A CATALOGUE

OF THE

COLLEGE OF ARTS AND SCIENCES

1935-1936

UNDERGRADUATE SCHOOL

OF

Georgetown University

❧

One Hundred and Forty-Seventh Year

❧

WASHINGTON, D.C.

November, 1935

The following partial table appears in the left margin:

l from up	Maximum allowed from Group	
B.S.	A.B.	B.S.
3	4	4
	4	4
	3	3
*2	4	4
1	2	2
1	1	1
	½	½
	½	½
1	3	3
1	3	4
	2	2
	1	1

ame language.

3

ding from other
catalogue of the
certificate show-
college record in

e entire year in

ourses in Latin,
rescribed in the
l be accepted at

es to a standing

higher than that represented by the completion of the junior year.

REQUIREMENTS FOR THE A.B., AND B.S. DEGREES

1. In order to receive the College degree, a student is required to complete successfully an amount of work equivalent to at least 128 credits, as well as all required courses. *A credit represents one hour per week for one semester except when one class period is conducted in the style of a conference or seminar, in which case fewer credits are allowed. In laboratory work two hours are estimated as the equivalent of one lecture period.*

2. At the time appointed by the Dean, before the end of the sophomore year,* each student is obliged to hold a conference with his student adviser to determine his major and his other electives for the ensuing year. In this decision the main factor is not the student's desires, but his prospective vocation in life. It will be required of him that he at this time settle upon some course, at least provisionally, and his choice of electives will be drawn up by the faculty with this in view, so that what is elective with the student is not so much his studies as his vocation.

In all cases it is plainly understood that whatever a student's major may be, he is always obliged to follow the prescribed courses of Philosophy and Physics in junior and senior. At the end of both Junior and Senior years a candidate for a degree will be required to pass a comprehensive oral examination in Philosophy.

The main purpose of the major is to give unity to the elective studies and hence the student is urged to elect as his major some other study rather than those already prescribed.

3. A major study comprises: (1) not less than 18 semester hours of instruction either in the same subject or in subjects so closely related as to form a well united field of study; (2) assigned reading or investigation in the designated subject; (3) during the senior year candidates will be obliged to write a thesis of 3,500 words on some portion of their major approved by the head of the department.

4. After the prescribed course for junior and senior has been provided for and the major has been selected, the remaining number of hours may be made up from other subjects at the discretion of the Faculty Advisers.

* In the B.S. Course, however, the group election must be made in the Freshman year. The course is divided into four major groups namely, four year Pre-Medical Group, Biology Group, Chemistry Group, Physics and Mathematics Group.

Courses Required for Degrees

The Degrees Conferred in the Undergraduate School are Bachelor of Arts (A.B.) and Bachelor of Science (B.S.)

THE A.B. COURSE
FRESHMAN CLASS

	Credits
English, 1, 2	6
Religion, 1, 2	2
Greek or Mathematics[1]	8
Latin 1, 2	10
Modern Language	6
	32

SOPHOMORE CLASS

	Credits
Chemistry, 1, 2	8
English, 3, 4	6
Religion, 3, 4	2
Greek or Mathematics[1]	8
Latin, 3, 4	8
Modern Language[2] or History, 3, 4	6
	38

JUNIOR CLASS

	Credits
Philosophy, 101, 102	8
Philosophy, 103, 104	8
Physics, 1, 2	8
Religion, 101, 102	2
Elective Group	6
	32

SENIOR CLASS

	Credits
Philosophy, 105, 106	9
Ethics, 107, 108	9
Religion, 103, 104	2
Elective Group	12
	32

THE B.S. COURSE
(Pure Science)
FRESHMAN CLASS

	Credits
Chemistry, 3, 4	10
English, 1, 2	6
Religion, 1, 2	2
Modern Language	6
Mathematics, 3, 4	6
Physics, 3, 4	6
	36

SOPHOMORE CLASS

	Credits
Chemistry, 7	4
Chemistry, 8	4
English, 3, 4	6
Religion, 3, 4	2
Modern Language[3] or History, 3, 4	6
Biology,[3] 1, 2	8
Physics, 5, 6	8
	38

JUNIOR CLASS

	Credits
Philosophy, 101, 102	8
Philosophy, 103, 104	8
Religion, 101, 102	2
Group Requirement	8
Elective	6
	32

SENIOR CLASS

	Credits
Philosophy, 105, 106	9
Ethics, 107, 108	9
Religion, 103, 104	2
Elective Group	12
	32

[1] Military Science may be substituted for part of the Mathematics requirement.
[2] Those who take an Elementary Foreign Language in Freshman year are required to continue Modern Language during Sophomore and take History during Junior year.
[3] In the Chemistry Group Mathematics is Elective with Biology: In the Physics Group Mathematics is substituted for Biology.

THE B.S. COURSE
(Social Science)
FRESHMAN CLASS

	Credits
English, 1, 2	6
Religion, 1, 2	2
Modern Language	6
Government, 1, 2	6
Economics, 1, 2	6
Military Science, 1, 2	4
or	
English, 5, 6	6
	30 (32)

SOPHOMORE CLASS

	Credits
English, 3, 4	6
Religion, 3, 4	2
Economics, 3, 4	6
Modern Language or History, 3, 4	6
*Economics, 21, 22	6
or	
Philosophy, 1, 2	8
Government, 3, 4	6
Military Science, 3, 4	(4)
	32 (38)

JUNIOR CLASS

	Credits
Philosophy, 101, 102	8
Philosophy, 103, 104	8
Physics, 1, 2	8
Religion, 101, 102	2
Elective Group	6
	32

SENIOR CLASS

	Credits
Philosophy, 105, 106	9
Ethics, 107, 108	9
Religion, 103, 104	2
Elective Group	12
	32

MAJOR ELECTIVE GROUPS

GROUP I: BIOLOGY
Comparative Anatomy
Embryology
Histology
Physiology

GROUP II: CHEMISTRY
Inorganic Analysis
Inorganic Preparations
Organic Chemistry
Organic Analysis
Organic Syntheses
Physical Chemistry
History of Chemistry

GROUP III: ECONOMICS
Principles of Economics
History of Economic Thought
Public Finance
Business Administration
Modern Economic Problems
Sociological Economics
Principles of Sociology

GROUP IV: ENGLISH
History of English Drama
The Novel
Classical Literature
English Prose
History of English Literature

GROUP V: FRENCH
Survey of French Literature
French Literature in the XIX Century
The Contemporary Catholic Movement

GROUP VI: GERMAN
History of German Literature
Catholic Spirit in German Literature
Scientific German

GROUP VII: SPANISH
Advanced Studies in Literature and Composition

GROUP VIII: GREEK
The Orators

* Those who intend to enter Law School at the end of Sophomore year will substitute Philosophy 1, 2, for Sociology.
Note: Students in the A.B. course may, with the approval of the Dean, elect scientific subjects. The group requirement must be filled by eighteen hours in the sciences elected.

The Dramatists
Advanced Studies in Greek
  Composition

GROUP IX: LATIN
Pre-Augustan Literature
Post-Augustan Literature
Medieval Latin

GROUP X: HISTORY AND GOVERNMENT
Modern European History
American History
Contemporary History
The Philosophy of History
Theory of Political Science
Comparative Governments
American Government
Constitutional History of the U. S.
Constitutional History of England

GROUP XI: MATHEMATICS
Introduction to Higher Algebra
Introduction to Higher Geometry
Fundamental Concepts of Mathematics
Fundamental Concepts of Dynamics
Vector Analysis
Differential Equations

GROUP XII: PHILOSOPHY
History of Philosophy
Comparative Philosophies
Empirical Psychology

GROUP XIII: PHYSICS
Physical Optics
Dynamics
Thermodynamics
Alternating Currents

GROUP XIV: MILITARY SCIENCE
Advanced Course

C

DEPA

Professors MURPHY *and*
MCNAMEE, SCHOBERG *a*

1. *Mental Philosophy*

Compendious Course in I
dents.

   4 credits

2. *Moral Philosophy*

Compendious Course in P
   4 credits

101, 102. *Logic, Epist*

The term—The propositi
Scepticism—Critical Study
   8 credits

103, 104. *Ontology,*

Being—Essence—Distinctio
the light of Scholastic prin
ture—Miracles—Constitutio
   8 credits

105. *Psychology*

Fundamental: Essential diff
grades of life. Nature of th
animals. Causal influence of
species, as contrasted with th
Lamarckism, Darwinism, P.
Theories.
Advanced: External and int
petitive faculty and the em
of ideas. The human soul—
of Anthropological Evolutio
   5 credits

106. *Theodicy*

Existence of God—His Esse
   4 credits

shifting, capitalization, transformation and evasion of taxes; of tax burden, the public budget.

3 credits *Professor* SOLTERER

104. *Economic Problems*

A study of current economic problems; a course in applied economics.

3 credits *Professor* SOLTERER

111, 112. *Business Administration*

The fundamental principles of business organization and management. Financial reports—Accounting terminology. Taxation with relation to business enterprise.

3 credits each semester *Professor* O'CONNOR

SOCIOLOGY

21. *Principles of Sociology*

The scope and importance of sociology, its methods, principles and relation to other social sciences. The geographical, biological, psychic and cultural factors in the development of social evolution. The origin of specific institutions such as the state and its authority; the ownership and use of property; the family—marriage and divorce; immigration and naturalization and problems of social control and social progress in the light of Christian principles.

3 credits *Dr.* KRESS

22. *Social Pathology*

Private and Public Charity. The more important social problems; tracing their causes and suggested remedies. Poverty and institutionalism; the human factor in industry; relationship of employer and employee; crime, its causes and relief; penal treatment; feeble mindedness and insanity. The Church and moral problems pertinent to domestic and civil society. Social agencies.

3 credits *Dr.* KRESS

121, 122. *Social Economics*

The economic problems that intimately affect social conditions with special reference to labor and labor legislation. Research by students on individual problems. Reports and discussions.

3 credits each semester *Professor* MURPHY

123, 124. *History of Social Thought*

3 credits each semester *Offered if a sufficient number apply*

DEPARTMENT OF MATHEMATICS

Professors, HARBIN, MCNALLY *and* SOHON (CHAIRMAN); *Assistant Professor* FLAHERTY.

For a Major Sequence in Mathematics, courses 31-32; 33-34, 133 and

136 must be taken, together with 12 semester hours chosen from the courses 51 to 182 including at least one of the three courses: 101-102, 111-112 or 161-162.

1, 2. *Elementary Mathematics*

A course covering functions and graphs, the principle of limits as applied to rates, tangents, areas, differentiation, integration, trigonometric functions, logarithms, rectangular co-ordinates, definite integrals, progressions and series, applications. Required of Freshmen A.B. students electing Military Science.

2 credits each semester *Professor* HARBIN

23, 24. *Mechanical Drawing*

A course covering the use of instruments, practice in lettering, the principles of orthographic and of isometric projection, developments, practice in the making of working drawings to scale from free-hand sketches, drawing on tracing cloth and blue-printing. Required of pre-dental students in the B.S. course and Sophomore A.B. students taking Military Science.

2 credits each semester; 1 lecture, 1 laboratory *Professor* HARBIN

31, 32. *Introduction to Mathematical Analysis*

A survey course covering Advanced Algebra, Trigonometry, Analytic Geometry and the elementary principles of the Calculus. Year course, required of Freshmen B.S. students. Alternative to Greek in Freshmen A.B.

4 credits each semester *Professor* FLAHERTY

33, 34. *Advanced Mathematical Analysis*

A continuation of course 31, 32. A course covering the indefinite integral; the definite integral as the limit of a sum; centroids; moment of inertia; infinite series; Maclaurin's series; Taylor's series; partial differentiation; multiple integrals; and applications. Required of Sophomore students majoring in Mathematics or Physics; optional for those majoring in Chemistry. Alternative to Greek in Sophomore A.B.

4 credits each semester *Professor* FLAHERTY

51, 52. *Introduction to Statistics*

Theory of the analysis of numerical data, graphical methods, frequency distributions and frequency curves; index numbers, method of least squares, simple correlation, practical examples. The second term will be devoted to applications which will be chosen with special reference to the practical needs of the students electing the course. Offered in conjunction with the Department of Economics.

3 credits each semester *Professor* SOLTERER

101, 102. *Introduction to Higher Algebra*

Matrices, linear transformations, invariants, bilinear, quadratic and Hermitian forms, elementary symmetric functions, invariant factors and elementary divisors. Year course offered in 1935-36 and alternate years.

3 credits each semester *Professor* FLAHERTY

111, 112. *Introduction to Higher Geometry*

Elements at infinity, homogeneous coordinates, line coordinates, cross ratio, transformations, complex elements, plane projective geometry, projective theory of conics, circle, space geometry. Year course. Offered in 1936-37 and alternate years.

    3 credits each semester   *Professor* FLAHERTY

133. *Differential Equations*

Introductory notions, equations of the first order and first degree, equations of the first order and higher degree, singular solutions, applications to geometry and mechanics, linear equations with constant coefficients, applications. Offered in 1936-37 and alternate years.

    3 credits   *Professor* SOHON

136. *Introduction to the Theory of the Complex Variable*

Complex numbers, fundamental definitions concerning functions, differentiation and integration, mapping with applications to elementary functions, transformations, infinite series, single and multiple—valued functions. Offered in the Spring Semester of 1935-36 and in alternate years.

    3 credits each semester   *Professor* FLAHERTY

161. *Vector Algebra*

Addition and multiplication of vector quantities with simple applications, to geometry and mechanics, the linear vector function, formal properties of dyadics, rotations and strains, affine transformations, reduction of dyadics to canonical form.

    3 credits   *Professor* SOHON

162. *The Calculus of Vectors*

Differentiation of vectors and dyadics with respect to scalars, geometry of the twisted curve, applications to kinematics, gradient, divergence, and curl, curvature of surfaces, line integrals, theorems of Gauss and Stokes, elementary notions on the potential, curvilinear co-ordinates and introduction to Tensor Analysis.

    3 credits

181. *Fundamental Concepts of Mathematics*

Axioms, the concept of number, continuity, transfinite number, infinitesimal analysis, generalized algebras and geometries, symbolic logic, non-euclidean geometries and the concept of distance, the definition of mathematics. Offered in the Fall semester of 1935-36 and alternate years.

    3 credits   *Professor* SOHON

182. *Fundamental Concepts of Dynamics*

Theories of space and time, the non-euclidean geometry of Newtonian mechanics compared with that of the special theory of relativity, action and reaction, force, inertia and energy, general theory of relativity, the expanding universe. Offered in the Spring semester of 1936-37 and alternate years.

    3 credits   *Professor* SOHON

COLLE

DEP

Professor KOLKMEYER (
Messrs. DONOVAN, DOW
SPRIEGEL.

    For a Major
    are required,

1, 2. *General Physics*

A first course in general colle
and the college obligation of
a degree. Beginning with Ge
Mechanics, Sound and Heat.
will be used in the course, it
ciples above their application
material.

    8 credits: lectures, recit

3, 4. *Geometrical Opti*
       Elements of He

First course in a two-year seq
and to provide a thorough q
Sciences. A brief treatment o
introduction to the physical
so that a concurrent course,
tools. This course is require

    3 credits each semester;

5, 6. *Thermodynamics*

Second year of two-year sequ
B.S. course. Pre-requisite: Ph

    4 credits each semester;

7, 8. *General Physics*

This course covers the same
of the mathematical prepara
33 and 34. It is introduced
of employing the more gene

    8 credits; lectures, recita

201, 202. *Physical Opti*

Pre-requisite: Physics 3, 4 ar
    8 credits; lectures, recita

203, 204. *Modern Phys*

Pre-requisites: Physics 3, 4 a
    8 credits; lectures, recita