

laboratory research problem. At the discretion of the departmental Graduate Committee, the graduate student may be permitted to present an acceptable thesis based on an exhaustive literature research or a project approved by the Department.

3. COURSE OFFERINGS:

The program is designed so that part-time students will be able to obtain the Master's degree in five terms of late afternoon, evening, and summer sessions.

The course offerings for 1963-64 are as follows:

First Term — August 1963:

BIO 325	Parasitology
BIO 407	Embryology
BIO 410	Radiation Biology
BIO 515	Bacterial Physiology
BIO 520	Principles of Biology

Second Term — January 1964:

BIO 320	Evolution
BIO 330	Plant Physiology
BIO 501	Seminar
BIO 503	Advanced Genetics
BIO 520	Principles of Biology

Summer Session 1964:

BIO 501	Seminar
BIO 508	Field Biology
BIO 513	Mycology
BIO 520	Principles of Biology

II. THE MASTER'S PROGRAM IN CHEMISTRY

1. STATEMENT OF PURPOSE:

The purpose of the Master's program in Chemistry is to present to the student a rigorous approach to modern theories in Chemistry, and to increase his desire and potential toward fundamental research through a program of literature search and laboratory experimentation.

2. SPECIFIC REQUIREMENTS OF THE DEPARTMENT:

a. Undergraduate prerequisites:

The undergraduate prerequisites shall be the minimum requirements specified by the American Chemical Society. Those students who have graduated from A.C.S. approved schools will have fulfilled these requirements. Others may have to take certain courses concurrently from the undergraduate program to meet A.C.S. requirements.

b. Undergraduate courses open to graduate students:

Credit for certain undergraduate non-Chemistry electives may be allowed at the discretion of the Chairman of the Department.

c. Requirements in terms of credit hours for the Master's Degree in Chemistry:

Twenty-four credit hours of course work and six credit hours of research

are required. A thesis based on the research, which may be an exhaustive literature search, is required. Every thesis must be approved by a Thesis Committee, appointed by the Chairman of the Department.

The following courses are required:

- CHM 503 Advanced Inorganic Chemistry
- CHM 504 Advanced Inorganic Chemistry
- CHM 505 Advanced Organic Chemistry
- CHM 506 Advanced Organic Chemistry
- CHM 507 Advanced Physical Chemistry
- CHM 508 Advanced Physical Chemistry
- CHM 510 Pro-Seminar or PHL 505
- CHM 520-521 Research

Electives:

Three hours of electives which may be taken from the following listing. Other electives may be chosen with the approval of the Chairman of the Chemistry Department.

- CHM 511 Biochemistry
- CHM 514 Advanced Analytical Chemistry
- MTH 421 Advanced Calculus I
- PHY 420 Introduction to the Solid State
- PHY 440 X-Rays

3. COURSE OFFERINGS:

The program is designed so that part-time students will be able to obtain the Master's degree in five terms of late afternoon and evening sessions. The course offerings for 1963-64 are as follows:

First Term — August 1963:

- CHM 503 Advanced Inorganic Chemistry
- CHM 505 Advanced Organic Chemistry
- CHM 520 Research

Second Term — January 1964:

- CHM 504 Advanced Inorganic Chemistry
- CHM 506 Advanced Organic Chemistry
- CHM 521 Research

III. THE MASTER'S PROGRAM IN HISTORY

1. STATEMENT OF PURPOSE:

The Department of History through its graduate program seeks to develop in the student that combination of mature judgment and scholarly competence associated with the ability to make, compare, test, and evaluate historical conclusions and interpretations.

As a secondary purpose, the program is designed to prepare the student for a successful career in teaching, government services, or specific fields of private endeavor.

2. SPECIFIC REQUIREMENTS OF THE DEPARTMENT:

a. Undergraduate prerequisites:

Applicants for the graduate program in History must have completed a

total of twenty-four semester credit hours of History, and must have achieved a grade-point average of at least 3.00 in all History courses.

b. Number and kind of courses allowed for advanced undergraduate and graduate students:

A maximum of six graduate credit hours may be taken from the upper level course offerings in History or in an allied field (see "e" below). These are the 300 and 400 courses listed in the University catalog. *Courses for which undergraduate credit has been allowed may not be repeated for graduate credit.*

c. Courses required of all students in the Master's Program in History:

- HST 500 Historiography
- HST 550 The Philosophy of History or PHL 505
- HST 545 Seminar in Non-American History or
- HST 595 Seminar in American History

d. Credit hour requirement for the Master's degree in History:

A minimum of thirty semester credit hours in History is required for the Master's degree in History. Nine semester credit hours must be taken from the list of required courses; fifteen semester credit hours may be taken from the list of subject matter courses; six semester credit hours will be granted for the thesis.

e. Credit hours in an allied field:

Six semester credit hours may be taken in an allied field upon approval of the Chairman of the Department.

f. Thesis:

A thesis is required of all candidates for the Master's degree in History. A maximum of six semester credit hours will be granted for the successful completion of the thesis (HST 599).

g. Examination:

An oral comprehensive examination must be passed by the candidate in his final term of study at least two weeks prior to graduation. Detailed instructions concerning this examination may be obtained from the Department Chairman. See also instructions on Page 14 of this *Bulletin*.

3. COURSES OF INSTRUCTION:

- HST 500 Historiography
- HST 501 Greek and Roman Civilization
- HST 505 Great African States
- HST 506 Medieval Civilization
- HST 521 Tudor-Stuart England
- HST 522 Victorian England
- HST 528 Soviet Union since 1917
- HST 531 The Civilization of the Far East
- HST 540 Interpretations in World History
- HST 545 Seminar in Non-American History
- HST 550 The Philosophy of History
- HST 552 The American Revolution
- HST 555 The Immigrant in America
- HST 570 The Old South

- HST 580 History of the Labor Movement in the U.S.
- HST 585 Science and Technology in American History
- HST 590 Interpretations in American History
- HST 595 Seminar in American History
- HST 599 Thesis

4. COURSE OFFERINGS:

The program is designed so that students will be able to obtain the Master's degree in five terms of summer, late afternoon and evening sessions.

The course offerings for 1963-64 are as follows:

Summer Session — 1963:

- HST 521 Tudor-Stuart England
- HST 550 Philosophy of History
- HST 599 Thesis

First Term — August 1963:

- HST 500 Historiography
- HST 599 Thesis

Second Term — January 1964:

- HST 522 Victorian England
- HST 599 Thesis

Summer Session — 1964:

- HST 545 Seminar in Non-American History
- HST 590 Interpretations in American History
- HST 599 Thesis

NOTE: Additional courses on the 300 and 400 level will be offered in the Summer session and in the Evening School each semester which may be taken for Graduate credit subject to the restrictions previously mentioned.

IV. THE MASTER'S PROGRAM IN MATHEMATICS

1. STATEMENT OF PURPOSE:

The Department proposes to offer graduate studies in Mathematics in order to give an opportunity for properly prepared persons to acquire skills in those branches of Mathematics normally studied after the Baccalaureate degree. The curriculum is intended to serve as a firm basis for doctoral studies and research.

2. SPECIFIC REQUIREMENTS OF THE DEPARTMENT:

a. Undergraduate prerequisites:

- | | |
|-------------|---------|
| MTH 301 | 3 hours |
| MTH 361 | 3 hours |
| MTH 421-422 | 6 hours |

NOTE: (1) Other courses in Advanced Analysis may replace MTH 422 in this requirement.

(2) All 400 courses in the Department may be allowed for graduate students in Mathematics, except MTH 421.

b. Graduate requirements:*(1) Obligatory courses as follows:*

MTH 521-522	Real Variables	6 hours
MTH 525	Complex Variables	3 hours
MTH 561 or	Abstract Algebra	3 hours
565	Linear Algebra	3 hours
MTH 471 or	Topology	3 hours
571	Linear Topological Spaces	3 hours
MTH 599	Philosophical Foundations of Mathematics	3 hours

*(2) Requirements for Degree:**Thirty hours, as follows:*

18 hours of required courses listed above as obligatory.

6 hours maximum of advanced undergraduate courses chosen from 400 courses.

6 hours maximum of approved courses outside of Department.

(3) A thesis with a maximum of six credit hours shall be permitted only in exceptional cases.

(4) No foreign language as such shall be required, but the students may expect to be assigned reading from Journals and Reference Works in French or German.

3. COURSES OF INSTRUCTION:

MTH 411-412	Probability and Statistics
MTH 417	Numerical Analysis
MTH 421-422	Advanced Calculus
	(Mth 421 not offered for graduate credit to students in Mathematics.)
MTH 432	Fourier Series
MTH 461	Complex Variables
MTH 465	Modern Operational Methods
MTH 471	Topology
MTH 521-522	Real Variables
MTH 525-526	Complex Variables
MTH 531-532	Advanced Differential Equations
MTH 535-536	Partial Differential Equations
MTH 541-542	Operational Methods
MTH 545	Special Functions
MTH 551-552	Methods of Mathematical Physics
MTH 555-556	Advanced Numerical Analysis
MTH 561	Abstract Algebra
MTH 565-566	Linear Algebra and Matrices
MTH 571-572	Linear Topological Spaces
MTH 575	Differential Geometry
MTH 599	Philosophical Foundations of Mathematics

4. COURSE OFFERINGS:

The program is designed so that part-time students will be able to obtain the Master's degree in five semesters of late afternoon and evening sessions.

The course offerings for 1963-64 are as follows:

First Term — August 1963:

MTH 432	Fourier Series and Boundary Value Problems
MTH 461	Introduction to the Theory of Functions of a Complex Variable
MTH 521	Real Variables I
MTH 531	Advanced Differential Equations I
MTH 565	Linear Algebra and Matrices I

Second Term — January 1964:

MTH 471	Topology
MTH 522	Real Variables II
MTH 532	Advanced Differential Equations II
MTH 566	Linear Algebra and Matrices II

V. THE MASTER'S PROGRAM IN PHILOSOPHY

1. STATEMENT OF PURPOSE:

The purpose of the graduate program in Philosophy is to provide an atmosphere for independent study and research, in which the student can gain a more comprehensive knowledge and deepen his understanding of Thomistic philosophy and of other major philosophical positions, develop his powers of critical analysis and his ability to apply philosophical principles to the solution of present-day problems.

Students working toward the Master of Arts degree in Philosophy will be subject to the general requirements of the Graduate School of Arts and Sciences program and to the specific requirements given below.

2. SPECIFIC REQUIREMENTS OF THE DEPARTMENT:

a. Undergraduate Prerequisites:

For a Master's degree in Philosophy, the student must have had the following undergraduate courses: Logic, Cosmology, Philosophical Psychology, Epistemology, General Metaphysics, Natural Theology, Ethics, History of Greek, and Medieval Philosophy.

b. Advanced Undergraduate Courses Open to Graduate Students:

Only two courses are permitted. Offerings will be restricted to a choice from the following:

PHL 408	History of Modern Philosophy
PHL 410	History of Political Philosophy
PHL 430	Philosophy of Plato
PHL 432	Philosophy of Aristotle
PHL 434	St. Thomas Aquinas

c. Obligatory Core Courses:

Six credit hours of core courses will be required of all regular students for the M.A. in Philosophy. The courses which constitute the core are listed under "Courses of Instruction" as PHL 515 and PHL 525.

d. Requirements in Terms of Credit Hours for an M.A. in Philosophy:

The student must take a minimum of thirty hours in graduate work, six of which are given for a thesis. At the discretion of the Chairman, six

of these hours may be taken in an allied field, as listed in Courses of Instruction, (3), (c), in this Outline.

e. Thesis Requirement:

A thesis will be required of all students in this program. An outline of his thesis should be submitted by the student to the Chairman three months prior to the expected graduation.

f. Language Requirement:

All students will be required to pass an examination on their reading knowledge of a foreign language. A reading knowledge of philosophical Latin, of French or of German will satisfy this requirement.

3. COURSES OF INSTRUCTION:

A distinctive feature of the Graduate Program in Philosophy is the special emphasis on Modern Philosophy.

a. Core Courses:

- PHL 515 Methods of Research in Philosophy Seminar
- PHL 525 Thomistic Texts and Commentaries
- PHL 540 Aristotle's De Anima and St. Thomas' Commentary

b. Areas of Concentration:

- PHL 545 Modern French Philosophy
- PHL 555 Modern German Philosophy
- PHL 560 Modern British Philosophy
- PHL 565 The History and Literature of American Philosophy
- PHL 570 Existentialist Philosophy

c. Allied Fields:

- THL 500 Philosophy of Religion
- EDU 502 Comparative Philosophies of Education
- PHL 504 Philosophy of Art
- PHL 505 Inter-Disciplinary Seminar
- HST 550 Philosophy of History

4. PROGRAM FOR THE M.A. IN PHILOSOPHY:

The program is so designed that part-time students will be able to obtain the Master's degree in five terms of late afternoon, evening, and summer sessions.

5. COURSE OFFERINGS:

First Term—August 1963:

- PHL 525 Thomistic Texts and Commentaries
- PHL 560 Modern British Philosophy

Second Term — January 1964:

- PHL 504 Philosophy of Art
- PHL 515 Methods of Research in Philosophy Seminar

Summer 1964:

- PHL 555 Modern German Philosophy
- PHL 565 The History and Literature of American Philosophy

VI. THE MASTER'S PROGRAM IN THEOLOGY

1. STATEMENT OF PURPOSE:

The graduate program of Theology, leading to the degree of Master of Arts in that subject, is designed to satisfy the desire of religious and laity for a scientific training in sacred truth. It is of special value to teachers of Christian doctrine, for it provides them with a thorough grasp of the deep realities of Catholic theology, which is essential for effective teaching.

With the truth of the Incarnation as its core, the program follows a systematic curriculum of Catholic theological study. Courses in related fields are likewise offered. Because of the Marianist tradition at the University of Dayton, and the unique facilities afforded by the Marian Library, special programs will be offered in Mariology and the social apostolate. Thus the student will be given the opportunity for a deeper understanding of Catholic theology and an orientation toward his role in the Marian apostolate of the Church.

2. SPECIFIC REQUIREMENTS OF THE DEPARTMENT:

a. Undergraduate prerequisites:

Ordinarily, thirty hours of undergraduate theology and philosophy are required.

b. Use of advanced undergraduate courses in the graduate program:

Not more than six graduate semester credit hours of the student's total graduate program may be selected from designated upper-division courses. All four hundred courses except 406, 407, and 408 are "designated upper-division courses."

c. Obligatory core courses:

Among the graduate courses, 500 and 501 are courses in "allied fields" and must be taken by all candidates for the Master's Degree in Theology.

d. Types of programs and specific requirements of each:

The department offers two programs leading to a Master of Arts in Theology:

- (1) *An Academic Program:* Twenty-four hours of content courses plus six hours for a thesis. The twenty-four hours must include six hours of core courses, twelve hours from a chosen field of concentration, and six hours from the other area of concentration. All who elect this program must have a reading knowledge of a foreign language (Latin, French, German, Italian, or Spanish) in order to pursue profitably the work of a thesis.
- (2) *A Professional Program:* Thirty hours of content courses with a monograph on a problem defined in a seminar, preferably toward the end of the student's graduate studies. The thirty hours ordinarily include six hours of core courses, fifteen hours from a chosen major field of concentration, and nine hours from the other area of concentration.

3. PROGRAM FOR THE M.A. IN THEOLOGY:

The programs leading to a Master's degree in Theology will be offered only in the Summer Sessions. They can be completed in five Summer Sessions, and must be completed within seven calendar years.

4. COURSES OF INSTRUCTION:**a. Core courses:** (six hours) Common to all programs.

THL 500 Philosophy of Religion (*Prerequisite:* PHL 207)

THL 501 History of Religion

b. Areas of concentration: (Nine to fifteen hours)**(1) The Advent of the Incarnation: Mariology**

THL 505 Theology of Incarnation

THL 520 Role of the Mother of God in the Incarnation

(*Prerequisite:* THL 342)

THL 521 Privileges of the Mother of God

(*Prerequisite:* THL 444)

THL 522 History of Mariology

THL 590 Seminar with Monograph

THL 599 Thesis

(2) The Incarnation in History: The Church and the Apostolate

THL 540 The Church of Christ

THL 541 Church and State

THL 542 The Catholic Church in America

THL 543 Missiology: The Missionary Movement in the Church

THL 544 Theological Perspectives of the Apostolate

THL 545 Canon Law for the Laity

THL 590 Seminar with Monograph

THL 599 Thesis

5. COURSE OFFERINGS:**Summer 1963:**

THL 500 Philosophy of Religion

THL 501 History of Religion

THL 522 History of Mariology

Summer 1964:

THL 520 Role of the Mother of God in the Incarnation

THL 540 The Church of Christ

THL 541 Church and State