

CURRICULUM GUIDE
Biomedical Sciences, B.S. (Pre-Physician Assistant Concentration)
2017-2018

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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	
Freshman Year	SCO 100B BIO 111 ⁶ CHE 111 (fulfills Gen. Ed. 4) CHE 111L MAT 120 or higher Gen. Ed. 1A (ENG 101)	1 4 3 1 3-5 3	BIO 112 CHE 112 CHE 112L EMC 105 ⁶ PSY 200 or PSY 200W (fulfills Gen. Ed. 5B) Gen. Ed. 1B (ENG 102)	4 3 1 1 3 3
TOTAL	15-17	TOTAL	15	
Sophomore Year	BIO 331 CHE 361 CHE 361L ⁶ PHY 131 or 201 (fulfills Gen. Ed. 4) ANT 120 or SOC 131	3 3 1 5 3	BIO 318 or BIO 319 BIO 332 BIO 320 (ACCT) HSA 200 PSY 280 or PSY 280W	4 1 4 3 3
TOTAL	15	TOTAL	15	
SUMMER	NOTE: While not required, it is strongly recommended that students complete THREE (3) HOURS of BIO 349: Applied Learning in Biology or 349A: Cooperative Study: Biology in leui of a marked (☼) free elective.		(0-3)	
Junior Year	BIO 342 BIO 348 PHI 383 or PHI 383W ⁶ STA 215 or STA 270 (fulfills Gen. Ed. 2) (STA 270 recommended) Free Elective	4 3 3 3-4 2	BIO 315 INF 104 Gen. Ed. 1C (CMS 100 or 210) Gen Ed. 3B (Humanities) Gen. Ed. 5A (History)	4 3 3 3 3
TOTAL	15	TOTAL	16	
Senior Year	†Restricted Elective (BIO 527 or 547 recommended) Gen. Ed. 3A (Arts) Gen. Ed. 6 (Diversity) Free Elective	3-4 3 3 4	BIO 495 †Restricted Elective (BIO 527 or 547 recommended) Gen Ed. 6 (Diversity) Free Elective Free Elective* Free Elective*☼	1 3-4 3 4 0-2 0-3
TOTAL	13-14	TOTAL	12-17	
TOTAL HOURS TO DEGREE COMPLETION		120		

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100B	Student Success Seminar for Biology (1)
CORE COURSE REQUIREMENTS (28)	
BIO 111	Cell and Molecular Biology (4)
BIO 112	Ecology and Evolution (4)
BIO 315	Genetics (4)
BIO 318 or BIO 319	Botany (4) Zoology (4)
BIO 320	Principles of Microbiology (4)
BIO 331	Cell Biology (3)
BIO 332	Careers in Biomedical Sciences (1)
BIO 348	Vertebrate Physiology (3)
BIO 495	Evolution Theory and Application (1)
PRE-PHYSICIAN ASSISTANT CONCENTRATION REQUIREMENTS (23-25)	
ANT 120 or SOC 131	Intro to Cultural Anthropology (3) Introductory Sociology (3)
BIO 342	Comparative Vertebrate Anatomy (4)
EMC 105	Survey of Medical Terminology (1)
HSA 200	Medical Terminology (3)
*MAT 120 (or higher)	Trigonometry (3) (or higher (3-5))
PSY 280 or PSY 280W	Lifespan Developmental Psychology (3) Lifespan Developmental Psychology (writing intensive) (3)
† PLUS 6 (SIX) HOURS selected from the following (restricted elective):	
BIO 527	Immunology (3)
BIO 528	Virology (3)
BIO 531	Principles of Molecular Biology I (4)
BIO 535	Pathogenic Microbiology (4)
BIO 546	Comparative Vert. Embryology (4)
BIO 547	Histology (4)
BIO 598	Special Problems (1-4)
CHE 362	Organic Chemistry II (3)
*CHE 430	Biochemistry of Macromolecules (3)
*CHE 431	Metabolic Biochemistry (3)
*CHE 432	Biochemistry Laboratory (1)
SUPPORTING COURSE REQUIREMENTS (17-18)	
[⁶ CHE 111 *CHE 111L *CHE 112 *CHE 112L *CHE 361 *CHE 361L INF 104 PHI 383 or PHI 383W **PHY 131 or **PHY 201 ⁶ PSY 200 or ⁶ PSY 200W ⁶ STA 215 or *STA 270	General Chemistry I (3) General Chemistry Lab I (1) General Chemistry II (3) General Chemistry Lab II (1) Organic Chemistry I (3) Organic Chemistry Lab I (1) Computer Literacy with Software Apps. (3) Health & Biomedical Ethics (3) Health & Biomedical Ethics (writing intensive) (3) College Physics I (5) University Physics I (5) Introduction to Psychology (3) Introduction to Psychology (writing intensive) (3) Intro. to Statistical Reasoning (3) Applied Statistics I (4)
Bracketed items must be taken concurrently.	
FREE ELECTIVES (10-15)	
⁶ 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, 361/361L, 362/362L, 366, 430, and/or 366; MAT 112, 114 or higher; PHY 131 and/or 201.

♣ Due to variable course hour choices in the concentration requirements, marked free electives may also be variable. Consult with your advisor to ensure you have a minimum of 12 hours per semester to maintain full-time standing and 120 total credit hours for graduation.

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.)