

# SECONDARY EDUCATION

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Recent changes to science and mathematics requirements for high school graduation have lead to an anticipated increase in demand for secondary science teachers. Preparation for secondary education at CSU-Pueblo involves a B.S. in a science discipline, plus a minor in education. Colorado licenses teachers in science, so preparation in all science disciplines is included. Students who have already completed a B.S. need to complete any lacking science content area coursework plus the education minor. This minor includes several courses with field hours in a school district as a requirement. These courses are therefore scheduled over several semesters.

Students apply for formal admission to the teacher education program during the Frameworks in Education course (ED 301). After admission the remaining Education courses can be taken (RDG 435, ED 412, and ED 444). In addition to coursework, students must pass a content exam for science (PLACE or PRAXIS) prior to acceptance for student teaching during their last semester (ED 485 and ED 488).

## **COURSES REQUIRED FOR THE SECONDARY EDUCATION EMPHASIS**

Title	Course Prefix/number	Credits	√
Applied Calculus	MATH 221	4 hrs	
Earth Science	GEOL 101/L	4 hrs	
Principles of Physics I	PHYS 201/L	4 hrs	
Principles of Physics II	PHYS 202/L	4 hrs	
General Chemistry I	CHEM 121/L	5 hrs	
General Chemistry II	CHEM 122/L	5 hrs	

Organic Chemistry	CHEM 211/L OR 301/L	4-5 hrs	
College Biology I	BIOL 191/L	5 hrs	
College Biology II	BIOL 192/L	5 hrs	
Intro to Cell Biology	BIOL 212/L	3 hrs	
Mendelian and Population Genetics	BIOL 350	2 hrs	
Molecular Biology and Genetics	BIOL 351	2 hrs	
Introduction to Microbiology OR General Microbiology	BIOL 206/L OR 301/L	4-5 hrs	
Anatomy and/or Physiology	BIOL 223/L, 224/L OR 414/L	4 hrs	
Evolutionary Biology and Ecology	BIOL 352 (S)	3 hrs	
Approved Upper Division Field Elective with lab: (Limnology, Freshwater Invert. Zoology, Ecology, Ichthyology, Entomology, Plant Taxonomy, Mammology, Ornithology)	BIOL 441/L or 443/L or 453/L or 479/L or 481/L or 483/L or 484/L or 485/L	3-4 hrs	
Seminar	BIOL 493	1 hr	
	Math and Science Total	<b>62-64 hrs</b>	

## GENERAL EDUCATION COURSES REQUIRED

Title	Course Prefix/number	Credits	√
English Composition I	ENG 101	3 hrs	
English Composition II	ENG 102	3 hrs	
Speaking and Listening (with a grade of B or better)	SPCOM 103	3 hrs	
Humanities course	(H)	3 hrs	
Humanities course	(H)	3 hrs	
Social science course	(SS)	3 hrs	
Human Development	PSYCH 151	3 hrs	
History course	(HS)	3 hrs	
	General Education Total	<b>24 hrs</b>	

## COURSES REQUIRED FOR THE MINOR IN EDUCATION

Title	Course Prefix/number	Credits (field hrs)	√
Educational Psychology	Psych 342	3 hrs	
Foundations of Ed	ED 202	3 hrs (30)	
Educational Media & Technology	ED 280	3 hrs	
Frameworks of Education*	ED 301	3 hrs (30)	
Teaching Diverse Learners**	ED 412	3 hrs (30)	
Content Area Literacy**	RDG 435	4 hrs (60)	
Teaching Secondary Science**	ED 444 (F)	4 hrs (60)	
Student Teaching**	ED 488	12 hrs (590)	
Capstone Seminar**	ED 485	2 hrs	
	Education Total	<b>37 hrs (800)</b>	<b>123-125 hrs Total</b>

\* student must have completed >45 credit hours and have cumulative GPA >2.6.

\*\*acceptance into the teacher education program required prior to taking these courses.