., Vice-President for Business Affairs; Professor of Mechanical Engineering Valparaiso University; Purdue University (B.S. in E.E., 1943; B.S. in M.E., 1947); Illinois Institute of Technology; University of Notre Dame (M.S. in E.E., 1954). Professional Engineer (Indiana).

Michael M. Kumpf, Ph.D., Assistant Professor of Foreign Languages Luther College (B.A., 1968); Ohio State University (M.A., 1972; Ph.D., 1974).

Boonchai Kuntakom, M.S., Instructor in Civil Engineering Chiangmai University (B.Engr., 1975); Youngstown State University (M.S., 1977).

Lloyd H. Kusch, M.S.E.E., Instructor in Mechanical Engineering Valparaiso University (B.S. in M.E., 1976); Purdue University (M.S.E.E., 1976).

Van Carl Kussrow, Jr., Ph.D., Professor of Speech and Drama National Institute of Speech and Voice Disorders; Valparaiso University; Stanford University (B.A., 1949; M.A., 1950); The University of Chicago (M.A., 1959; Ph.D., 1959).


W. Reed Langford, Ph.D., Visiting Assistant Professor of Physics Utah State University (B.S., 1977); Michigan State University (M.S., 1979); Brigham Young University (Ph.D., 1979).

Raymond George Larson, Ph.D., Professor of Chemistry University of North Dakota (B.S., 1931; M.S., 1934); Purdue University (Ph.D., 1938); Cornell University; University of Minnesota; University of Southern California; University of Illinois; University of California at Berkeley; University of Oregon; University of Utah; University of Colorado (B.S., 1940; M.S., 1952).

Dale Guilford Lasky, Ph.D., Associate Professor of Theology Concordia (Junior) College, Milwaukee, Wisconsin; Concordia Theological Seminary, St. Louis, Missouri (B.A., 1951; M.Div., 1954); University of Minnesota; Heidelberg University, Germany; Yale Divinity School (B.T.M., 1960); The University of Chicago (M.A., 1965; Ph.D., 1972).

Richard Henry Laube, Ph.D., Dean of the College of Business Administration; Professor of Administrative Sciences Valparaiso University (A.B., 1940); University of Minnesota (M.A., 1953); University of Nebraska (Ph.D., 1956).

Francis W. Lauck, M.S., Visiting Associate Professor of Mechanical Engineering University of Wisconsin (B.S., 1940; M.S., 1952).

Chen H. Lee, Ph.D., Assistant Professor of Economics University of Nebraska (B.A., 1957; M.A., 1959); Northern Illinois University (Ph.D., 1974).

Richard William Lee, Rel.D., Associate Professor in Christ College Valparaiso University (B.A., 1960); The University of Chicago (B.D., 1964); The School of Theology at Claremont (Rel.D., 1965).


For 1976-1979, rank of Associate Professor.

For 1977-1978 only.

For 1976-1978 only.

For 1978-1979 only.

For 1978-1979 only.

For 1978-1979 only.

For 1978-1979 only.

For 1978-1979, Editor of "The Cresset."

125 Anita Louise Manning, B.S. in H.E., Assistant Professor of Home Economics - Cornell University (B.S. in H.E., 1937).

126 William A. Marion, D.A., Assistant Professor of Mathematics St. Peter's College (B.S., 1965); University of Denver (M.S., 1967); University of Northern Colorado (D.A., 1976).

127 William C. Marks, M.S., Associate Professor of Biology Purdue University; Valparaiso University (M.S., 1950); University of Michigan Biological Station; DePauw University; University of Michigan (B.A., 1951); University of Oklahoma (B.A., 1952); Louisiana State University (M.S., 1957); Indiana University (Ph.D., 1961); University of Miami (M.A., 1961); University of Miami, Miami, Florida; University of Miami (Ph.D., 1963); Indiana University of Pennsylvania (Ph.D., 1970).
1945; 1963).
1955).
1976).
1941); University of Denver (M.B.A., 1947); Ohio State University (Ph.D., 1955).
175David A. Schneidmiller, M.A.L.S., Part-time Instructor in Music Youngstown State University (B.M., 1976; 1963; Valparaiso University (M.A.L.S., 1977). 171David L. Schoenherr, Ph.D., Assistant Professor of Home Economics State University of New York, Buffalo; Cornell University (B.S., 1966); Pennsylvania State University (M.S., 1968); Purdue University (Ph.D., 1976). 1*William Joseph Schoenherr, Ph.D., Associate Professor of Mechanical Engineering Valparaiso University (B.S. in E.E., 1960); Pennsylvania State University (M.S.I.E., 1969); Purdue University (Ph.D., 1971), Professional Engineer (Indiana).
Robert Keith Schoppa, Ph.D., Assistant Professor of History Valparaiso University (B.A., 1966); Taiwan National Normal University; University of Hawaii (M.A., 1969); University of Oregon (B.A., 1966); Miami University (Ph.D., 1974).
James Edward Schueler, M.S., Associate Professor of Civil Engineering Valparaiso University (B.S. in E.E., 1959); Northwestern University (M.S., 1960), Professional Engineer (Indiana).
Richard L. Schuster, Ph.D., Instructor in Sociology University of Wisconsin, Whitewater (B.S., 1972); Arizona State University (M.A., 1974); Ohio State University (Ph.D., 1978).
Theodore Carl Schwan, Ph.D., Professor of Chemistry Valparaiso University (A.B., 1941); University of Notre Dame (M.S., 1942; Ph.D., 1953).
Nancy Marsh Searles, B.A., Part-time Instructor in Art Colby College; Skidmore College (B.A., 1969).
Nancy Carol Sederberg, M.Ed., Part-time Assistant Professor of Sociology Thiel College (A.B., 1954), University of Pittsburgh (M.Ed., 1955).
David Sexton, M.S.W., Part-time Assistant Professor of Social Work George Williams College (B.S., 1962); University of Illinois (M.S.W., 1964). 176Ermac Lucile Shabowich, M.S. in H.E., Assistant Professor of Home Economics Fort Hays Kansas State College (B.S. in H.E., 1952); New Mexico State University (M.S. in H.E., 1966); Purdue University.
Mary Josephine Sheehan, M.A., Associate Professor of Nursing Adelphi University (B.S., 1959); New York University (M.A., 1962); Northwestern University.
William Shewan, Ph.D., Professor of Electrical Engineering Valparaiso University (B.S. in App. Sci., 1952); University of Notre Dame (M.S. in E.E., 1952); Purdue University (Ph.D., 1966).
Donald Leroy Shrir, Ph.D., Professor of Physics Case Institute of Technology, (B.S., 1952); Ohio State University (M.Sc., 1953; Ph.D., 1957); University of Illinois.
165For Fall Semester 1978-1979 only.
166For 1977-1978 only.
167For 1977-1978 only.
168For 1978-1979 only.
169For 1978-1979 only.
170For 1978-1979, rank of Assistant Professor.
172For Fall Semester 1977-1978 only.
173For Fall Semester 1977-1978 only.
174For Fall Semester 1977-1978 only.
175For Fall Semester 1977-1978 only.
176For Fall Semester 1977-1978 only.
177For 1978-1979, rank of Assistant Professor.
178For 1978-1979, Acting Dean of College of Engineering.
180For 1978-1979 only.
181For Fall Semester 1977-1978 only.

Janet Louise Sievers, M.B.A., Professor of Accounting Valparaiso University (A.B., 1939); The University of Chicago (M.B.A., 1952), C.P.A.
Fred Sitton, Ph.D., Professor of Speech and Drama Texas Western College (B.A., 1945; M.A., 1951); University of Texas (M.F.A., 1954); University of North Carolina (L.D.A., 1959); Northwestern University (Ph.D., 1962).
Frank Stiby, Jr., M.B.A., Assistant Professor of Administrative Sciences Indiana University (B.S., 1961; M.B.A., 1963).
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