

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

<b>Credential Minor in Life Sciences-General Science (for Physics Major only)</b>	<b>Units</b>
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
	<hr/> 28-32
<b>Credential Major in Physics</b>	
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
	<hr/> 48
<b>Total, Credential Major and Minor Combined</b> .....	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.)	
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*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.