

CURRICULUM GUIDE

Forensic Science, B. S. (Forensic Biology Concentration) 2021-2022

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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 BIO 112
	⁶ BIO 111 (fulfills Gen. Ed. 4)	4 CHE 111
	FOR 301	3 CHE 111L
	⁶ MAT 234 (fulfills Gen. Ed. 2)	4 STA 215 <i>or</i> 270
	Gen. Ed. 1A (ENG 101)	3 Gen. Ed. 1B (ENG 102)
TOTAL	15	TOTAL 14-15
Sophomore Year	BIO 315	3 CHE 361
	CHE 112	4 CHE 361L
	CHE 112L	1 FOR 431 (spring only)
	FOR 401	1 FOR 431L (spring only)
	⁶ PHY 131 <i>or</i> 201 (fulfills Gen. Ed. 4)	5 PHY 132 <i>or</i> 202
TOTAL	14	TOTAL 16
Junior Year	BIO 320	4 BIO 331
	CHE 362	3 CHE 430
	CHE 362L	1 CHE 432 (spring only)
	FOR 451 (fall only)	2 FOR 330
	FOR 451L (fall only)	1 FOR 432
	†Restricted Elective (FOR 310 recommended)	1 †Restricted Elective
	Gen. Ed. 3A (Arts)	3 Gen. Ed. 6 (Diversity)
TOTAL	15	TOTAL 15
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 (fall only)	3 BIO 531 (spring only)
	FOR 499 (ACCT) (fall only)	3 †Restricted Elective
	†Restricted Elective	3 Gen. Ed. 3B (Humanities)
	Gen. Ed. 5A (History)	3 Gen. Ed. 5B (Soc. & Behav. Sci.)
Gen. Ed. 6 (Diversity)	3 * Free Elective	
TOTAL	15	TOTAL 15-16
TOTAL HOURS TO DEGREE COMPLETION		120

* If STA 215 (3 hrs) is taken, then 4 hours of Free Elective must be taken. If STA 270 (4 hrs) is taken, only 3 hours of Free Elective must be taken

* **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.)

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Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100C	Student Success Seminar for Chemistry (1)
CORE COURSE REQUIREMENTS (35)	
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 401	Forensic Professional Practice (1)
FOR 431	DNA Profiling (3) (spring only)
FOR 451	Forensic Microscopic Analysis (2) (fall only)
FOR 451L	Forensic Microscopy Lab (1) (fall only)
FOR 465W	Expert Witness Testimony (3) (fall only)
FOR 499	Forensic Science Capstone (3) (fall only)
Bracketed items must/should be taken concurrently.	
FORENSIC BIOLOGY CONCENTRATION REQUIREMENTS (28)	
BIO 315	Genetics (4)
BIO 320	Principles of Microbiology (4)
*BIO 331	Cell Biology (3)
BIO 531	Principles of Molecular Biology (4) (spring only)
CHE 432	Biochemistry Laboratory (1) (spring only)
FOR 330	Bloodstain Pattern Analysis (1)
FOR 431L	DNA Profiling Lab (1) (spring only)
FOR 432	Forensic Serology (1)
†PLUS NINE (9) HOURS selected from the following (restricted elective):	
ANT 306	Human Evolution (3)
ANT 380	Forensic Anthropology (3)
ANT 385	Human Osteology (3)
BIO 307	Human Anatomy & Physiology I (3)
BIO 308	Human Anatomy & Physiology II (3)
BIO 348	Vertebrate Physiology (3)
BIO 527	Immunology (3)
BIO 528	Virology (3)
BIO 533	Bioinformatics: Principles & Apps. (3) (spring only)
*BIO 535	Pathogenic Microbiology
BIO 546	Histology (4) (spring only)
CHE 325 <i>and</i> CHE 325L	Analytical Chemistry (3)
CHE 425 <i>and</i> CHE 425L <i>OR</i> CHE 425L <i>OR</i> FOR 411 <i>and</i> FOR 411L	Analytical Chemistry Lab (2)
CHE 425 <i>and</i> CHE 425L <i>OR</i> FOR 411 <i>and</i> FOR 411L	Instrumental Analysis (3)
CHE 425L <i>OR</i> FOR 411 <i>and</i> FOR 411L	Instrumental Analysis Lab (3)
CHE 431	Instrumental Analysis (3)
CHE 501	Forensic Instrumental Lab (1)
CHE 501L	Metabolic Biochemistry (3)
CHE 520 <i>or</i> CHE 720	Chemtopics (1-3)
FOR 310	Chemtopics Lab (1)
FOR 349	Mass Spectrometry (3) (spring only)
FOR 412 <i>and</i> FOR 412L	Mass Spectrometry (3) (spring only)
FOR 442 <i>and</i> FOR 442L	Training for Forensic Internships (1) (fall only)
FOR 460	Applied Learning in Forensic Science (0.5-8)
FOR 490	Forensic Trace Evidence (3) (spring only)
PLS 316	Forensic Trace Evidence Lab (1) (spring only)
	Drugs and Toxicology (3) (spring only)
	Drugs and Toxicology Laboratory (1) (spring only)
	Selected Topics in Forensic Science (1-3)
	Introduction to Research (1-3)
	Criminal Evidence (3)
SUPPORTING COURSE REQUIREMENTS (16-17)	
⁶ BIO 111	Cell and Molecular Biology (4)
BIO 112	Ecology and Evolution (4)
⁶ MAT 234	Calculus I (4)
⁶ PHY 131 <i>or</i> PHY 201	College Physics I (5)
PHY 132 <i>or</i> PHY 202	University Physics I (5)
STA 215 <i>or</i> STA 270	College Physics II (5)
	University Physics II (5)
	Introduction to Statistical Reasoning (3)
	Applied Statistics I (4)
FREE ELECTIVES (3-4)	

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