

# SECONDARY SCIENCE - BIOLOGY, POST- BACCALAUREATE 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 181	College Biology I/Organismal Bio (GT-SC2)	3.00
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1.00
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3.00
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1.00
BIOL 201	Botany (GT-SC2)	2.00
BIOL 201L	Botany Laboratory (GT-SC1)	2.00
or		
BIOL 202	Zoology	2
BIOL 202L	Zoology Laboratory	2
BIOL 350	Mendelian and Population Genetics	2.00
BIOL 351	Molecular Biology and Genetics	2.00
BIOL 206	Introduction to Microbiology	3.00
BIOL 206L	Introduction to Microbiology Lab	1.00
or		
BIOL 301	General Microbiology	3
BIOL 301L	General Microbiology Lab	2
One of the following sets of courses:		4.00
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
or		
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
or		
BIOL 414	Vertebrate Physiology	3
BIOL 414L	Vertebrate Physiology Lab	1
BIOL 352	Evolutionary Biology and Ecology	3.00
BIOL 378	Laboratory in Teaching Biology	1.00
Upper Div. Field Elective		3
Upper Div. Elective & Lab		3.00
CHEM 121	General Chemistry I (GT-SC2)	4.0
CHEM 121L	General Chemistry Lab I (GT-SC1)	1.00
CHEM 122	General Chemistry II (GT-SC2)	4.00

CHEM 122L	General Chemistry Lab II (GT-SC1)	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
CHEM 301L	Organic Chemistry Lab I	2
GEOL 101	Earth Science (GT-SC2)	3.00
GEOL 101L	Earth Science Lab (GT-SC1)	1.00
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
PHYS 201	Principles of Physics I (GT-SC2)	3.0
PHYS 201L	Principles of Physics Lab I (GT-SC1)	1.00
PHYS 202	Principles Of Physics II (GT-SC2)	3.00
PHYS 202L	Principles Of Physics II Lab (GT-SC1)	1.00
ENG 101	Rhetoric & Writing I (GT-CO1)	3.0
ENG 102	Rhetoric & Writing II (GT-CO2)	3.0
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	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 Develop in Curriculum & Instruction	4.00
ED 512	Teaching Diverse Learners	3.0
ED 544	Teaching Secondary Science	3.0
RDG 535	Advanced Disciplinary Literacy	3.0
ED 485	Capstone Seminar in Education	1.00
ED 488	Student Teaching Secondary	12.00