

Biology: MAJOR Requirements for Secondary Teacher Certification

These requirements are for students entering the program in summer 2008 or later.

Major/minor requirements are subject to change. All candidates are expected to consult with a School of Education advisor as they plan and progress through their program.

Prerequisite courses

(Note: These do not count toward the required credits for the major.)

Course Number	Course Title	Credits	Completed?
CHEM 125	General Chemistry Laboratory I	1	
CHEM 130*	General Chemistry: Macroscopic Investigations and Reaction Principles	3	
CHEM 210	Structure and Reactivity I	4	
CHEM 211	Investigations in Chemistry		
CHEM 215	Structure and Reactivity II	3	
CHEM 216	Synthesis and Characterization of Organic Compounds	2	
MATH 115	Calculus I	4	
MATH 116	Calculus II	4	

* If possible, students should take the studio section of Chemistry 130. This section is generally only offered in the fall. Please contact the Chemistry Department at (734) 763-7315 to identify which section is the studio section.

Select one combination:

PHYSICS 125/127	General Physics: Mechanics and Sound/Lab	5	
PHYSICS 126/128	General Physics: Electricity and Light/Lab	5	
OR			
PHYSICS 140/141	General Physics I/Lab	5	
PHYSICS 240/241	General Physics II/Lab	5	

Biology majors must complete a minimum of 37 credits including the following:

Major Requirements

Course Number	Course Title	Credits	Completed?
EDUC 422	Teaching of Science in the Secondary School	3	
BIOLOGY 171	Introductory Biology: Ecology and Evolution	4	
BIOLOGY 172	Introductory Biology: Molecular, Cellular, and Developmental	4	
BIOLOGY 173	Introductory Biology Lab	2	
BIOLOGY 225	Principles of Animal Physiology: Lecture	3	
BIOLOGY 305	Genetics	3	

Select one course:

BIOLOGY 310	Introductory Biochemistry	4	
BIOLOGY 311	Introductory Biochemistry	4	
BIOCHEM 415	Introductory Biochemistry	3	

Select two courses from group "A":

A.			
BIOLOGY 118	AIDS and Other Health Crises	4	
BIOLOGY 207	Introductory Microbiology	4	
BIOLOGY 208	Embryology	3	
BIOLOGY 222	From Message to Mind: An Introduction to Neurobiology	3	
BIOLOGY 252	Chordate Anatomy and Phylogeny	4	

Select two courses from group "B":

B.			
BIOLOGY 226	Animal Physiology	2	
BIOLOGY 230	Introduction to Plant Biology	4 or 5	
BIOLOGY 255	Plant Diversity	5	
BIOLOGY 281	General Ecology	3	
BIOLOGY 282	General Ecology Laboratory	3	
BIOLOGY 288	Animal Diversity	4	
BIOLOGY 390	Evolution	4 or 5	
MCDB 306	Introductory Genetics Laboratory	3	

Additional courses selected from Biology, EEB, or MCDB to meet credit requirements		
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