

## THE COLLEGE PROGRAM

In addition, there are certain departments and courses of study which do not fall within this framework; they include General Studies and Military Science. The reader should also refer to the general requirements for the degree and to the major fields offered, both listed in this section of the catalog.

\*No major is offered in these subjects.

\*\*For the 3-2 and 4-2 programs in engineering, see the section on Special Curricula.

### ADVISING

At Colorado College each student has close contact with his personal adviser. During New Student Week he is assigned a faculty adviser with whom to confer about his particular needs. The adviser's concern is not only with the academic, but with the student's general adjustment to college life. The adviser also serves as a point of contact between the student and the many special offices of the college,

such as medical and psychological services, the Counseling Center, the Treasurer's Office, the Deans of Students, the Minister of the Chapel, and the Dean of the College.

In the spring of his sophomore year the student chooses a major subject. At that time a change to an adviser in his major department is usually made.

Each student must see his adviser twice each semester. He is encouraged to call on his adviser whenever he has questions about his college program. Although the advisers are ready to render what help they can to students in solving their problems, it is the responsibility of the student to seek this help when it is needed.

### DEGREES OFFERED

As a liberal arts college, Colorado College has granted the Bachelor of Arts degree since 1882. It also awards the degrees of Bachelor of Science, Master of Arts, and Master of Arts in Teaching.

*Teacher and student; personal contact is essential.*



# 1965 Colorado College catalog requirements for degree

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### UNIT OF INSTRUCTION

The unit of instruction is the semester hour, representing attendance in class of one hour per week for a semester. Courses have a credit value varying from one semester hour to six semester hours.

### REQUIREMENTS FOR THE BACHELOR'S DEGREE

In addition to specific requirements determined by each department offering a major, the College has a number of general requirements applicable to all students working toward the bachelor's degree.

1. Each candidate must present a minimum of 128 semester hours of course credits, with a cumulative average not less than 2.0 (C). This average is computed by including only courses taken at Colorado College.

2. Each candidate must present an average of 2.0 in his major field. This average is also computed by including only courses taken at Colorado College, unless they total less than 12 hours, in which case relevant courses taken elsewhere and transferred are to be included. However, prior to May, 1968, if a student's average so computed is below 2.0, it will be recomputed including hours transferred to Colorado College.

3. Each candidate must present the following course requirements (ordinarily completed by the end of the sophomore year; the science requirement must be completed by the end of the junior year):

(a) *Humanities*: English 107-108 (unless specifically excused) plus six hours in the Division of the Humanities selected from the following: history or theory of art, clas-

sics, English, modern languages, history of music or introduction to music, philosophy, or religion.

(b) *Social Sciences*: History 101-102 (unless specifically excused) plus six hours in the Division of the Social Sciences to be selected from courses in the following departments: anthropology, economics, history, political science or sociology.

(c) *Natural Sciences*: Each student must complete four semesters of work in the sciences, selected from the three groups of courses listed below. No more than two semesters of work may be elected from any one group for the purpose of meeting this requirement. Any course listed as a year course must be taken in full if it is to be used to meet the science requirement. Students will normally begin to meet this requirement in the freshman year and are expected to complete it by the end of the junior year.

#### GROUP I

Science 111 (Logic)  
Science 113 (Mathematics)  
Mathematics 105-106

#### GROUP II

Chemistry 103-104  
Physics 101-102  
Physics 111-112  
Science 105 (Chemistry)  
Science 109 (Physics)

#### GROUP III

Botany 151-152  
Geology 101-102  
Psychology 101-102  
Zoology 101-102  
Science 103 (Biology)  
Science 107 (Geology)



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(d) *Physical Education*: All women students are required to take one year of physical education.

4. Each candidate must fulfill the requirements of his major department. Although requirements for the completion of the work in any major are matters for departmental action, with the advice and consultation of the Committee on Instruction, the College fixes the following general requirements:

- (a) A student must present for graduation not less than 24 hours and may present no more than 44 hours in a single department.
- (b) He must present a *minimum* of 48 hours outside the division of his major.
- (c) Credits in ROTC and in General Studies are included in the 48 hours' requirement outside the division of the major.

For specific requirements in major fields, see the section on Description of Courses. Requirements for the major are given in italics directly under the title of each of the various departments. The student is urged to consult during the freshman or sophomore year with the department in which he wishes to major in order to determine an appropriate four-year schedule.

5. During the last semester of study for the bachelor's degree, the candidate must take a departmental comprehensive examination as well as the Graduate Record Advanced Test in the subject matter of his major. The candidate must achieve a passing grade on the total comprehensive, including the Graduate Record Advanced Test. The Graduate Record grade plus the departmental comprehensive grade are

used in establishing honors on graduation. In addition, all graduating seniors take the Area Test of the Graduate Record Battery as an aid in assessing general educational development. To graduate, seniors must perform satisfactorily on the Area Test (pass the Area Test in the area of the student's division, along with a passing average of the other two areas, based on percentiles set by the Committee on Instruction).

6. No candidate for a degree may present more than 32 hours of credit from extension courses. Credits from correspondence courses are not normally acceptable.

7. Each candidate must present the equivalent of his last year's work (normally 32 hours) from courses taken in residence on The Colorado College campus.

8. Certain courses offered in the College are grouped as applied courses. No student may apply more than 8 hours toward his degree requirements in courses in choir, band, typing, shorthand, and practical radio (Radio 334, 335, 336).

9. *Special requirements for the Degree of Bachelor of Science*: This degree may be granted to students who present 40 to 44 hours in a major and a minimum of 72 hours in the division of the major.

### MAJOR FIELDS OF CONCENTRATION

The purpose of the liberal arts college is to provide a basic education which will help its students become culturally well-rounded men and women, assist them in determining a field of interest, and prepare them for later work which they may choose.



*Students in a natural science laboratory; four semesters of science are required.*

At Colorado College the student is given a broad general education plus a considerable degree of concentrated work in one field, known as the major. The major may be one of the following:

- Anthropology
- Art
- Botany
- Business Administration
- Chemistry
- Economics
- English
- \*Fine Arts with Drama Concentration
- French
- Geology
- German
- History
- \*History-Philosophy
- \*Humanities  
(for Elementary Teachers)
- Mathematics
- Medical Technology
- Music
- \*Natural Science
- Philosophy
- Physics
- Political Science
- \*Political Science-Philosophy

- Psychology
- Religion
- Sociology
- Spanish
- Zoology

Special pre-professional programs are offered in dentistry, medicine, and veterinary medicine, engineering, law, and other fields. Further information concerning these programs and those marked with an asterisk will be found under the section on Special Curricula.

Further information on those not marked with an asterisk will be found in the section on Description of Courses.

\*Combined major

### DISTINCTION IN THE MAJOR FIELD

Certain departments in the College grant a special award of distinction to their majors who have done especially outstanding work in their major subject and who also have a superior record in all their College work. Some departments offer special courses of independent work for students who are admitted to this program.



HISTORY, MATHEMATICS

378—ENGLAND SINCE 1783. Political and social history of England and the British Empire and the development of British institutions from 1783 to the present time. 4 hours.—Gilbert.

381—GERMANY AND CENTRAL EUROPE TO 1740. The German people from the collapse of the Carolingian Empire to 1740. Developments in the Hapsburg Empire and Central Europe. 4 hours. Alternate years.—Bernard.

382—GERMANY AND CENTRAL EUROPE SINCE 1740. The development of the German unification movement and the rise of the German Empire as the dominant power in Europe. The growth of German nationalism, the culmination in National Socialism, and its impact on Central Europe. 4 hours. Alternate years.—Gilbert.

387—HISTORY OF RUSSIA, I. The establishment and development of the Kievan and Muscovite states. Russian life, political institutions and foreign affairs from Peter the Great to World War I. 3 hours. Alternate years.—Malyshev.

388—HISTORY OF RUSSIA, II. Pre-revolutionary intellectual life, the growth of revolutionary thought and action. Revolutions of 1905 and 1917 and the establishment of the Soviet regime. Military Communism, the New Economic Policy, the Five-Year Plans, World War II, and post-war years. 3 hours. Alternate years.—Malyshev.

389—STUDIES IN THE HISTORY OF THE SOVIET UNION. Supervised research. Primarily for students with previous work in Russian History. Qualified juniors and seniors only. 3 hours. Alternate years.—Malyshev.

411—SUPERVISED STUDY IN HISTORY ABROAD. Research study at the University of Sheffield in England. Research in primary sources in eighteenth century English history, supplemented by extensive reading among secondary historical materials both in the United States and in England. Lectures at Sheffield by the supervising professor from Colorado College and by foreign specialists. 8 hours. Summers only.—Gilbert.

422—SENIOR READINGS IN EUROPEAN HISTORY. Required for all senior majors concentrating in European History. 4 hours.—Bernard, Gilbert.

451—M. A. T. SEMINAR IN EUROPEAN HISTORY. Required for all candidates for the degree of Master of Arts in Teaching

History, Economics, and Government. 2 hours. Summers only.—Department.

See also GENERAL STUDIES 309 — STUDIES IN 18TH CENTURY IDEAS. This course may be counted in the history major. 3 hours. Alternate years.—Bernard.

Far Eastern History

285—THE FAR EAST TO 1800. Political and social history of China, Japan, and the other East Asian lands from the earliest times. 3 hours. Alternate years.—Tucker.

286—THE FAR EAST SINCE 1800. Modern political and social history of East Asia. The response of the Orient to the effects of the industrial revolution and to Western politico-economic innovations. 3 hours. Alternate years.—Tucker.

383 — CULTURAL HISTORY OF EAST ASIA. Oriental ways of thought and ways of life and their interaction with governmental and economic systems from early times to the present. 3 hours. Alternate years.—Tucker.

NOTE: Other courses offered by the College in the general area of Asian Studies are History 338, EUROPEAN IMPERIALISM; General Studies 211, ASIAN LITERATURE IN TRANSLATION; General Studies 212, STUDIES IN MODERN JAPANESE CULTURE; Philosophy 320, ORIENTAL PHILOSOPHY; and Religion 105, RELIGIONS OF THE WORLD.

Special Readings

409, 410—SPECIAL READINGS IN HISTORY. 2-3 hours each semester.—Department.

Thesis, Master of Arts and Master of Arts in Teaching

501—THESIS. 6 hours.—Department.

MATHEMATICS

Professors Leech, Polk, Simmons; Associate Professors Gateley, Hansman, Paine; Assistant Professors McIntire, Ness, Kendrick; Adjunct Professor Vogel.

Students majoring in mathematics must complete a minimum of 15 hours of 300 or 400 level courses including Mathematics 402.

105, 106—ANALYSIS I. Analytic geometry and calculus. Treatment of the conic sections in rectangular, polar, and parametric equations. Differentiation and integration of algebraic, trigonometric, logarithmic, and exponential functions, with applications. 4 hours each semester.—Department.

105T, 106T — MATHEMATICAL STRUCTURES. A study of a variety of mathematical ideas including topics from number theory, geometry, algebra, and analysis. At least one full semester will be spent on calculus. Prerequisites: one year of high school algebra and one year of high school geometry. 4 hours each semester.—Department.

203, 204—ANALYSIS II. Analytic geometry and calculus. Analytic geometry of three dimensions, infinite series, Taylor's formula, partial differentiation, and multiple integrals, with applications. 4 hours each semester.—Department.

207 — ELEMENTARY STATISTICS. Frequency distributions, descriptive statistics, elementary probability, introduction to the methodology of statistical inference including point and interval estimation and hypothesis testing, regression and correlation. Prerequisite: high school algebra. 3 hours.—Department.

315, 316—ANALYSIS III. Differential equations, vector analysis, partial differential equations, and other topics in advanced calculus. 4 hours each semester.—Department.

317, 318—MATHEMATICAL STATISTICS. Probability, random variables, probability distributions, sampling theory, statistical inference including point and interval estimation and hypothesis testing. Prerequisite: Mathematics 204. 3 hours each semester.—Gateley.

319, 320—AN INTRODUCTION TO DIGITAL COMPUTING. Development of computers, computer hardware, computer mathematics, programming with emphasis on FORTRAN, and numerical techniques in computer problem-solving. 2 hours each semester.—Vogel.

402 — READINGS IN MATHEMATICS. Readings, discussions and reports on selected topics in college mathematics. Prerequisite: Senior standing and concentration in mathematics. 3 hours.—Department.

405, 406—MODERN ALGEBRA. The real number system, determinants and matrices, transformations, integral domains, rings, fields, vector spaces, groups, polynomials and their properties. 3 hours each semester.—Department.

409, 410—ANALYSIS IV. Continuation of Mathematics 315-316. 4 hours each semester.—Department.

MATHEMATICS, MILITARY SCIENCE

415 — THE TEACHING OF MATHEMATICS. The history of mathematics and the aims and methods of teaching mathematics in the secondary schools. Prerequisite: Mathematics 106 and senior standing. 3 hours. Offered on demand.—Department.

See also Science 113—BASIC CONCEPTS OF MATHEMATICS listed under Science.

MILITARY SCIENCE (ROTC)

Professor Chapman; Associate Professor Jones; Assistant Professor Mease.

201 — BASIC MILITARY SCIENCE (First semester, second year). Map and aerial photograph reading; introduction to operations and basic tactics; leadership laboratory (drill). Prerequisites: Military Science 101 and 102. 1 hour.—Department.

202—BASIC MILITARY SCIENCE (Second semester, second year). American military history; leadership laboratory (drill). Prerequisites: Military Science 101, 102, and 201. 1 hour.—Department.

301 — ADVANCED MILITARY SCIENCE (First semester, third year). Organization, functions and missions of the various branches of the Army; exercise of command. In addition, an academic subject chosen from the following four general academic areas will be required:

- I. Effective communication.
- II. Science comprehension.
- III. General psychology.
- IV. Political development and political institutions.

The academic subject will carry a minimum of three semester hours and must be approved by the PMS. It cannot be a requirement for graduation from Colorado College nor a subject required in the student's major field. Prerequisites: Credit for Basic Military Science or successful completion of ROTC Basic Summer Camp. 1 hour.—Department.

302 — ADVANCED MILITARY SCIENCE (Second semester, third year). Leadership, military teaching methods, small unit tactics, communications, exercise of command. Prerequisites: Basic course or ROTC Basic Summer Camp and 301. 2 hours.—Department.

401 — ADVANCED MILITARY SCIENCE (First semester, fourth year). Operations, logistics, administration, military law, exercise of command. Prerequisites: Credit for the Basic Course, or ROTC Basic Summer Camp, 301 and 302. 2 hours.—Department.