

# SECONDARY SCIENCE - PHYSICAL SCIENCE, CERTIFICATE

This program leads to Colorado Teacher licensure in Secondary Science.

It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

## Goals

To prepare individuals for Colorado Teacher licensure in Secondary Science.

## Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
BIOL 100	PRINCIPLES OF BIOLOGY	3.00
BIOL 100L	PRINCIPLES OF BIOLOGY LAB	1.00
BIOL 121	ENVIRONMENTAL CONSERVATION	3.00
BIOL 121L	ENVIRONMENTAL CONSERVATION LAB	1.00
CHEM 121	GENERAL CHEMISTRY I	4.0
CHEM 121L	GENERAL CHEMISTRY LAB I	1.00
CHEM 122	GENERAL CHEMISTRY II	4.00
CHEM 122L	GENERAL CHEMISTRY LAB II	1.00
CHEM 211	INTRODUCTION TO ORGANIC CHEMISTRY	3.00
CHEM 211L	INTRO TO ORGANIC CHEMISTRY LAB	1
or		
CHEM 301	ORGANIC CHEMISTRY I	3.00
CHEM 301L	ORGANIC CHEMISTRY LAB I	2.00
CHEM 311	BIOCHEMISTRY SURVEY	3.00
CHEM 317	QUANTITATIVE ANALYSIS	3.00
CHEM 317L	QUANTITATIVE ANALYSIS LAB	2.00
CHEM 321	PHYSICAL CHEMISTRY I	3.00
CHEM 378	PRACTICUM IN LABORATORY INSTRUCTION	1.00
GEOL 101	EARTH SCIENCE	3.00
GEOL 101L	EARTH SCIENCE LAB	1.00
MATH 126	CALCULUS AND ANALYTIC GEOMETRY I	5.00
MATH 224	CALCULUS AND ANALYTIC GEOMETRY II	5.00
PHYS 110	ASTRONOMY	3.0
PHYS 140	LIGHT, ENERGY, & THE ATOM	3.0
PHYS 140L	LIGHT, ENERGY AND THE ATOM LAB	1.00
PHYS 221	GENERAL PHYSICS I	4.00
PHYS 221L	GENERAL PHYSICS I LAB	1.00
PHYS 222	GENERAL PHYSICS II	4.00
PHYS 222L	GENERAL PHYSICS II LAB	1.00
PHYS 323	GENERAL PHYSICS III	4.00
PHYS 323L	GENERAL PHYSICS III LAB	1.0
ENG 101	RHETORIC & WRITING I	3.0
ENG 102	RHETORIC & WRITING II	3.0
COMR 103	SPEAKING AND LISTENING	3.00

PSYC 151	HUMAN DEVELOPMENT	3.00
or PSYC 251	CHILDHOOD AND ADOLESCENCE	
ED 202	FOUNDATIONS OF EDUCATION	3.00
ED 520	EDUCATIONAL MEDIA AND TECHNOLOGY	3.00
ED 560	PROFESSIONAL DEVELOPMENT IN CURRICULUM AND INSTRUCTION	4.00
ED 512	TEACHING DIVERSE LEARNERS	3.0
ED 544	TEACHING SECONDARY SCIENCE	3.0
RDG 535	CONTENT AREA LITERACY	3.0
ED 485	CAPSTONE SEMINAR IN EDUCATION	1.00
ED 488	STUDENT TEACHING SECONDARY	12.00