## SECONDARY SCIENCE - BIOLOGY, POSTBACCALAUREATE 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
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
or		
BIOL 202	Zoology	2
BIOL 202L	Zoology Laboratory	2
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
or		
BIOL 301	General Microbiology	3
BIOL 301L	General Microbiology Lab	2
One of the following sets of courses:		
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
BIOL 378	Laboratory in Teaching Biology	1
Upper Div. Field Elective		
Upper Div. Elective & Lab		
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4

CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 211	Introduction to Organic Chemistry	3
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
GEOL 101L	Earth Science Lab (GT-SC1)	1
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
PHYS 201	Principles of Physics I (GT-SC2)	3
PHYS 201L	Principles of Physics Lab I (GT-SC1)	1
PHYS 202	Principles Of Physics II (GT-SC2)	3
PHYS 202L	Principles Of Physics II Lab (GT-SC1)	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 544	Teaching Secondary Science	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		109