

CURRICULUM GUIDE
Biology, B.S. (Teaching Concentration)
2022-2023

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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		Course Number	Course Name
Freshman Year	SCO 100B	1	EDF 203	3	GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
	BIO 111	4	CED 100	0	SCO 100B Student Success Seminar for Biology (1)	
	☉ CHE 111 (fulfills Gen. Ed. 4)	3	☉ SED 104 (fulfills Gen. Ed. 6)	3	CORE COURSE REQUIREMENTS (29)	
	CHE 111L	1	BIO 112	4	BIO 111	Cell and Molecular Biology (4)
	☉☉† MAT Requirement (fulfills Gen. Ed. 2)	3-5	CHE 112	3	BIO 112	Ecology and Evolution (4)
	☉ Gen. Ed. 1A (ENG 101)	3	CHE 112L	1	BIO 315	Genetics (4)
	TOTAL	15-17	TOTAL	17	BIO 316	Ecology (4)
Sophomore Year	BIO 319	4	EDF 219	3	BIO 318	Botany (4)
	CHE 361	3	CED 200	0	BIO 319	Zoology (4)
	CHE 361L	1	BIO 318	4	BIO 320	Principles of Microbiology (4)
	☉ Gen. Ed. 1C (Oral Comm.)	3	CHE 362	3	BIO 495	Evolution Theory and Application (1)
	Gen. Ed. 3B (Humanities) (PHI 110, 130, 300, or 320 recommended)	3	CHE 362L	1	BIOLOGY TEACHING CONCENTRATION REQUIREMENTS (3)	
	Gen. Ed. 5B (Soc. & Behav. Sci.)	3	Gen. Ed. 3A (Arts)	3	BIO 348	Animal Physiology (3)
	☉ Gen. Ed. 5A (History)	3	Gen. Ed. 5A (History)	3	SUPPORTING COURSE REQUIREMENTS (21-26)	
TOTAL	17	TOTAL	17	☉ CHE 111	General Chemistry I (3)	
Junior Year	EDC 300	3	EDF 413	3	CHE 111L	General Chemistry Lab I (1)
	EDF 204	2	EMS 490	3	☉* CHE 112	General Chemistry II (3)
	CED 300	0.5	CED 400	0.5	☉* CHE 112L	General Chemistry Lab II (1)
	EMS 300W	3	BIO 320 (ACCT)	4	☉* CHE 361	Organic Chemistry I (3)
	BIO 315	4	BIO 348	4	☉* CHE 361L	Organic Chemistry Lab I (1)
	☉ PHY 131 or 201 (fulfills Gen. Ed. 4)	5	§ PHY 132, 202 or GLY 108	3-5	☉* CHE 362	Organic Chemistry II (3)
	TOTAL	17.5	TOTAL	17.5-19.5[§]	☉* CHE 362L	Organic Chemistry Lab II (1)
Senior Year	ESE 561	3	CED 499	9	☉ PHY 131 or 201	College Physics I (5)
	CED 450 (fall only)	1	EMS 474	3	☉ PHY 201	University Physics I (5)
	BIO 316	4			PHY 132 or 202	College Physics II (5)
	BIO 495	1			PHY 202 or GLY 108	University Physics II (5)
	STA 215 or 270	3-4			GLY 108	Plate Tectonics: The Active Earth (3)
	Gen. Ed. 6 (Diversity)	3			☉ STA 215 or 270	Intro. to Statistical Reasoning (3)
	TOTAL	15-16	TOTAL	12	☉* STA 270	Applied Statistics I (4)
TOTAL HOURS TO DEGREE COMPLETION				128-133	† 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)	
					Bracketed items must be taken concurrently.	
					PROFESSIONAL EDUCATION REQUIREMENTS (37)	
					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 300W	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)
					PLUS ELEVEN (11) HOURS of Clinical Experiences to include:	
					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)

* PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division BIO courses. CHE 111/111L, 112/112L, 361, and/or 366; 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.

§ In order to take more than 18 hours per semester, you must seek approval from the Office of the Associate Dean in Roark 106.

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

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

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. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: Biology majors will fulfill ACCT with one of the following: BIO 320, 349, 598, HON 420 with a thesis topic approved by the Biology department, a program-approved leadership experience, or a program-approved study abroad experience. (Credit hours are incorporated into program requirements.)