

# BIOLOGY, BACHELOR OF SCIENCE WITH A CONCENTRATION IN BIOLOGY TEACHING (B.S.)

## Program Requirements

CIP Code: 26.0101

### Summary Checklist for General Education

Code	Title	Hours
<b>Element 1</b>		
A:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
B:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
C:	Oral Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
<b>Element 2</b>		
	Quantitative Reasoning ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/</a> )	3
<b>Element 3</b>		
A:	Arts ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
B:	Humanities ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
<b>Element 4</b>		
	Natural Sciences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/</a> )	6
<b>Element 5</b>		
A:	Historical Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
B:	Social Behavioral Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
<b>Element 6</b>		
	Diversity of Perspectives Experiences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/</a> )	6
<b>Total Hours</b>		<b>36</b>

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

### Major

Code	Title	Hours
<b>University Graduation Requirements</b>		
	General Education	36
	<i>Student Success Seminar</i>	

SCO 100	Student Success Seminar (waived for transfers with 30+ hrs.)	1
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
<b>Major Requirements</b>		
<i>Core Courses</i>		
BIO 111	Cell and Molecular Biology	4
BIO 112	Ecology and Evolution	4
BIO 315	Genetics	4
BIO 316	Ecology	4
BIO 318	General Botany	4
BIO 319	General Zoology	4
BIO 320	Principles of Microbiology	4
BIO 495	Evolutionary Application and Theory	1
<b>Concentrations</b>		
Students must select at least one of the following Concentrations: Courses used for one concentration may not count toward another concentration.		
Aquatic Biology		
Biodiversity and Conservation		
General Biology		
Biology Teaching		58-61
<i>Free Electives</i>		
<b>Total Hours</b>		<b>124-127</b>

### Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
BIO 348	Vertebrate Physiology	3
<i>Supporting Course Requirements</i>		
CHE 111 & 111L	General Chemistry and General Chemistry Lab I (Element 4) <sup>G</sup>	
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
CHE 361 & 361L	Organic Chemistry I and Organic Chemistry Lab I	4
CHE 362 & 362L	Organic Chemistry II and Organic Chemistry Lab II	4
PHY 131 or PHY 201	College Physics I (Element 4) <sup>G</sup> or University Physics I	
Choose from one of the following:		
MAT 120	Trigonometry (Element 2) <sup>G</sup>	
MAT 122	Precalculus Mathematics (Element 2) <sup>G</sup>	
MAT 211	Applied Calculus (Element 2) <sup>G</sup>	
MAT 234	Calculus I (Element 2) <sup>G</sup>	
Choose from one of the following:		3-5
PHY 132	College Physics II	
PHY 202	University Physics II	
GLY 108	Earthquakes and Volcanoes	
STA 215 or STA 270	Introduction to Statistical Reasoning or Applied Statistics	3-4
<i>Professional Education Requirements</i>		
EDC 300	Differentiation in Inclusive Classrooms	3

EDF 203	Educational Foundations	3
EDF 204	Emerging Instructional Technologies	2
EDF 219	Human Development and Learning	3
EDF 413	Assessment in Education	3
SED 104	Special Education Introduction (Element 6) <sup>G</sup>	
EMS 300W	Curriculum and Instructional Design	3
EMS 474	Disciplinary Literacy	3
EMS 490	Classroom & Behavior Management	3
ESE 561	Teaching Science in Secondary School	3
<b>Clinical Experiences:</b>		
CED 100	Clinical I: Introduction to the Education Profession	0
CED 200	Clinical II: Understanding the Learner	0
CED 300	Clinical III: Curriculum and Instructional Design	0.5
CED 400	Clinical IV: Diagnosis and Prescription	0.5
CED 450	Clinical V: Practicing Teaching	1
CED 499	Clinical VI: The Professional Semester	9

*Exit Requirements***PRAXIS Examination**

Students must register for and take the PRAXIS exam which correlates to their degree program, per College of Education requirements. Refer to Degree Works for exam details. The PRAXIS exam must be taken prior to student teaching.

---

**Total Hours** **58-61**

**G**

Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.