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THE CITY COLLEGE BULLETIN

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COLLEGE OF LIBERAL ARTS AND SCIENCE
FOR THE FALL AND SPRING SESSIONS
1945-1946

ST. NICHOLAS TERRACE AND 139th STREET
NEW YORK 31, N. Y.
student may be excused from repeating such courses. Students who have completed certain courses in high school which are the equivalents of courses offered by the college are excused from repeating such courses; but no college credit is allowed for work completed in an American non-degree-granting institution.

Students dropped from other institutions for poor scholarship or for other reasons are not eligible for admission to The City College.

NON-MATRICULATED STUDENTS

Under certain limitations, persons who are not candidates for a degree may be enrolled in the College as non-matriculated students and admitted to particular courses which they desire.

Such students must give satisfactory evidence to the heads of the departments in which they wish to study that they are fully equipped to pursue the work of the courses chosen. Furthermore, in the day session such students are not permitted to register until after the regularly matriculated students have been accommodated.

GRADUATE WORK

The Faculty of the College has recommended the offering of courses leading to the degree Master of Arts in such fields or subjects as may be designated by the President and approved by the Board of Higher Education. A Graduate Administrative Committee (Dean Godfrey, Professors Crane, Dawson, Mead, Murphy, Rhodes, and Zemansky) has been appointed to exercise general supervision over such work and to encourage its development. In 1944, the Board approved the institution of a graduate program in the Department of Psychology (see p. 59). Graduate work has not been organized in other departments, but college graduates may enroll for particular subjects as non-matriculated students.

UNDERGRADUATE COURSES OF STUDY

The College of Liberal Arts and Science offers courses of study leading respectively to the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Science in Social Science. The fundamental aims of these various courses of study are, however, the same throughout: first, to develop the students of the college as broadly cultivated and intelligent citizens of the world in which they live; and, second, to train them so that each may be able to perform some particular function in the community in a worthy manner. Under the present curriculum the courses leading to the degree are divided into the four following groups:

1. A group of studies or “common core” prescribed for candidates for all degrees, including courses calculated to provide the tools of the scholar of collegiate standing and to impart broad, general knowledge essential and basic to a liberal education. The subjects of this group normally amount to 60 or 61 credits.

2. A group of studies forming a background for the particular degree sought. Students contemplating a degree in Science should have a broad and thorough preparation in all the basic sciences; considerable training in mathematics; and in special training in scientific technique and procedure. Students of the social sciences, in like manner, should have an especially ample background of history, the social sciences, and methods of social investigation. A candidate for the degree of Bachelor of Arts should be well grounded in languages and literatures and those forms of human activities dealing with the arts or the expressive aspects of human endeavor. This second group of subjects amounts to from 19 to 24 credits.

3. A specialization or concentration group of 24 credits calculated to make the student competent in some particular field of endeavor.

4. Free electives to stimulate interest in diverse fields of intellectual endeavor, sufficient in number to enable the students to complete the total of 128 credits required for graduation.

GROUP 1—PRESCRIBED WORK COMMON TO ALL DEGREES

This group is composed of the following subjects:

A. Tools

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>English 1, 2—English Composition</td>
<td>4</td>
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<tr>
<td>Public Speaking 1-4 inclusive—Spoken English</td>
<td>4</td>
</tr>
</tbody>
</table>

The departments of English and Public Speaking may assign students with sufficient proficiency in written and spoken English from taking some courses normally prescribed, but such exemption will not carry college credit; and they may withhold credit and require additional work to be done by students who are below standard in the use of English.

Mathematics 1, 2, or 61, 62

Mathematics 1, 2 are for Science students. Mathematics 61, 62, for students in Arts and Social Science. Students who have had either Trigonometry or Advanced Algebra in high school should substitute Mathematics 2, 3 or 4, as the case may be, for Mathematics 1. Students who have had neither Trigonometry nor Advanced Algebra in high school may substitute both Mathematics 2, 3, or 4, or 61 (3 cr.) for Mathematics 1 (3 cr.). Students who have had both Trigonometry and Advanced Algebra are assigned directly to Mathematics 2 or to Mathematics 7.

Arts or Social Science students may, if they so desire, replace Mathematics 61, 62, if the science requirement in above outlined. Combinations of the requirements also may be permitted under special circumstances.

A foreign language, viz., Latin in the Arts course (14 credits) or a modern language in Science or Social Science, normally 12 credits

If a student in Science or Social Science elects a modern language which he has studied for two years in high school, he will be assigned courses 1 and 2 in the freshman year (4 hours weekly; 12 credits per term) and courses 3 and 4 in the sophomore year (4 hours weekly; 12 credits per term). If the student elects to continue in a modern language which he has studied for three years in high school, he will be assigned courses 1, 2, 3, and 4 (4 hours weekly; 15 credits per term), or if his high school work is distinctly superior, courses 3 and 4 only. For Arts students, see the note under Group 11.

B. General Knowledge, Physical Education and Recreation

(a) Physical Science

Two courses in laboratory science, 6 credits each or (for non-science students) a four-term sequence in Science 12 credits

Arts and Social Science students may choose their two science courses from Physics (1, 2, and 3), Chemistry (1, 2, 3, and 4) or Geology (Course 1 and an approved elective) or, if necessary, an alternative, an integrated four-term sequence in Science, given in collaboration by the four science departments. As explained below under Group 12, Science students are required to take the four-year course in Physics, the first three years in Physics 12 credits.

(b) Social Sciences

(1) Economics 1

(2) Government 1

(3) History 1, 2

These courses are given as distinct courses, but with close cooperation between departments with the view to working out ultimately a survey course in social organization.

(c) Aesthetic Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>English 3, 4—English Literature</td>
<td>4</td>
</tr>
<tr>
<td>Art 1—Appreciation of Art</td>
<td>1</td>
</tr>
<tr>
<td>Music 1—Appreciation of Music</td>
<td>1</td>
</tr>
</tbody>
</table>

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GROUP II—BACKGROUND GROUPS FOR THE RESPECTIVE DEGREES

The additional courses prescribed in the curriculum leading to the degree Bachelor of Arts are as follows:

Second language
In the Arts course two languages are required. The first language must be Latin; the second language chosen may be Greek, German, French, Spanish, or Italian. The normal requirements presuppose three years of Latin and two years of the second language in high school; the 10 college credits required in Latin are covered by courses 1, 2, 3, 4 (4 hours weekly, 3½ credits each term); similarly the credits in the second language are covered by courses 1, 2, 3, 4 (4 hours weekly, 3½ credits each). The student presenting more than the minimum requirement will be required to take a correspondingly smaller number of language courses in college; similarly the student presenting less than the minimum requirement will have his language course correspondingly lengthened. A student, however, who is admitted to the Arts course with fewer than two units of Latin will be required to complete in college only three years of Latin, including both preparatory and college work, five hours a week through two years, and four hours a week through a third year.

Philosophy 1—Introduction to Philosophy

3 credits

The additional courses prescribed in the curriculum leading to the degree Bachelor of Science are as follows:

Mathematics 3, 4, in continuation of the common base

6 credits

Mathematics 3, 4, in continuation of the common base

6 credits

Students may substitute Mathematics 7, 8 (10 credits) for Mathematics 3, 4 (9 credits). This substitution is particularly advisable for students intending to take effective work in either Mathematics or Physics.

Drafting 1—Descriptive Geometry

2 credits

Although discontinued during the war emergency, the requirement for the Science degree, this course may still be required if deemed necessary by the Departmental Adviser as a background course for the student’s elective concentration.

Geology 1—General Geology

3 credits

Philosophy 12—Logic and Scientific Method

3 credits

The additional courses prescribed in the curriculum leading to the degree Bachelor of Science in Social Science are as follows:

Economics 2—American Economic Development

3 credits

Economics 3—Economics in the Development of Modern Man

3 credits

Sociology 5—Introductory Sociology

3 credits

History 3 or 4 or 5

3 credits

Philosophy 1—Introduction to Philosophy

3 credits

History 3 and either 4 or 5

Either History 4 or History 5, but not both, may be counted among the prescribed subjects in the Social Science course.

Government 21

Psychology 1

Philosophy 12

Anthropological Geography (Unattached)

3 credits

Three courses, of three credits each, to be selected from:

Economics 20

History 3 and either 4 or 5

Government 21

Psychology 1

Philosophy 12

Anthropological Geography (Unattached)

3 credits

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ELECTIVE CONCENTRATION

Guidance Program

To assist students in meeting the somewhat complex problems of the curriculum, a guidance program was instituted in 1944 for the College of Liberal Arts and Science. This program is under the direction of Associate Dean John G. Peatman, assisted by a group of General Advisers: Professors Apelbaum and Biddle, Drs. Cortell, Penton, and Riedel. Each department of study also has a designated representative to advise students regarding its elective offerings and special objectives. Conferences are regularly scheduled with students, beginning in the Lower Freshman term, for the purpose of discussing possible objectives, vocational or otherwise, and the appropriate sequence of prescribed courses in the light of such objectives. Reference is made wherever necessary to the Personnel Bureau in connection with changes of course, aptitude tests, and allied matters, and to the special Departmental Advisers who are directly concerned with the elective concentration work of the upper class years.

GROUP III—ELECTIVE CONCENTRATION

Each student is required to select a group of elective courses amounting to 24 credits; these courses are normally to be taken during the junior and senior years. Students are permitted to change his major field, the group selected, or the sequence of the courses included; in case he must do so, the student is referred to the College Catalog for the prescribed subjects in the major field.

For a given cultural or vocational field, as described in the Guide, those elective courses indicated as essential or especially relevant ordinarily will form the nucleus for a concentration program. Concentration programs, however, are not limited to the fields described in the Guide; rather, the information presented there is offered as suggestive for the purpose of aiding the student to plan his upper college work.

The selection and approval of the elective concentration is part of the guidance program, already referred to, under the general direction of the Associate Dean. Each student, during the second half of the sophomore year, submits to the appropriate Adviser or Advisers a brief statement of the aim or purpose of his proposed elective concentration program, and in consultation with the Adviser or Advisers the plan is outlined, the courses to be elected as his concentration sequence, and approved official approval therefor. Official approval of a concentration program means that a student has chosen a group of courses that is adequate in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor. Official approval of a concentration program means that in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor. Official approval of a concentration program means that in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor. Official approval of a concentration program means that in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor. Official approval of a concentration program means that in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor. Official approval of a concentration program means that in the broad field of the student’s major interest and that the sequence is desirable and consistent with the student’s background and aptitudes. The concentration program outlines the plan of courses to be elected as his concentration sequence, and obtains official approval therefor.

Failure of Upper Sophomore students to file an officially approved Elective Concentration Card at the Registrar’s office may result in their failure to register in any elective courses for the beginning of the junior year. Any changes that are made in the concentration program, once it has been filed, are subject to the approval of the General Adviser or Advisers as specified in the Guide.

The Faculty Committee on Elective Concentration has prepared a Guide to Elective Courses, according to Cultural and Vocational Interests. The student should select his elective course from this Guide, and, in case of doubt, consult the General Adviser or Advisers. For a given cultural or vocational field, as described in the Guide, those elective courses indicated as essential or especially relevant ordinarily will form the nucleus for a concentration program. Concentration programs, however, are not limited to the fields described in the Guide; rather, the information presented there is offered as suggestive for the purpose of aiding the student to plan his upper college work.

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Note: If a student takes the following sequence of Education courses (Education 11, 16, 17 or 18, 22, 23, and 41 or 51 or 61), his concentration program may be reduced from 24 to 18 credits. The entire sequence, including the first term of a methods course, must be taken.

The Departmental Advisers are: Professors d’Andrea (Art), Dawson (Biology), Frager (Chemistry), Newton (Classical Languages), Liptzin (Comparative Literature), Messrs. Taffet (Economics), Epstein (Education), Professors Gordon (English), O’Connell (Geology), Dr. Schreiber (German), Professors Halley (Government), Janowsky (History), Purcell (Hygiene), Fagerstrom (Mathematics), Neidlinger (Music), Bronstein (Philosophy), Marcus (Physics), Pelzman (Psychology), Schultz (Public Speaking), Bergeron (Romance Languages), Joseph (Sociology).

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COURSES IN MATHEMATICS

42. Plane Trigonometry.
   3 hrs. wk.; 3 cr.

43. College Algebra.
   3 hrs. wk.; 3 cr.

   3 hrs. wk.; 3 cr.

   Prescribed for students who do not present Intermediate Algebra for admission. 3 hrs.
   wk.; no credit.

61. Fundamentals of Mathematics I.
   3 hrs. wk.; 3 cr.

62. Fundamentals of Mathematics II.
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 61.

77. Analytic Geometry.
   4 hrs. wk.; 4 cr. Prereq.: Same as for Mathematics 7.

78. Differential Calculus.
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 77.

79. Integral Calculus.
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 78.

Of the courses listed above, Law 100 is offered at the Uptown Center as well as downtown; the others are offered at the Downtown Center only. For description of these courses, consult the bulletin of the School of Business and Civic Administration.

ELECTIVE COURSES

Students desiring electives should consult the Chairman of the Department. Continued privilege of electives is dependent upon attaining a minimum final grade of C in each prerequisite course taken, beginning with Mathematics 13.

Students planning to take electives in Mathematics are advised to acquire, as early as in their college course as possible, a reading knowledge of French and of German.

11. Theory of Numbers.
   Professor Gill and Dr. Malin
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 4, 8, or 79.

   Dr. S. L. Robinson
   3 hrs. wk.; 3 cr. Prereq.: Completion of prescribed Mathematics.

13. Introduction to Higher Analysis, I.
   Professors Gill, Hubert, Wirth, Post; Dr. Nathan; Mr. Frary
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 4, 8, or 79.

14. Introduction to Higher Analysis, II.
   Professors Gill, Hubert, Post; Dr. Nathan

15. Ordinary Differential Equations.
   Professors Linehan and Gill
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 4, 8, or 79.

   Professor Hubert
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 4, 8, or 79.

   Professor Linehan

   Professor Wirth
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 14 and 15.

   Professors Philip and Hubert
   2 hrs. wk.; 2 cr. Prereq.: Completion of the prescribed mathematics.

   Professor Linehan, Dr. S. L. Robinson
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 4, 8, or 79.
22. Mathematical Statistics, II.  
   Professor Linehan, Dr. S. L. Robinson  
   Spring

   Students who have completed Mathematics 217 and 218 in the School of Business may not receive credit for Mathematics 21 and 22.

   Fall

32. Theory of Functions of a Complex Variable.  
   Professors Gill, Post  
   Spring

33. Introduction to Modern Algebra.  
   Professor Gill  
   Spring

34. Theory of Functions of Real Variables.  
   Professor Post  
   Fall

41. Solid Geometry.  
   3 hrs. wk.; 3 cr.

44. Spherical Trigonometry with Applications to Navigation.  
   3 hrs. wk.; 3 cr. Prereq.: Mathematics 42 or a high school course in Trigonometry.

MILITARY SCIENCE AND TACTICS


The Reserve Officers’ Training Corps was instituted by Act of Congress for the purpose of providing two years’ basic training to such students as desire it. The work is conducted through the cooperation of the Federal Government and the College.

Students who complete the basic course are given a Military Training Certificate but do not thereby become a part of the Army of the United States.

Students who elect Military Science must complete the basic course of two years’ training to receive credit for any part of it. The course, when entered upon by any student, is prerequisite to his graduation and must be completed in four consecutive semesters. Drops and postponements must be arranged with the Professor of Military Science & Tactics.

The Military Science Department also offers an elective advanced course (21-24) to students who complete the basic course (11-14). Students who are accepted in the elective advanced course receive two academic credits per semester for such time as they are enrolled in this course.

Students who have the necessary musical qualifications may elect to serve in the Military Band of the College. Members of the Band are required to attend concerts, ceremonies, and formations at College functions.

Basic course students may, in addition to taking the basic course, receive instruction in the Military Band, or students who have completed the basic course may continue instruction in the Military Band and receive credit from the Department of Music. For credit and requirements, see note under Music 31, 32, 33 and 34, on page 54.


   Orientation, citizenship and military policy of the United States, military discipline, courtesies and customs of the Service, wearing of the uniform, organization, rifle marksmanship, National Defense Act, equipment, clothing and supply procedure, map reading, safeguarding military information, tent pitching, combat self-aid, field sanitation, mechanical training, technique of rifle fire and its application, interior guard duty, cover and movement, scouts,