

# CURRICULUM GUIDE

## Biology, B.S. (Teaching Concentration)

2023-2024

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule.  
Please consult your advisor for specific changes that may need to be made.

	Fall Semester	Spring Semester
<b>Freshman Year</b>	SCO 100B 1 BIO 111 4 ☐ CHE 111 (fulfills Gen. Ed. 4) 3 CHE 111L 1 ☐ ☐ MAT Requirement (fulfills Gen. Ed. 2) 3-5 ☐ Gen. Ed. 1A (ENG 101) 3 <b>TOTAL 15-17</b>	EDF 203 3 CED 100 0 ☐ SED 104 (fulfills Gen. Ed. 6) 3 BIO 112 4 CHE 112 3 CHE 112L 1 ☐ Gen. Ed. 1B (ENG 102) 3 <b>TOTAL 17</b>
<b>Sophomore Year</b>	BIO 319 4 CHE 361 3 CHE 361L 1 ☐ Gen. Ed. 1C (Oral Comm.) 3 Gen. Ed. 3B (Humanities) (PHI 110, 130, 300, or 320 recommended) 3 Gen. Ed. 5B (Soc. & Behav. Sci.) 3 ❖ 30 hrs complete + apply to professional education program <b>TOTAL 17</b>	EDF 219 3 CED 200 0 BIO 318 4 BIO 331, 348, 500, or 532 3 Gen. Ed. 3A (Arts) 3 Gen. Ed. 5A (History) 3 <b>TOTAL 16</b>
<b>Junior Year</b>	EDC 300 3 EDF 204 2 CED 300 0.5 EMS 300 3 BIO 331, 348, 500, or 532 3 ☐ PHY 101, PHY 131 or GLY 109 (fulfills Gen. Ed. 4) 3-5 <b>TOTAL 14.5-16.5</b>	EDF 413 3 EMS 490 3 CED 400 0.5 BIO 320 4 BIO 315 4 <b>TOTAL 14.5</b>
<b>Senior Year</b>	ESE 561 3 CED 450 (fall only) 1 BIO 316 4 BIO 495 1 Gen. Ed. 6 (Diversity) 3 Free Elective 0-2 <b>APPLY FOR STUDENT TEACHING</b> <b>TOTAL 12-14</b>	CED 499 9 EMS 474 3 <b>TOTAL 12</b>
<b>TOTAL HOURS TO DEGREE COMPLETION</b>		<b>120-122</b>

Course Number	Course Name
<b>GENERAL EDUCATION &amp; UNIVERSITY REQUIREMENTS (37)</b>	
SCO 100B	Student Success Seminar for Biology (1)
<b>CORE COURSE REQUIREMENTS (29)</b>	
BIO 111	Cell and Molecular Biology (4)
BIO 112	Ecology and Evolution (4)
BIO 315	Genetics (4)
BIO 316	Ecology (4)
BIO 318	Botany (4)
BIO 319	Zoology (4)
BIO 320	Principles of Microbiology (4)
BIO 495	Evolution Theory and Application (1)
<b>BIOLOGY TEACHING CONCENTRATION REQUIREMENTS (6)</b>	
SIX (6) HOURS selected from the following:	
BIO 331	Cell Biology (3)
BIO 348	Animal Physiology (3)
BIO 500	Environmental Issues (3)
BIO 532	Conservation Biology (3)
<b>SUPPORTING COURSE REQUIREMENTS (9-13)</b>	
☐ CHE 111	General Chemistry I (3)
☐ CHE 111L	General Chemistry Lab I (1)
☐ CHE 112	General Chemistry II (3)
☐ CHE 112L	General Chemistry Lab II (1)
☐ CHE 361	Organic Chemistry I (3)
☐ CHE 361L	Organic Chemistry Lab I (1)
☐ PHY 101 or	Concepts of the Physical World (3)
☐ PHY 131 or	College Physics I (5)
☐ GLY 109	Great Moments in Earth History (3)
☐ PLUS ONE (1) MATHEMATICS COURSE SELECTED FROM (any of which can count towards General Education, Element 2):	
☐ MAT 120	Trigonometry (3)
☐ MAT 122	Precalculus Mathematics (5)
☐ MAT 211	Applied Calculus (3)
☐ MAT 234	Calculus I (4)
<b>PROFESSIONAL EDUCATION REQUIREMENTS (37)</b>	
EDC 300	Differentiation Inclusive Classrooms (3)
EDF 203	Philosophical & Historical Found. of Ed. (3)
EDF 204	Emerging Instructional Technologies (2)
EDF 219	Human Development and Learning (3)
EDF 413	Assessment in Education (3)
EMS 300	Curriculum & Instructional Design (3)
EMS 474	Teaching Content Reading (3)
EMS 490	Classroom & Behavior Management in P-12 (3)
ESE 561	Teaching Science in the Secondary Schools (3)
☐ SED 104	Introduction to Special Education (3)
<b>PLUS ELEVEN (11) HOURS of Clinical Experiences to include:</b>	
CED 100	Clinical I: Intro to the Education Prof. (0)
CED 200	Clinical II: Understanding the Learner (0)
CED 300	Clinical III: curriculum and Instruct. Des. (0.5)
CED 400	Clinical IV: Diagnosis & Perception (0.5)
CED 450	Clinical V: Practicing Teaching (1) (fall only)
CED 499	Supervised Student Teaching P-12 (9)
<b>FREE ELECTIVES (0-2)</b>	

☐ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

\* PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division BIO courses. CHE 111/111L, 112/112L, MAT 112 or higher.

❖ Student must have completed 30 hours by the end of the second semester and apply for admission to Professional Education Program.

☐ Must be completed before enrolling in CED 300 and applying to the Teacher Ed. program.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300-level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements.