## **CURRICULUM GUIDE**

## Forensic Science, B.S. (Forensic Chemistry Concentration) 2022-2023

Website: www.forensicscience.eku.edu Email Contact: forensics@eku.edu Department of Chemistry 521 Lancaster Ave. 4126 New Science Building Richmond, KY 40475 859-622-1456

Course Name

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	SCO 100C	1	<sup>G</sup> BIO 111 (fulfills Gen. Ed. 4)	4	
Year	CHE 111	3	CHE 112	3	
· cu.	CHE 111L	1	CHE 112L	1	
	FOR 301	3	*STA 215 <u>or</u> 270	3-4	
	§ G MAT 234 (fulfills Gen. Ed. 2)	4	Gen. Ed. 1B ( <i>ENG</i> 102)	3	
	Gen. Ed. 1A ( <i>ENG 101 or 105</i> )	3	Free Electives	0-1	
	TOTAL	15	TOTAL	15	
Sophomore	CHE 361	3	CHE 362	3	
Year	CHE 361L	1	CHE 362L	1	
	FOR 401	1	CHE 325	3	
	<sup>G</sup> PHY 131 <u>or</u> 201 (fulfills Gen.	-	CHE 325L	2 5	
	Ed. 4) Gen. Ed. 5B (Soc. & Behav. Sci.)	5	PHY 132 <u>or</u> 202	5	
	BIO 112	4			
	510 112				
	TOTAL	17	TOTAL	14	
Junior	FOR 411	3	FOR 331 (spring only)	3	
Year	FOR 411L	1	FOR 412 (spring only)	3	
	FOR 451 (fall only)	2	FOR 412L (spring only)	1	
	FOR 451L (fall only)	1	FOR 442 (spring only)	3	
	†CHE/FOR Restricted Elective (FOR 310 recommended)	1	FOR 442L (spring only) Gen. Ed. 3A (Arts)	1 3	
	Gen. Ed. 6 ( <i>Diversity</i> )	3	Gen. Ed. 3A (Arts)	3	
	*Free Elective	2-3			
	ATTEC Elective	2 3			
	TOTAL	13-14	TOTAL	14	
	TOTAL	13-14	IOIAL	14	
SUMMER	• NOTE: While not required, it is strongly recommended that students complete THREE (3) (3)			(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.	FUR 310 t	raining for Forensic Internship before		
Senior	CHE 430	3	CHE 520 (spring only)	3	
Year	FOR 465W (fall only)	3	CHE 570 <u>or</u> 770 (spring only)	4	
rear	FOR 499 (ACCT) (fall only)	3	†CHE/FOR Restricted Elective	3	
	Gen. Ed. 1C (Oral Comm.)	3	Gen. Ed. 3B ( <i>Humanities</i> )	3	
	Gen. Ed. 6 ( <i>Diversity</i> )	3	Gen. Ed. 5A ( <i>History</i> )	3	
	TOTAL	15	TOTAL	16	
TOTAL HOURS TO DEGREE COMPLETION 120					
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<sup>\*</sup> 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.

**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 <a href="http://www.catalogs.eku.edu/">http://www.catalogs.eku.edu/</a> 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.)

Number	Number				
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)				
<b>∫</b> CHE 112	General Chemistry II (3)				
CHE 112L	General Chemistry Lab II (1)				
<b>CHE 361</b>	Organic Chemistry I (3)				
CHE 361L	Organic Chemistry Lab I (1)				
CHE 362 CHE 362L	Organic Chemistry II (3)				
CHE 430	Organic Chemistry Lab II (1) 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.					
CHE 325	STRY CONCENTRATION REQUIREMENTS (28)				
CHE 325L	Analytical Chemistry (3) Analytical Chemistry Lab (2)				
CHE 520 or	Mass Spectrometry (3) (spring only)				
CHE 720	Mass Spectrometry (3) (spring only)				
CHE 570 <u>or</u>	Biophysical Chemistry I (4)				
CHE 770	Biophysical Chemistry I (4)				
_CHE 425 <u>and</u>	Instrumental Analysis (3)				
CHE 425L <u>OR</u>	Instrumental Analysis Lab (1)				
FOR 411 <u>and</u> FOR 411L	Instrumental Analysis (3) Forensic Instrumental Lab (1)				
FOR 412	Forensic Trace Evidence (3) (spring only)				
FOR 412L	Forensic Trace Evidence Lab (1) (spring only)				
FOR 442	Forensic Toxicology & Drugs (3) (spring only)				
FOR 442L	Drugs & Toxicology Lab (1) (spring only)				
†PLUS FOUR (4) HOURS selected from the following (restricted					
elective): CHE 349	Applied Learning in Chemistry (0.5.9)				
CHE 349 A-N	Applied Learning in Chemistry (0.5-8) Cooperative Study: Chemistry (0.5-8)				
CHE 432	Biochemistry Laboratory (1) (spring only)				
CHE 450	Inorganic Chemistry (3) (fall only)				
CHE 501	Chemtopics (1-3)				
CHE 501L	Chemtopics Lab (1)				
FOR 310	Preparation for Internship (1) (fall only)				
FOR 330 FOR 349	Bloodstain Pattern Analysis (1)				
FOR 349 FOR 431L	Applied Learning in Forensic Science (0.5-8) DNA Profiling (3) (spring only)				
FOR 460	Special Topics in forensic Science (1-3)				
FOR 490	Introduction to Research (1-3)				
FSE 350	Fire, Arson and Explosion Investigation (3)				
FSE 380	Fire and Explosion Scene Analysis (3)				
PLS 316	Criminal Evidence (3)				
SUPPORTING COURSE REQUIREMENTS (16-17)					
<sup>6</sup> BIO 111	Cell and Molecular Biology (4)				
BIO 112 <sup>G</sup> MAT 234	Ecology and Evolution (4) Calculus I (4)				
<sup>G</sup> PHY 131 <u>or</u>	College Physics I (5)				
<sup>G</sup> PHY 201	University Physics I (5)				
* PHY 132 <u>or</u>	College Physics II (5)				
* PHY 202	University Physics II (5)				
STA 215 <u>or</u>	Introduction to Statistical Reasoning (3)				
STA 270	Applied Statistics I (4)				
FREE ELECTIVES (3-4)					

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

Course

<sup>\*</sup> PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division CHE and FOR courses. See University cataloa for details.

and FOR courses. See University catalog for details. § A preparatory course in mathematics (MAT 122) may be required before admission to MAT 234.