

CURRICULUM GUIDE

Forensic Science, B. S. (Forensic Biology Concentration)

2018-2019

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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 100C 1	CHE 111 3
	⁶ BIO 111 (fulfills Gen. Ed. 4) 4	CHE 111L 1
	FOR 301 3	STA 215 <u>or</u> 270 3-4
	⁶ MAT 234 (fulfills Gen. Ed. 2) 4	Gen. Ed. 1B (ENG 102) 3
	Gen. Ed. 1A (ENG 101) 3	Gen. Ed. 3B (Humanities) 3
TOTAL	15	TOTAL 13-14
Sophomore Year	BIO 315 3	CHE 361 3
	CHE 112 3	CHE 361L 1
	CHE 112L 1	FOR 331 3
	FOR 401 3	FOR 331L 1
	⁶ PHY 131 <u>or</u> 201 (fulfills Gen. Ed. 4) 5	PHY 132 <u>or</u> 202 5
	PLS 316 3	Gen. Ed. 1C (Oral Comm.) 3
TOTAL	18	TOTAL 16
Junior Year	BIO 320 4	BIO 331 3
	CHE 362 3	CHE 432 1
	CHE 362L 1	CHE 430 3
	FOR 451 2	†Restricted Elective 3
	FOR 451L 1	Gen. Ed. 6 (Diversity) 3
	†Restricted Elective (FOR 310 recommended) 1	
	Gen. Ed. 3A (Arts) 3	
TOTAL	15	TOTAL 13
SUMMER	♣ NOTE: While not required, it is strongly recommended that students complete THREE (3) HOURS of FOR 349: Applied Learning in Forensic Science in a Forensic Laboratory. Students interested in the internship must complete FOR 310 training for Forensic Internship before taking FOR 349. (3)	
Senior Year	FOR 465W 3	BIO 531 4
	FOR 499 (ACCT) (fall only) 3	†Restricted Elective 3
	†Restricted Elective 3	Gen. Ed. 5B (Soc. & Behav. Sci.) 3
	Gen. Ed. 5A (History) 3	Free Elective 3
	Gen. Ed. 6 (Diversity) 3	
TOTAL	15	TOTAL 13
TOTAL HOURS TO DEGREE COMPLETION		120 – (* 123)

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division CHE and FOR courses. BIO 111, 320, and/or 315; CHE 361. See University catalog for details.
 § A preparatory course in mathematics (MAT 122) may be required before admission to MAT 234.

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: Forensic Sciences majors will fulfill ACCT with FOR 499. (Credit hours are incorporated into program requirements.)

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100C	Student Success Seminar for Chemistry (1)
CORE COURSE REQUIREMENTS (38)	
☐ 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)
☐ CHE 362	Organic Chemistry II (3)
☐ CHE 362L	Organic Chemistry Lab II (1)
CHE 430	Biochemistry of Macromolecules (3)
FOR 301	Intro. to Forensic Science (3)
FOR 331	DNA Profiling (3)
FOR 401	Forensic Professional Practice (3)
☐ FOR 451 <u>and</u>	Forensic Microscopic Analysis (3)
☐ FOR 451L	Forensic Microscopy Lab (1)
FOR 465W	Expert Witness Testimony (3)
FOR 499	Forensic Science Capstone (3)
Bracketed items must/should be taken concurrently.	
FORENSIC BIOLOGY CONCENTRATION REQUIREMENTS (27)	
BIO 315	Genetics (4)
BIO 320	Principles of Microbiology (4)
*BIO 331	Cell Biology (3)
BIO 531	Principles of Molecular Biology (4)
CHE 432	Biochemistry Laboratory (1)
FOR 331L	DNA Profiling Lab (1)
†PLUS TEN (10) HOURS selected from the following (restricted elective):	
BIO 527	Immunology (3)
BIO 528	Virology (3)
BIO 533	Bioinformatics: Principles & Apps. (3)
*BIO 535	Pathogenic Microbiology
BIO 546	Histology (4) (spring only)
☐ CHE 325 <u>and</u>	Analytical Chemistry (3)
☐ CHE 325L	Analytical Chemistry Lab (2)
☐ CHE 425 <u>and</u>	Instrumental Analysis (3)
☐ CHE 425L	Instrumental Analysis Lab (1)
CHE 520 <u>or</u>	Mass Spectrometry (3) (spring only)
CHE 720	Mass Spectrometry (3) (spring only)
FOR 310	Training for Forensic Internships (1)
FOR 349	Applied Learning in Forensic Science (0.5-8)
☐ FOR 412 <u>and</u>	Forensic Trace Evidence (3) (spring only)
☐ FOR 412L	Forensic Trace Evidence Lab (1) (spring only)
☐ FOR 442 <u>and</u>	Drugs and Toxicology (3) (spring only)
☐ FOR 442L	Drugs and Toxicology Laboratory (1) (spring only)
FOR 460	Selected Topics in Forensic Science (1-3)
FOR 490	Introduction to Research (1-3)
SUPPORTING COURSE REQUIREMENTS (± 15-16)	
⁶ BIO 111	Cell and Molecular Biology (4)
⁶ MAT 234	Calculus I (4)
⁶ PHY 131 <u>or</u>	College Physics I (5)
⁶ PHY 201	University Physics I (5)
PHY 132 <u>or</u>	College Physics II (5)
PHY 202	University Physics II (5)
PLS 316	Criminal Evidence (3)
STA 215 <u>or</u>	Introduction to Statistical Reasoning (3)
STA 270	Applied Statistics I (4)
FREE ELECTIVES (6-2-3)	

⁶ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.