1966

Graduate Catalog, 1966-1967

Valparaiso University

Follow this and additional works at: http://scholar.valpo.edu/gradcatalogs

Recommended Citation
Valparaiso University, "Graduate Catalog, 1966-1967" (1966). Graduate Catalogs. 10.
http://scholar.valpo.edu/gradcatalogs/10

This Book is brought to you for free and open access by ValpoScholar. It has been accepted for inclusion in Graduate Catalogs by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.
Valparaiso University Bulletin

Master of Arts in Liberal Studies

Announcements for 1966-1967
PROGRAM FOR THE
MASTER OF ARTS
IN
LIBERAL STUDIES
The program of graduate studies, leading to the degree Master of Arts in Liberal Studies, was initiated by Valparaiso University in the summer session of 1963. It was 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 University, in presenting graduate courses, 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 also desires through this program to broaden its educational service to the constituency in its area. There are elements of uniqueness in the program, both in breadth and depth, which make it unusual in American higher education.

NATURE OF THE PROGRAM

The graduate degree offered is the Master of Arts in Liberal Studies. The program leading to this degree 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. The student is also required to present ten hours of work in one subject matter field other than education. The remaining hours required are electives, selected by the student after conference with his adviser. Ten of these may be in professional education.

The program 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 the electives so as to strengthen their subject matter competence and, if they desire, to add to their professional training in education.

It also provides a particularly challenging opportunity for pastors and other professional workers in the church who wish to strengthen their preparation and secure breadth of background in academic areas.
As the program evolved, frequent conferences were held with the Indiana State Department of Public Instruction in an effort to assure its meeting the requirements of classroom teachers, both elementary and secondary, who wish to qualify for the Professional Certificate. It has been formally approved by the Indiana State Department of Public Instruction. It has also been approved and accredited by the North Central Association of Colleges and Secondary Schools.

It is expected that the program will meet the requirements for certification in most other states.

**ADMINISTRATION**

The graduate program is under the general supervision of the President and the Faculty. Policies are determined by the Graduate Council. The Director of Graduate Studies administers the program. He is advised by the Graduate Council and carries out the regulations which it enacts.

The Director assigns an adviser to every student admitted to the graduate program.

Students who are working toward qualifying for teaching certificates will be assigned an adviser in the Department of Education. If necessary, they will be assigned an additional academic adviser.

**ACADEMIC REQUIREMENTS**

*Admission*

Applicants must be graduates of accredited colleges or universities, with a standing of at least 1.5 (C=1.00) in all work attempted. A transcript of undergraduate work and a completed form for admission must be presented to the Graduate Council for evaluation.

To become a candidate for a degree, the student must have completed at least six semester hours in residence, with a standing of at least 1.8 (B=2.00). The candidate must file a letter of intent and a tentative program of study. Admission to candidacy is a separate step from admission to the graduate program, and requires separate approval by the Graduate Council.

A senior in Valparaiso University who has a standing of at least 2.00 in all his work and a standing of at least 2.00 in all the work taken in his major field, and who needs not more than six semester hours of credit to meet the requirements for his 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 a total of 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.
Requirements for the Degree

To be eligible for the master's degree, students must complete at least thirty semester hours, distributed as follows:

1. A core of 14 semester hours consisting of 10 semester hours in one subject-matter field other than education and 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.

3. 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 open only to graduate students (numbered 300 or higher). These must be taken at Valparaiso University.

No thesis will be required, but a term paper will be a regular part of most courses.

Students must maintain a grade point average of 1.8 (B=2.00) in all work undertaken at Valparaiso University for the master's degree. Graduate credit may be received for A, B, and C grades, but not more than six semester hours of C work may be counted toward the degree. All grades received at Valparaiso University are counted in computing a student's grade point average.

If a student receives a grade of Incomplete in any course that grade must be removed before the end of the next succeeding semester or it will automatically become an F.

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 eighth week of the semester or after the fourth week of an eight week summer session.

A maximum of six semester hours of transfer credit from another institution will be accepted for the degree, and no transfer course presented with a grade of less than B will be considered. They must have been earned not more than ten years before the student is admitted to the graduate program. All requests for transfer credit must be evaluated by the Graduate Council.

With the permission of the head of the department concerned and of the Graduate Council, a student may earn up to three of the thirty semester hours required for the degree by means of an independent-study project. No student may apply for permission to undertake an independent-study project until he has satisfactorily completed at least twelve semester hours of his approved Master of Arts program.

A student's first independent-study project will be recorded as course number 390 (cr. 1-3) of the department concerned. His second will be recorded as course number 391 (cr. 1-2), and his third as course number 392 (cr. 1).

No student may register for an independent study project during the final summer session of his program.
No student should expect to start and complete an independent study project in one summer session.

Not more than fifteen semester hours of work for graduate credit may be carried in any one semester, nor more than eight semester hours of credit in any summer session of eight weeks. All work for the master’s degree must be completed within a period of five calendar years from the date of the student’s initial enrollment in the program.

**Application For Graduation**

To receive the degree of Master of Arts in Liberal Studies students must make formal application to the Director of Graduate Studies 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.

**Certificates For Teaching**

To prepare persons for teachers' certificates, Valparaiso University adapts the graduate programs, after reviewing the candidates' prior preparation, to the student's individual needs.

Each candidate for the Indiana Secondary School Certificate, Professional, must earn at least eight semester hours of graduate credit in each subject field for which certification is desired.

The recommended program described in Bulletin 400 of the Division of Teacher Education and Certification, Indiana State Department of Public Instruction, page 43, is the normal pattern. If, however, the candidate presents a heavy concentration of professional courses and weakness in content, the alternate program described on the same page may be followed.

Persons seeking the Indiana General Elementary Certificate, Professional, must devote at least fifty per cent of their work to a combination of courses in education and subject content directly related to elementary school teaching. These courses, nine or ten in education; five or six in related course work*, are to be selected with the advice of the education adviser, and are to be approved by him.

All students working toward teaching certificates, especially Indiana, should consult the Head of the Department of Education in planning their programs.

**HONOR SYSTEM**

The student-initiated Honor System, administered by the Honor Council, is recognized and approved by the University as an integral part of the regulations under which students become members of the University family.

The basis on which the Honor System at Valparaiso University is

*Biology 201 (Natural History), English 301 (Books for Children and Adolescents), English 307 (Structure of Modern English), Geography 210 (Geography of World Affairs), Mathematics 204 (Concepts For Elementary School Mathematics), Mathematics 308 (Structures of Number Systems), Psychology 208 (The Exceptional Child), Sociology 205 (The Child and Society), are some of the courses considered "related."
founded is in every way consistent with the highest principles of Christian ethics and morality and presumes that students are able and willing to accept the duties and responsibilities for maintaining the principles of honorable conduct for the sake of the University community.

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 and is usually requested to sign a pledge to the effect that no unauthorized aid was given or received. In the unfortunate case of a proven breach of honor the Honor Council determines and recommends to the President of the University appropriate disciplinary action.

The Honor Council, an educational, preventive, remedial, and judicial body, is composed of students appointed by the President and chosen from a list of students recommended by the Student Senate.

Manifestly, it is impossible for anyone to become a member of the University community without both explicit and implicit adherence to the Honor System.

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

FACILITIES

Henry F. Moellering Memorial Library

This newly constructed modern library is air-conditioned and provides comfortable and pleasant surroundings for study. It is a two-story structure with three stack levels. Reading space is provided for 500 persons and stacks contain in excess of 200,000 volumes. The main level consists of two large reading rooms, lobby, circulation desk, catalogue file, lounge, and offices. Also located on the main floor are the Sloan Galleries of American Paintings and their extensive collection of works by American artists.

University Bookstore

The University’s modern, self-selection bookstore is operated for the convenience of students in the purchase of books, supplies, and other necessary materials for classwork and daily living. Students should purchase textbooks before the second class meeting.

Living Accommodations

In summer sessions, comfortable living accommodations in modern university dormitories on campus are available for graduate students.

The residence halls, with floors reserved especially for graduate students, are within a short walking distance of all classrooms.

Meals may be obtained at the Valparaiso Union located near the residence halls.

All requests for living accommodations must be made in advance of registration.
Cultural and Recreational Opportunities

The University is less than fifty miles, or an hour's drive, from the city of Chicago with the cultural advantages offered by its great libraries, museums, art galleries, and concert halls.

For recreational activities, the University's new swimming pool and modernized gymnasium, as well as Lake Michigan, Dunes State Park, and golf courses are easily accessible.

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.

Graduation fee ............................................... $10.00
This fee should accompany the application for graduation.

Tuition and dormitory fees are indicated in University bulletins covering summer session, evening offerings, and the regular academic year.

For further information write to

DIRECTOR OF GRADUATE STUDIES
VALPARAISO UNIVERSITY
VALPARAISO, INDIANA
NOTE: Announcements for specific terms or summer sessions will indicate which courses are offered during those periods.

ART
For Undergraduates and Graduates
205. MODERN ART. Cr. 2. A study of the plastic and pictorial expressions of Europe and America from the 18th century to the present with particular emphasis on the 20th century development.

BIOLOGY
For Undergraduates and Graduates
201. NATURAL HISTORY. 1+6, Cr. 3. A course designed primarily to acquaint the elementary teacher with some important biological and other scientific principles and information applicable to the classroom. Emphasis is on scientific methodology, nature study, and the inter-relationship of the sciences. Prerequisite one year of undergraduate biology. This course may not be counted toward a major or minor in Biology.

205. ECOLOGY. 2+5, Cr. 4. A study of organisms in relationship to their physical and biotic environment. There is considerable field work in local terrestrial and aquatic habitats. Prerequisite: Biology 62 or 64. Laboratory fee, $6.00. Field trip fee, $3.00.

210. MICROBIOLOGY. 2+6, Cr. 4. A study of the microscopic and sub-microscopic characteristics, culture and multiplication, physiology, genetics, and relationships of bacteria and viruses. Prerequisites: Chemistry 55 or 71 and 81, Biology 61, or consent of the instructor. Laboratory fee, $6.00.

211. GENERAL PHYSIOLOGY. 3+3, Cr. 4. 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 energy release of nutrients and elimination of waste products), irritability and response, and growth and reproduction. Prerequisites: Chemistry 71 or 81 (which may be taken concurrently), Biology 51 and 52 (or 54). Laboratory fee, $3.00.

217. COMPARATIVE PSYCHOLOGY. (Also offered as Psychology 217.) Cr. 3. The concepts of the science of behavior and the application of the scientific method to the study of animal conduct. This course deals with the development of behavior and intelligence, the receptor control of activity, periodicity in behavior, and higher mental processes in animals. Prerequisites: Biology 51 and 52 (or 54), Psychology 51, and one of the following: Psychology 132, Psychology 135, Psychology 136, Biology 205.

220. CYTOLOGY. 2+3, Cr. 3. An introduction to cell biology from the point of view of molecular biology, with particular reference to composition, structure, function, growth, genetics, and differentiation of cells. Laboratory work in experimental cytology. Prerequisites: Chemistry 71 or 81 (which may be taken concurrently), Biology 61, or consent of the instructor. Laboratory fee, $3.00.

225. DEVELOPMENTAL BIOLOGY. 2+3, Cr. 3. An introduction to the descriptive and analytic study of plant and animal development and growth, with emphasis on higher plants and vertebrate animals. Prerequisite: Biology 61 or consent of the instructor. Laboratory fee, $3.00.

For Graduates
305. EVOLUTION: A CRITICAL STUDY. 3+0, Cr. 3. A study of the theory of organic evolution, including evidences of evolution, course of evolution, and modern ideas on the mechanisms of evolution. Prerequisite: Genetics or consent of the instructor. Field trip fee, $3.00.
310. Advanced Physiology. 3+4, Cr. 4. An intensive study of the conversion of energy and matter in the living cell. Prerequisites: General Physiology and Organic Chemistry or consent of the instructor. Laboratory fee, $6.00.

315. Analysis of Development. 2+3, Cr. 3. The historical background, modern techniques, and descriptive and analytic account of growth and development. Prerequisite: Biology 140 or 225 or consent of the instructor. Laboratory fee, $3.00.

320. Advanced Microbiology. 3+3, Cr. 4. Lecture, laboratory, and discussion sessions designed to develop an understanding of molecular biology through study of the pertinent facts and methodology in microbiology, genetics, immunology, and biochemistry. Prerequisites: Microbiology or Bacteriology, Organic Chemistry, Genetics, or consent of the instructor. Laboratory fee, $6.00.

350. Seminar in Biology. 1+0, Cr. 1. Reports and discussions by staff members and graduate students on current research in biology. Required of all students presenting more than ten semester credits in biology for their master's degree. Prerequisite: consent of the chairman of the department.

CHEMISTRY

For Undergraduates and Graduates

201. Elements of Physical Chemistry. 3+3, Cr. 4. A one semester course in physical chemistry covering principles of thermodynamics and kinetics, together with their applications to various chemical and biological systems. Prerequisites: Chemistry 64 and 71 or equivalent. Laboratory fee, $8.00. Open to graduate students only.

202. Advanced Organic Chemistry. 1+6, 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 82 and 101 or 111, or consent of the instructor. Laboratory fee, $8.00.

205. Biochemistry. 3+3, Cr. 4. The chemistry of proteins, carbohydrates, and fats, and the changes these undergo during processes of digestion and metabolism; brief considerations of enzymes and vitamins. Prerequisites: Chemistry 64 and 71 or equivalent. Laboratory fee, $8.00.

210. Advanced Inorganic Chemistry. 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.

ECONOMICS

For Undergraduates and Graduates

275. Economic History of the United States. Cr. 3. The history of the economic development of the United States from the colonial period to the present. Prerequisite: consent of the instructor.

286. History of Economic Thought. Cr. 3. Economic thought in its historical development from the Mercantilists to the present day. Prerequisite: consent of the instructor.

EDUCATION

For Undergraduates and Graduates

200. Mathematics in the Elementary School. Cr. 2. Psychological and instructional aspects of arithmetic, elementary algebra, and geometry, including new methods of teaching based on recent scientific studies; diagnostic and corrective measures. Prerequisites: Mathematics 43 or 204 or 308, or a basic course in the updated mathematics, and consent of the instructor.

205. Educational Measurement. Cr. 3. A course dealing with the history and theory of measurement, statistical analysis and interpretation of measurement data, and testing in relation to pupil achievement and guidance.
10. **Curriculum Development.** Cr. 3. A study of the composition of today's curriculum from elementary through secondary, the factors which affect its development, the principles governing curriculum organization, and current curricular patterns.

212. **Foundations of Reading Instruction.** 1+2, Cr. 2. A study of the nature of the reading process, the reading curriculum, and principles, methods, and materials used for the development of effective reading.

213. **Science in the Elementary School.** 1+2, Cr. 2. 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. Laboratory work is required. Prerequisites: 12 hours in science and consent of the instructor.

215. **The Junior High School.** Cr. 2. The role of the junior high school will be explored. Particular attention will be given to a critical analysis of current practice in the nature, purpose, organization, administration, and supervision of the junior high school. Prerequisite: Education 116 or the equivalent.

220. **Improvement of Reading Instruction.** Cr. 2. A course designed to review basic and current accepted practices in teaching reading. Problems concerned with the teaching of reading, remedial reading, and guiding the reading of gifted children will be included. Prerequisite: basic course in the teaching of reading.

225. **Seminar in Curriculum Problems.** Cr. 2. Each year this seminar will study current problems in one area of the curriculum of the secondary school. Restricted enrollment.

240. **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: Education 205 or its equivalent.

---

For Graduates

305. **Philosophical Foundations of Education.** Cr. 3. A course in educational thought designed to explore systems of thought with emphasis upon educational philosophic patterns, their influence upon the implications for practice and theory in education.

310. **Advanced Educational Psychology.** Cr. 3. Basic study of psychological concepts and phenomena as related to the teaching-learning situation. Emphasis on the interpretation and analysis of psychological research concerning human behavior and development. Designed particularly for experienced teachers. Prerequisites: 15 hours in education, or consent of the instructor.

315. **Research in Secondary Education.** Cr. 3. A review of basic and recent research on problems in secondary education, with attention to implications of research for classroom and administrative practice and theory. Both problems specific to the teaching of the various secondary-school subjects and problems of a more general nature are considered. Prerequisite: 15 hours in education or consent of the instructor.

320. **Historical Foundation of Education.** Cr. 3. The history of American education in its cultural framework. Special attention will be given the reform movements of the last four decades.

325. **Research in Elementary Education.** Cr. 3. Recognition of the role of research in elementary education. A review of basic research and a study of current research in the various curricular areas and its application to principles of learning, instructional process, instructional materials, and curricular organization. Prerequisite: 15 hours in education or consent of the instructor.

327. **Remedial Reading.** Cr. 2. A course designed to develop the concept of remedial and corrective reading, skills in diagnosis of reading difficulties, and appropriate remedial techniques and procedures.
328. THE SUPERVISION OF STUDENT TEACHING. 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.

330. SEMINAR IN EDUCATIONAL RESEARCH. Cr. 3. Analysis of procedure and methods of research in education. Emphasis on student-initiated investigation into a selected educational field. Prerequisite: consent of the instructor.

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.

ENGLISH

For Undergraduates and Graduates

205. EIGHTEENTH CENTURY LITERATURE. Cr. 3. A study of literature of the Age of Pope and the Age of Johnson other than that of the drama and the novel.

210. SHAKESPEARE. Cr. 3. A careful study of about eight of the most important plays, with more rapid reading of others.

215. MILTON. Cr. 3. Some of the major writings of Milton, both poetry and prose, will be studied in relation to the religious, moral, and political issues of seventeenth-century England.

217. MODERN DRAMA. Cr. 3. A study of approximately a dozen plays typical of the various phases of the development of British and American drama since the beginning of the Romantic Movement.

220. TWENTIETH CENTURY LITERATURE. Cr. 3. Lectures and readings covering some forerunners of the modern schools and the most characteristic works of a number of important contemporary American and British authors. Drama is not included.

For Graduates

301. BOOKS FOR CHILDREN AND ADOLESCENTS. Cr. 3. Reviews, analyses, and evaluations of works in the field of literature for children and adolescents; study of criteria for selecting books for school use; development of research projects dealing with the relationship of literary values to the thinking of children and adolescents (kindergarten through junior high school).

305. ANALYSIS AND CRITICISM. Cr. 2. A course designed to teach the methods of analysis of intellectual works (literary criticism, philosophy, satire, biography, history, argument, and rhetoric) and the methods of criticism of imaginative works (plays, fiction, and poems) which will be required in other graduate-level courses. Works of every major genre will be analyzed and criticized in class according to principles accepted in the various schools of criticism.

307. THE STRUCTURE OF MODERN ENGLISH. Cr. 3. An analysis of the structure of the spoken and written English of today.

310. WORDSWORTH AND COLERIDGE. Cr. 3. A study of the major works of Wordsworth and Coleridge with special emphasis upon their theories and practices and upon the heritage of their critical theory.

311. TENNYSON AND BROWNING. Cr. 3. A study of the more important poems of Tennyson and Browning.

315. SHAKESPEAREAN TRAGEDY. Cr. 3. An intensive study of the five great tragedies of Shakespeare: Hamlet, Othello, King Lear, Macbeth, and Antony and Cleopatra. Prerequisite: a course in Shakespeare.

317. POETRY OF THE RENAISSANCE. Cr. 3. An intensive study of selected works of three outstanding poets of the English Renaissance: Edmund Spenser, John Donne, and Ben Jonson.
320. **Melville, Whitman, and Twain.** Cr. 3. As a projection in breadth and depth beyond the survey courses in American literature, intensive textual study of these authors will not only examine carefully the new directions in especially mid-nineteenth-century America, but also analyze important literary contributions to our cultural development. Prerequisite: a course in American literature or consent of the instructor.

325. **The Western Tradition I.** 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. (Also offered as History 325.)

326. **The Western Tradition II.** 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. (Also offered as History 326.)

### Foreign Languages

*For Undergraduates and Graduates*

205. **Contemporary French Literature.** Cr. 3. A rapid reading course with supplementary classroom lectures in French literature of the late nineteenth and early twentieth centuries including such authors as Renan, Taine, Bourget, Loti, France, Rolland, Proust, Bergson. Prerequisite: French 106 or the equivalent.

205. **Twentieth-Century German Literature.** Cr. 3. Prerequisite: German 102 or the equivalent.

205. **Spanish Drama of the Golden Age.** Cr. 3. A study of the Spanish drama in the Golden Age with rapid reading of representative dramatists. Prerequisite: Spanish 113 or 114 or the equivalent.

### Geography

*For Undergraduates and Graduates*

205. **Historical Geography of the United States.** Cr. 2. A regional treatment of the exploration, colonization, territorial expansion, migration, transportation, settlement, and economic development of our country, integrated in relation to the physical framework of the environment in which and with which American regional patterns of culture have come to be established. The course is primarily designed for students majoring in one or another of the social sciences. Prerequisites: 10 credit hours in geography and geology, or 6 hours in geography and 6 hours in history, government, economics, or sociology, or consent of the instructor.

210. **The Geography of World Affairs.** Cr. 2. A workshop course to develop the technique of interpreting current world events in the geographic framework in which such events occur. From newspapers and periodicals students clip articles for critical review and rewrite them in the form of "chorograms." Prerequisites: 10 credit hours in geography and geology, or 6 hours in geography and 6 hours in history, government, economics, or sociology, or consent of the instructor.

215. **Area Field Study.** 0+4, Cr. 2. A laboratory and field course designed to give insight into the nature and purpose of geographic field work. It includes such topics as mapping techniques, physical and cultural pattern analysis, rural and urban functions, and an intensive study of a selected area. Prerequisite: consent of the instructor.

*For Graduates*

305. **Geographic Thought.** Cr. 3. A conceptual approach to the content and contributions of geography in general education and in world society. Geographic facts and ideas are developed under the following categories: nature and scope of geographic thought; comparative Western and non-Western cultures, differentiated in space and time; the geographic facts and ways of life; procedures
and methods of identifying geographic investigation of human phenomenology; the Christian ethic of earth stewardship; geography as planning aforesight; teacher preparation in the earth sciences, including application of geographic understanding of world problems in specifically assigned projects. Prerequisite: consent of the instructor.

310. **Western Cultural Geography.** Cr. 3. An environmental appraisal of the European-American regional patterns of culture which are essential to the understanding of Western man. Prerequisite: consent of the instructor.

315. **Non-Western Cultural Geography.** Cr. 3. An environmental appraisal of the cultural regional patterns of Asia and Africa. Prerequisite: consent of the instructor.

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. It is based on an intensive review of the literature with special attention given to those books and documents that have played a vital role in shaping American thinking with respect to resource use. Prerequisite: consent of the instructor.

**GOVERNMENT**

*For Undergraduates and Graduates*

205. **American Political Parties.** Cr. 3. An intensive study of the origin, history, composition, policies, functions, and activities of political parties in the United States, including the evolution and operation of the party system. Prerequisite: Government 1 or consent of the instructor.

206. **The Constitution of the United States.** Cr. 3. An examination of great constitutional issues, decided and undecided, in the light of the contemporary interpretation of the Constitution. Prerequisite: Government 1 or consent of the instructor.

207. **Church and State.** Cr. 2. An examination into some of the ramifications of church-state relationships in the United States. Prerequisite: senior standing or consent of the head of the department.

210. **Recent Political Thought.** Cr. 3. A detailed study of political ideas in the West from 1848 to the present day. Prerequisites: Government 53 and 54 or consent of the instructor.

213. **Soviet Communism.** Cr. 2. A detailed study of Marxism as modified and practiced in the U.S.S.R. and in other communist states. Prerequisites: Government 53 and 54 or consent of the instructor.

**For Graduates**

305. **The Legislative Process.** Cr. 2. A detailed study of the legislative machinery set up in the Constitution of the United States for determining and declaring the will of the people as the machinery functions within the political party system. Prerequisite: Government 1 or consent of the instructor.

312. **Problems of American Foreign Policy.** Cr. 3. Specific contemporary problems of American foreign relations are considered in detail from various angles.

**HISTORY**

*For Undergraduates and Graduates*

203. **The United States from 1815-1860.** Cr. 3. History of the United States from 1815-1860. A study of the major political, social, and economic problems during the antebellum period. Prerequisites: History 61 and 62 or the equivalent.

205. **Twentieth Century America I.** Cr. 3. A study of the United States from 1900 to 1932. Prerequisites: History 61 and 62 or the equivalent.

206. **Twentieth Century America II.** Cr. 3. A study of the United States from 1932 to the present. Prerequisites: History 61 and 62 or the equivalent.
210. **The High Middle Ages.** Cr. 3. A study of medieval civilization and culture from the tenth to the thirteenth centuries (936-1268). Prerequisites: History 51 and 52.

215. **Diplomatic History of the United States.** Cr. 3. A survey of the foreign relations of the United States from the American Revolution to the present. Prerequisites: History 61 and 62 or the equivalent.

220. **History of American Thought.** Cr. 3. An introduction to the history of American thought through a study of significant thinkers and movements.

225. **Nineteenth Century Europe.** Cr. 3. A study of the culture and domestic and international politics of Europe from the close of the Napoleonic Wars to the outbreak of war in 1914. Prerequisites: History 51 and 52 or consent of the instructor.

226. **Age of the Reformation.** Cr. 3. A study of the cultural and political history of Europe from the eve of the Reformation to the close of the religious wars and the Peace of Westphalia. Prerequisites: History 51 and 52 or consent of the instructor.

*For Graduates*

305. **The Interpretation of History.** Cr. 3. The role of interpretation in the study of history with emphasis on major trends and types of historical thought in western culture.

310. **Post-War America, 1865-1900.** Cr. 3. An analysis of selected problems in the development of the United States from the end of the Civil War to the turn of the twentieth century. Attention will be centered upon the Negro in the new South, the urban-industrial transformation of the North, agrarian protest and revolt, and the disappearance of the last Western frontier.

316. **Latin America in the Twentieth 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, where contact with the United States has been of greatest importance. Prerequisite: consent of the instructor.

319. **Studies in United States History.** Cr. 3. An intensive study of a significant period or movement in U.S. History. Prerequisite: six semester credits in U.S. history or consent of the instructor.

320. **Studies in Stuart England.** Cr. 3. Through readings, discussions, and reports, this course will concentrate on the religious, political, economic, and social problems which led a country with a long tradition of constitutional development down the thorny road of civil war and regicide, into unknown paths of political experiment, to an uneasy Restoration, and, a generation later, to a glorious Revolution which finally resolved the basic problem of sovereignty. Prerequisite: a course in English history or consent of the instructor.

325. **The Western Tradition I.** 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. (This course is also offered as English 325.)

326. **The Western Tradition II.** 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 texts. (This course is also offered as English 326.)

330. **The Eve of the Reformation.** Cr. 3. A study of the background of the Protestant Reformation. Attention will be focused on the economic, social, political, and intellectual changes which gave rise to the religious, theological, and ecclesiastic reform movements of the sixteenth century.
MASTER OF ARTS IN LIBERAL STUDIES 15

MATHEMATICS

For Undergraduates and Graduates

204. CONCEPTS FOR ELEMENTARY SCHOOL MATHEMATICS. Cr. 2. A study of mathematical operations, relations, and structure as emphasized in modern mathematics programs in the elementary school. Open only to teachers in service who have not had a year of calculus.

205. ELEMENTS OF STATISTICS. Cr. 3. An introduction to descriptive statistics, elementary probability, and to some important classical probability distributions, including their application to statistical inference. Prerequisite: Mathematics 52 or its equivalent. This course is not open to any student who has had a first statistics course in any other department.

207. MATHEMATICAL STATISTICS I. Cr. 3. An introduction to probability spaces, random variables, distribution functions, the law of large numbers and the central limit theorem. The application of this theory to statistical inference, including estimation, hypotheses testing, and simple regression problems. Prerequisite: Mathematics 74 or the equivalent. (Not open to students who have taken Mathematics 205.)

208. MATHEMATICAL STATISTICS II. Cr. 3. A continuation of Mathematics 207. New topics include decision theory, analysis of variance, sequential sampling, and nonparametric methods. Prerequisite: Mathematics 207 or the equivalent.

210. ELEMENTS OF MODERN ALGEBRA I. Cr. 3. This course provides an introduction to modern abstract algebra. Topics from abstract algebra, including groups, rings, and fields. Prerequisites: Mathematics 74 or the equivalent and the consent of the department. (Offered upon sufficient demand.)

211. ELEMENTS OF MODERN ALGEBRA II. Cr. 3. Continuation of 210. Particular attention is given to the theory of matrices, matrix transformations, and the theory of vector spaces. Prerequisite: Mathematics 210. (Offered upon sufficient demand. Not open to students who have taken Mathematics 111.)

220. MATHEMATICAL ANALYSIS. Cr. 3. Set nomenclature and set algebra. Real number system as an extension of other number systems. Sentences and equations. Identities, relations, functions, and graphs. Point sets and sequences. Geometric and arithmetic progressions. Limits. Derivatives and integrals. Prerequisite: a year course in calculus.

For Graduates

305. INTRODUCTION TO DESIGN OF EXPERIMENTS. Cr. 2. A description of the place of experimental design in the field of statistics and of the mathematical basis for regression, analysis of variance and covariance, and various related designs. Prerequisite: a course in mathematical statistics.

308. STRUCTURES OF NUMBER SYSTEMS. Cr. 3. Vocabulary and symbolism of sets. Language and nature of deductive reasoning. Number theory and numeration systems. Number systems and their properties. Modular number systems and groups. Postulational method and a search for structure. This course is intended for teachers in the elementary schools. Not open to students who have had a year of calculus.

310. DEVELOPMENT OF MATHEMATICAL FOUNDATIONS. Cr. 3. A review of the history of the axiomatic method and criteria for the axioms of a system. The nature of structure in mathematics as exemplified in various algebraic and geometric systems. Sets and the foundations of mathematics. An examination of the place of mathematics in the culture of different periods. Prerequisite: a year of calculus.

316. INTRODUCTION TO GENERAL TOPOLOGY. Cr. 3. Theory of sets. Metric spaces. Topological spaces. Connectedness and compactness. Prerequisite: Mathematics 220 or the equivalent.
320. FUNCTIONS OF REAL VARIABLES. Cr. 3. An exposition of the more fundamental and generally useful parts of the theory of functions of real variables. Provides the set and measure-theoretic basis for the extension of elementary concepts of calculus to more advanced topics including the Lebesgue Integral. Prerequisite: Mathematics 220 or the equivalent.

MUSIC
For Undergraduates and Graduates

205. INTRODUCTION TO CHURCH MUSIC AND LITURGY. Cr. 1. A study of the function of the organ, the choir, and the pastor in the church service. Sacred music will be studied in relation to the liturgy. Organists will give special attention to hymn playing, accompanying, modulation, and improvisation; theological and pretheological students will give special attention to the principles of chanting. Prerequisite: consent of the instructor.

For Graduates

305. THE SYMPHONY. Cr. 2. This course will trace the history of the symphony from its beginnings to the modern period. While this course is not designed specifically for the professional major, it should also be of interest to such student. It serves this dual function insofar as it investigates the history of a specific musical form and, through this, is related to more general historical, stylistic, and aesthetic concerns.

PHILOSOPHY
For Undergraduates and Graduates

205. PHILOSOPHICAL PROBLEMS: RELIGION. Cr. 3. An approach through the great philosophies to the problem of religion, and the implications of this problem for several of the arts or sciences.

210. PHILOSOPHY OF THE SOCIAL SCIENCES. Cr. 3. An approach through the great philosophies to the social sciences and the implications of these sciences for several philosophical problems.

For Graduates

305. CONTEMPORARY PHILOSOPHY. Cr. 3. An introduction to major problem areas and schools of thought in contemporary philosophy. The careful reading and discussion of significant philosophical texts is emphasized.

PHYSICS
For Undergraduates and Graduates

207. INTRODUCTION TO QUANTUM MECHANICS. 3+0, Cr. 3. The fundamental concepts of quantum mechanics are examined with applications to atomic, nuclear, and solid state physics. Topics include the Schroedinger equation, perturbation theory, the hydrogen atom, angular momentum and electron spin, identical particles, multielectron atoms, and collision theory. Prerequisites: Physics 73, 173 (or 205), and Mathematics 180 or consent of the instructor. (Mathematics 180 may be taken concurrently.)

208. INTRODUCTION TO QUANTUM MECHANICS. 3+0, Cr. 3. A continuation of Physics 207. Prerequisite: Physics 207.

210. THEORETICAL PHYSICS. 2+0, Cr. 2. The LaGrange formalism, the LaPlace equation, Maxwell's equations, the wave equation, boundary value problems, applications to physics will be studied together with problems in mathematical physics depending upon the current interests of the students. Prerequisites: Physics 173 and 174, Mathematics 78 or 172.

211. THEORETICAL PHYSICS. 2+0, Cr. 2. A continuation of Physics 210. Prerequisite: Physics 210.
PSYCHOLOGY

For Undergraduates and Graduates

203. STATISTICAL METHODS FOR THE BEHAVIORAL SCIENCES. Cr. 3. Techniques of treating data from experiments and surveys, including data distributions, sampling, correlation, regression, and hypothesis testing. Examples are drawn from several behavioral sciences. Prerequisite: junior standing or consent of the instructor. (Not open to students who have taken Psychology 131 or its equivalent).

205. HISTORY OF PSYCHOLOGY. Cr. 3. The history of man's attempt to explain behavior. The contributions of other disciplines to the formation of various schools of psychology are considered. Prerequisite: 6 hours of psychology.

208. THE EXCEPTIONAL CHILD. Cr. 3. A course designed to help the student understand the impact of various physical and mental handicaps on the child's life. Emphasis will be given to the child's personal, social, and intellectual development and to the effect that these have on the learning process. Prerequisites: Psychology 101 and 103 or their equivalent.

210. METHODS OF CLINICAL PSYCHOLOGY. 2+2, Cr. 3. A study of the techniques of diagnosis and therapy employed in the clinical setting. Supervised practice in testing. Prerequisite: Psychology 155 or consent of the instructor.

215. LEARNING AND MOTIVATION. Cr. 3. A study of the principles, techniques, and variables observed in the learning and motivational behavior of various organisms. Prerequisite: 6 hours of psychology or consent of the instructor.

217. COMPARATIVE PSYCHOLOGY. (Also offered as Biology 217.) Cr. 3. The concepts of the science of behavior and the application of the scientific method to the study of animal conduct. This course deals with the development of behavior and intelligence, the receptor control of activity, periodicity in behavior, and higher mental processes in animals. Prerequisites: Introductory Psychology and Zoology and one of the following courses: Psychology 132, 135, 136, Biology 205.

For Graduates

305. HUMAN ABILITIES. Cr. 3. A study of intellectual and other abilities, of theories proposed to account for their factorial structure, and of the capabilities and limitations of the human senses. Prerequisite: 6 hours of psychology or consent of the instructor.

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 in psychology at the graduate level or consent of the instructor.

315. PROBLEMS IN PERSONALITY THEORY. Cr. 3. A treatment of the theoretical systems of personality, current approaches to the assessment of human motives, and the behavioral consequences of specific motives in the individual and society. Prerequisite: Psychology 215 or consent of the instructor.

SOCIOLOGY

For Undergraduates and Graduates

205. THE CHILD AND SOCIETY. Cr. 3. Theories of the social and cultural development of the child; his social and cultural development through family, peer group, school, and community. Comparison of childhood in American and other cultures. The child welfare movement; agencies and services in child care. Prerequisite: Sociology 54 or the equivalent.

208. JUVENILE DELINQUENCY. Cr. 3. This course will include a study of the causes, treatment, and prevention of delinquency. Emphasis will be placed on the sociological and personality factors responsible for juvenile delinquency. The roles of the police, detention, the juvenile court, probation services, correctional
schools, youth services, and other community agencies working toward the prevention of juvenile delinquency will be studied. Prerequisite: Sociology 54 or the equivalent.

210. RACIAL AND CULTURAL MINORITIES. Cr. 3. The social and cultural interactions and reactions when people meet people. The history and development of representative dominant-minority situations with emphasis upon the United States. Programs and methods for the reduction of prejudice and discrimination. Prerequisite: Sociology 54 or the equivalent.

SPEECH AND DRAMA

For Undergraduates and Graduates

204. THE CONTEMPORARY THEATRE AND ITS LITERATURE. Cr. 3. The main currents in dramatic art and literature since Ibsen as seen against the background of social, artistic, and intellectual movements of the past one hundred years and as illustrated in representative plays. Prerequisites: English 51 and 52.

205. THE AMERICAN THEATRE AND ITS LITERATURE. Cr. 3. A history of the American theatre from its beginning to the present. Masterpieces of American dramatic literature are studied in relation to contemporary theatre practices. Prerequisite: consent of the head of the department.

208. PERSUASION. Cr. 3. Development of skill in the composition and delivery of various forms of persuasive speeches. Also the development of techniques used in different types of discussion, such as those used in informal committee meetings and in more formal business conferences. Prerequisite: a course in speech.

THEOLOGY

For Undergraduates and Graduates

205. CLASSICS OF RELIGIOUS LITERATURE. Cr. 3. A study of Christian devotional classics, such as selections from St. Augustine, Confessions; Bernard of Clairvaux, On Consideration; Benedict, Rule; Thomas a’Kempis, Imitation of Christ; Pascal, Thoughts; Kierkegaard, Purity of Heart.

210. THE BIBLICAL MESSAGE AND MODERN MAN. Cr. 3. A consideration of religious questions raised by the modern mind and an examination of the answers offered by the Biblical message.

For Graduates

301. IMAGES OF MAN. Cr. 2. A seminar exploring the various views of man. A selected number of works by significant writers from various disciplines will be studied.

310. RELIGIOUS THOUGHT IN AMERICAN CULTURE. Cr. 3. An investigation of American religious thought with special emphasis on the interaction between religion and American cultural development. Prerequisite: basic course in American history or approval of head of the department.