

**GENERAL SECONDARY CREDENTIAL PHYSICS MAJOR COMBINED WITH
LIFE SCIENCES-GENERAL SCIENCE MINOR**

Credential Minor in Life Sciences-General Science (for Physics Major only)	Units
Biol 2A-B, 1A-B, or Zool 1 and Bot 1	6-10
Physio 1	4
Chem 1A-B	10
Geol 1, 20, or Math 21	3
Math 3	5
	28-32

Credential Major in Physics

Math 4, 6, 117	11
Physics 4A-B-C	12
Physics 102A-B, 105A-B, 110, 110L, 140	19
Elect from: Physics 107A-B, 120, 126, 126L, or u.d. physics electives	6
	48

Total, Credential Major and Minor Combined 76-80

**CREDENTIAL MINOR IN PHYSICAL SCIENCE-GENERAL SCIENCE (FOR MAJORS
OTHER THAN LIFE SCIENCE, CHEMISTRY, OR PHYSICS)**

Biol 2A-B, 1A-B, or Zool 1 and Bot 1	6-10
Chem 2A-B, 8, or Chem 1A-B	9-10
Physics 2A-B or Physics 4A-B-C	8-12
Geol 1, 20, or Math 21	3
Math 3, or Math B, C, 40	3-9

(Units may be adjusted for work taken in high school.)

29-41

Courses

PHYSICAL SCIENCE

10. Introduction to Physical Science (3) (Former Phy Sc 10A)

Not open to students with credit in college physics. Prerequisite: one year of high school algebra or equivalent. Elementary astronomy, meteorology, and physics; mechanical, magnetic, and optical principles; application to everyday experiences. Lecture, demonstration.

12. Introduction to Physical Science (3) (Former Phy Sc 10B)

Not open to students with credit in college chemistry. Prerequisite: one year of high school algebra or equivalent. Fundamental concepts of chemistry, principles and their applications, contributions of chemical sciences and engineering to everyday living. Lecture, demonstration.

GRADUATE COURSES

(See Course Numbering System—Definitions and Eligibility)

305. Physical Science for Secondary School Teachers (3; max total 6 in any one field)

Prerequisite: secondary credential and two years of teaching experience. Objectives, content, and instructional materials for the physical sciences; fundamental principles and recent developments. Emphasis may be on chemistry, geology, or physics.

350. Physical Science for Elementary School Teachers (3-6; max see below)

Maximum total credit 12 units; not more than 6 units in one field. Prerequisite: elementary school credential. Selection of source materials and aids available for illustration of fundamental concepts and principles in physical science; laboratory work in construction, operation, and use of demonstrations and experiments in the elementary school.