

Samford
1945

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Howard College Bulletin

The Annual Catalog

THE HUNDRED AND FOURTH SESSION

1945



BIRMINGHAM, ALABAMA

Quarter system

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FOR ENTRANCE.—
represents the maximum

	Units
.....	1
.....	2
.....	1
.....	1
.....	1
.....	1
.....	1
.....	1/2
.....	4
.....	2
.....	1
.....	2
.....	4
.....	4
.....	4
.....	4
.....	1
.....	1
.....	1/2
.....	1
.....	2
.....	1

mum of four units from
to count toward college
ects are carefully scruti-
of the Southern Associa-

	Units
.....	2
.....	1
.....	1
.....	1/2
.....	1
.....	2
.....	2

transferring to Howard
ted to advanced standing
. The amount of credit
pends upon the standing
obtained, as well as the
redits offered must be in
College. There are three
) Unconditional accept-
(2) deferred acceptance,
ssfully higher courses in

the subjects for which he offers credits; (3) partial acceptance—
that is, the amount of credit granted is less than the amount offered.

The college grants no degree to a student without a minimum
of at least one year in residence, and forty-five quarter hours of
credit work. The year of residence may be taken in one regular
session of nine months, or in three full summer sessions of ten
calendar weeks each. *The last forty-five quarter hours must be
earned in Howard College.*

WITHDRAWALS. — A student desiring to withdraw from
college within any term must procure permission from the Dean of
the college. If a student procures this formal permission he will be
entitled to have his permanent record card in the Registrar's office
show the notation, "Withdrew," which carries no discredit. If, how-
ever, a student drops out of college without permission of the Dean
his permanent record card will show the grade of "F" in all courses
he was carrying and will imply that he was failing in all his academic
work. *No student who withdraws from college for whatever reason
is entitled to a report card or to a transcript of credits until he shall
have settled his accounts in the Treasurer's office.*

A student withdrawing from any class without the written
consent of the instructor in charge and of the Dean of the college
shall receive a grade of "F" for the course and shall be subject to
discipline.

REQUIREMENTS FOR THE DEGREES

THE BACHELOR'S DEGREE. — The college grants three
degrees: The Bachelor of Arts (A.B.), the Bachelor of Science (B.S.)
and the Bachelor of Science in Pharmacy (B.S. in Phar.) It is
expected that most students desiring a general course will take
the A.B. degree. The B.S. degree is taken in such definite fields as
Biology, Chemistry, Pharmacy, Physics, Mathematics, Economics,
Home Economics and Education. For each degree a minimum of
192 quarter hours must be completed with an average grade of "C".

THE NUCLEAR CURRICULUM.—Beginning in September
1945 a group of nuclear courses will progressively replace the min-
imum requirements for graduation prescribed in preceding catalogs.
These courses have been arranged to run with a central continuity
through twelve quarters and to insure that each candidate for
graduation shall have pursued studies in the three groups into
which all subjects may be regarded as falling: physical, social, and
esthetic and spiritual. The nuclear curriculum is designed to give

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the student an acquaintance with the typical facts in each of these areas and with the relation of these facts to each other, to himself, and to the world in which he lives.

The Physical Group includes the physico-biological sciences and mathematics. The Social Group includes English composition, history, modern foreign languages, psychology, economics, and sociology. The Esthetic and Spiritual Group includes the appreciation of literature, the fine arts, and religion.

THE PRESCRIBED COURSES

(Roman numerals after the title indicate the year in which the course is to be taken. Thus, I, Freshman or a beginning course in the group; II, Sophomore; III, Junior; IV, Senior).

	Quarter hours
English I	10
Science I	10
History I	10
Bible I	10
Mathematics I	10
Modern Foreign Language I, II	20
Appreciation of Literature II	10
Social Science II, III	15
Appreciation of the Fine Arts III	10
Bible IV	10
Physical Training I, II, III	9
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Area of Concentration and electives (See page 31)	124
	68
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Total required for graduation	192

The requirements of the nuclear curriculum are not retroactive. Students now in college will not be disturbed in schedules they have already projected or plans already made. Beginning in the Fall Quarter of 1945 incoming freshmen will take courses numbered I in the nuclear curriculum. As they progress into the sophomore year they will add courses numbered II. And so to the Appreciation of the Fine Arts III and Social Science III in the junior year and Bible IV in the senior year. The number of prescribed courses thus diminishes and the number of elective increases as the student advances toward his degree.

Students who have to follow a course of studies prescribed by outside standardizing agencies (e.g. pre-medical students) will be permitted to waive such courses in the nuclear curriculum as make irreconcilable conflicts with degree requirements.

The schedules of students who transfer from other colleges will be arranged to fit as far as possible the requirements of the nuclear curriculum.

DESCRIPTION OF NUCLEAR COURSES

THE PHYSICAL GROUP

Physico-Biological Science I: two quarters, 10 quarter hours. Physical sciences become of the greatest importance when they are related to life processes. Chemistry and physics together supply the foundation for the modern science of biology. The course is intended to provide the student with fundamental information, arouse his interest in his physical environment, and aid him in making adjustments to it. This is a general course in physics, chemistry and biology intended for students who mean to take only one year of science. It will not be counted toward a major in any particular science. Freshmen who wish to major in one of the sciences will take the first course in the field of their choice as a substitute for the Science I of the nuclear curriculum.

Mathematics I: two quarters, 10 quarter hours. The emphasis at the first is on mathematical reasoning and the application of fundamental mathematical processes to commerce and industry. The study later turns to spatial relationships, selected material from plane and solid geometry and trigonometry, graphs, and some of the history of mathematics and its application in modern civilization.

THE SOCIAL GROUP

English I: two quarters, 10 quarter hours. A course in written and oral communication. Freshman English should teach the student how to read for the comprehension of ideas, how to acquire a serviceable vocabulary, how to reason soundly, and how to express himself clearly, vigorously, and pleasingly in writing and in speaking. The materials in the course should be drawn from life and from literature dealing with social, economic, historical, and religious problems of the day. The student should be taught the fundamentals of how to gather material and how to make reports.

Modern Foreign Languages I and II: four quarters, 20 quarter hours. Language is an immediate and effective instrument for the establishment of international understanding, good-will, and cooperation. The study of a foreign language provides the most direct approach to the culture and character of a people and should aid the student to acquire an international view of human relations.

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In keeping with the philosophy of the nuclear curriculum, the teaching of a modern foreign language should not only acquaint the student with a body of foreign literature but should also emphasize the ability to speak the language in order that the student may achieve a reasonable facility in direct communication. We believe that this can best be accomplished in concentrated courses five hours a week for three semesters—three hours a week to be devoted to classroom instruction and two hours a week to be devoted to conversation. Phonographs, radio, foreign periodicals and other visual and aural aids available today will be used. We also favor and recommend the exchange of students from the different countries whose languages we offer.

History I: two quarters, 10 quarter hours. The course suggested for the nuclear curriculum is the History of American Institutions and Culture. The aim of this course is to give the student an understanding and appreciation of our contemporary American institutions and culture through a careful study of their origins and development. It should help prepare the student to understand current conflicts of historical forces and to make an intelligent estimate of the probable consequences of a proposed course of action. It should impress upon the student the importance of the past to his country's present and future, and so make him a more effective citizen.

Social Science II and III: three quarters, fifteen quarter hours. The object of this course is the development of the student in appreciation and understanding of the requirements for his effective adjustment to psychological, social, and economic situations. The course includes (1) the principles of psychology, and their application to situations that arise through contact with social, vocational, political, cultural and religious groups; (2) the principles of economics, their development, and their functioning in our social structure, and (3) a study of social problems, their origin, their significance, and (if they have been solved) their solution.

THE ESTHETIC AND SPIRITUAL GROUP

English Bible I: two quarters, 10 quarter hours. The immediate aim of this course is to acquaint the student with the contents of the Bible. Its further aim is to make the student aware of the continuing spiritual and moral significance of the Bible as a main basis of our culture and of his own thought and conduct.

Appreciation of Literature II: two quarters, 10 quarter hours. This course should include representative complete masterpieces from the world's great literatures. The course is designed to develop in the student a power of discrimination and the habit of evaluating.

The director of this course should consult with the professors of foreign languages for the choice of masterpieces in their respective fields.

Appreciation of the Fine Arts III: two quarters, 10 quarter hours. This course is designed to give the student an acquaintance with the masters in the fields of the fine arts, painting, sculpture, architecture, and music, and an appreciation of the works of these masters.

Bible IV: two quarters, 10 quarter hours. This culminating course in the nuclear curriculum makes an analysis of Christian principles and considers how far these principles are actually applied in contemporary American life and throughout the world.

AREA OF CONCENTRATION

To supplement and balance the spread of liberal courses through the 124 quarter hours of the nuclear curriculum each student must choose not later than the end of his fourth quarter an *area of concentration* in which he will take the remainder of his work. Members of the department in which he is principally interested, sitting as a committee, will advise the student. After thorough conference the committee will direct the student into eight or more progressively advancing courses in a single department or field and will prescribe or permit such other courses as are related to the student's scholastic needs or to his personal tastes.

THE DEGREE WITH HONORS

To encourage a spirit of independent reading and research the faculty in full session will admit on written application from members of the junior class a limited number of candidates for the Degree With Honors in the area of concentration. The candidate's work must be consecutive and systematic in all required courses. At the discretion of the head of the major department, the candidate for honors may be allowed certain liberty in the matter of class attendance. Honors candidates shall take a final general oral examination in their area of concentration; separate examinations in specific courses taken during the senior year may be waived with the approval of the instructors concerned. The honors candidate is required to write a thesis in his major subject and may be allowed to count his thesis for five quarter credits in the senior year.

For an honors candidate the area of concentration may depend on the individual needs of the candidate, extending beyond a single department to embrace the work of other departments in the

COURSES OF INSTRUCTION

EXPLANATION OF THE COURSE NUMBERS

Courses numbered 101 to 199 are elementary and beginning courses in a department and in general are for freshmen.

Courses numbered from 201 to 299 are primarily for sophomores.

Courses numbered 301 to 399 are for juniors and seniors.

Courses numbered 401 and above are open only to seniors and to others who procure the specific permission of the head of the department.

In most departments a course number ending in 1 indicates that the course is given in the first (Fall) quarter; a number ending in 2 indicates that the course is offered in the second (Winter) quarter; a number ending in 3 indicates that the course is offered in the third (Spring) quarter; and a number ending in 4 indicates that the course is offered in the fourth (Summer) quarter. Certain courses in almost every department will, however, be offered in every quarter. Another exception to the general practice is in the numbering of courses in the Nuclear Curriculum. For the purpose of setting these courses out sharply from the others they are numbered in Roman numerals: I for freshman courses, II for sophomore, III for junior, and IV for senior.

THE QUARTER SYSTEM

The academic week is regularly five days, Monday through Friday. Most courses are scheduled for five recitations a week and thus carry a credit of five quarter hours unless otherwise specified. Students will normally take three five-hour courses plus Physical Training for a total of sixteen hours a week. To provide greater flexibility, however, and to make it possible for superior students to carry a heavier load than the average, each department has some offerings of two and of three credits each. Students will not be permitted to undertake more than sixteen hours until they have achieved a B average. No student will be permitted to undertake more than twenty hours.

RSE

interesting fields for
the sciences and the
professional career
practice of modern

COURSE	Quarter hours
English I(a)	5
Chemistry 113	5
Biology 207	5
Physical Education	1
	<hr/>
	16

English I(b)	5
Chemistry 302	6
Biology 306	5
Physical Education	1
	<hr/>
	17

Biology 404	5
Literature II	5
Electives	5
Electives	3
	<hr/>
	18

student spends three
interns in a hospital
Medical Technicians,
1 Medical Technology

MATHEMATICS

PROFESSOR HESS, ASSISTANT PROFESSORS FREEMAN AND FORMAN,
MISS FLEMING, MRS. ECHOLS

M

The forty-five hours required of students who choose mathematics as the area of concentration must include courses 101, 102, 103, 201, and 202. Students must take without credit such of the remedial courses as are needed.

In connection with the description of some of the courses statements are made as to the quarters of the year 1945-46 in which a sufficient demand is expected to justify their being offered, but any course will be offered in any quarter in which there is sufficient demand for it.

Students should receive permission from the head of the department before registering for courses numbered above 300.

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Ia, Ib. These courses form a part of the nuclear curriculum. See page 29.

100a. REMEDIAL ALGEBRA.—Non-credit.

100b. REMEDIAL PLANE GEOMETRY.—Non-credit.

100c. REMEDIAL SOLID GEOMETRY.—Non-credit.

101. COLLEGE ALGEBRA.—Fall, winter, summer. Prerequisite: one year of High School Algebra. Credit, five quarter hours.

102. TRIGONOMETRY.—Fall, winter, spring. Prerequisite: 101 and Plane Geometry. Plane and Elementary Spherical. Credit, five quarter hours.

103. ANALYTIC GEOMETRY.—Fall, winter, spring. Prerequisite: 102 and Solid Geometry. Credit, five quarter hours.

104. MATHEMATICS OF FINANCE.—Spring. Prerequisite: 101. Interest, Annuities, Depreciation, Life Insurance. Credit, five quarter hours.

201. DIFFERENTIAL CALCULUS.—Fall, winter, spring. Prerequisite: 103. Credit, five quarter hours.

202. INTEGRAL CALCULUS.—Winter, spring, summer. Prerequisite: 201. Credit, five quarter hours.

203. INTERMEDIATE CALCULUS.—Spring, summer. Prerequisite: 202. Partial Derivatives, Multiple Integrals, Series, Ordinary Differential Equations. Credit, three quarter hours.

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204. INTERMEDIATE CALCULUS.—Prerequisite: 202. Partial Derivatives, Multiple Integrals, Series, Ordinary Differential Equations, Fourier Series. Credit, five quarter hours.

205. SOLID ANALYTIC GEOMETRY.—Summer. Prerequisite: 103. Credit, five quarter hours.

301. COLLEGE GEOMETRY.—Prerequisite: junior standing. A study of the properties of the circle and triangle, indirect element construction, the nine point circle. Credit, three quarter hours.

303-304. THEORY OF EQUATIONS.—Prerequisite: junior standing. Credit, three hours each quarter.

401-402. INFINITE SERIES.—Sequences, Limits, Convergence Tests, Uniform Convergence, Sower Series, Infinite Products. Credit, two hours each quarter.

403-404. DIFFERENTIAL EQUATIONS. — Credit, three hours each quarter.

406-407. APPLIED MECHANICS.—Prerequisite: 202 and Physics 201. An advanced course in Mechanics. Credit, three hours each quarter.

408. MATHEMATICS SEMINAR.—Credit to be arranged. For Thesis or special reading.

COURSES IN ENGINEERING

102. ENGINEERING DRAWING I. — Use of drawing instruments, lettering, orthographic, oblique, and isometric projections, dimensioning, sectioning, and detail working drawings. Laboratory, six hours per week. Credit, two quarter hours.

103. ENGINEERING DRAWING II.—Prerequisite: Engineering Drawing 102. Advanced treatment of topics in Engineering Drawing I and additional topics of technical sketching, machine drawings, tracing, blue printing, and elements of structural drawing. Laboratory, six hours per week. Credit, two quarter hours.

104. DESCRIPTIVE GEOMETRY.—Prerequisite: Engineering Drawing 102. The fundamentals of descriptive geometry involving theory of projections, intersections, warped surfaces, and practical applications. Laboratory, six hours per week. Credit, two quarter hours.

105. ELEMENTARY SURVEYING.—Use and care of surveying instruments. Measurements of distances, elevations, directions, angles, traverses, land surveying, running levels, plotting profiles, field exercises illustrative of classroom topics. Lecture four hours per week. Laboratory, three hours per week. Credit, five quarter hours.

106. SLIDE RULE.—Solution of Engineering Problems involving the use of the log-log-duplex slide rule. Recitation, two hours per week. Credit, two quarter hours.

202. MATERIALS OF ENGINEERING.—(See Chemistry 321). Lectures and Recitations, three hours per week. Credit, three quarter hours.

203. ENGINEERING DRAWING.—Prerequisite: Course 104. Applications of engineering drawing to the construction of machine elements and the development of practical forms used in construction. Instruction includes engineering sketching, structural drafting, detail and assembly, and the elements of machine design. Laboratory, nine hours. Credit, three quarter hours.

MUSIC

MRS. MARTINSON, MRS. VAIL

A total of twenty-seven quarter hours in music may be counted toward the A.B. degree.

101-102-103. VOICE CULTURE.—Private lessons at hours to be arranged. Individual instruction, one-half hour lesson weekly. Credit, one hour each quarter. MRS. MARTINSON

201-202-203. HIGH SCHOOL MUSIC METHODS AND CHORAL CONDUCTING.—The adolescent voice and its care; testing and classification of voices; selection of materials; choral conducting, use of the baton. Three hours a week, one or two semesters. Credit, three or six quarter hours. MRS. MARTINSON

211-212-213. GLEE CLUB.—Entrance by approval of director. Two rehearsals weekly. Credit, one hour each quarter. MRS. MARTINSON

221-222-223. A CAPPELLA CHOIR.—Entrance by approval of director. Two rehearsals weekly. Credit, one quarter hour. MRS. MARTINSON

111-112-113. PIANO CLASS.—One hour piano class each week gives a credit of one semester hour each term. MRS. VAIL

121-122-123. PIANO, PRIVATE LESSONS.—One half-hour lesson a week earns one semester hour of credit each term. Two half-hour lessons a week earn two semester hours each term.

131-132-133. KEYBOARD HARMONY.—One semester hour may be earned in Harmony which is a required subject in either Piano classes or private lessons. MRS. VAIL

PHARMACY

PROFESSOR RICHARDS, AS
ASSISTANT PROFESSOR

The School of Pharmacy, Pharmacy, Pharmacology, and together with other correlated courses of B.A., B.S., or B.S. in Pharmacy.

These courses outlined are retail, hospital, wholesale and analysts, inspectors in government, journalists and for students in pharmacy or chemistry or who

The School of Pharmacy is Council on Pharmaceutical Education by the American Pharmaceutical Association of Pharmacy and the American Graduates of accredited colleges, several states for admission to reciprocal registration.

PHARMACY

ASSISTANT PROFESSOR

1-2. PHARMACY.—An introductory student with the scope of pharmaceutical nomenclature, pharmaceutical Latin principles and processes of pharmaceutical laboratory hours a week for two quarters.

11-12.—OPERATIVE PHARMACY—the various classes of pharmaceutical of typical examples of each class hours a week for two quarters. Credit

16. PHARMACEUTICAL JURISPRUDENCE—Jatation of the laws that govern drug for one quarter. Credit, three quarters.

21-22. REMEDIAL AGENTS—representative inorganic and organic States Pharmacopoeia, National Formulas and of the common prop