

CURRICULUM GUIDE
Chemistry, B.S. (Pre-Health Concentration including Pre-Dental, Pre-Medical, Pre-Optometry, and Pre-Physician Assistant)

2023-2024

Website: www.chemistry.eku.edu

Email Contact: chemistry@eku.edu

Department of Chemistry
 521 Lancaster Ave.
 4126 New Science Bldg.
 Richmond, KY 40475
 859-622-1456

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.

Students in Pre-Professional programs are encouraged to see the Pre-Professional program advisor in Science 1234, for help with scheduling.

	Fall Semester		Spring Semester		Course Number	Course Name
Freshman Year	SCO 100C	1	BIO 112	4	GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
	° BIO 111 (fulfills Gen. Ed. 4)	4	CHE 112	3	SCO 100C	Student Success Seminar for Chemistry (1)
	CHE 111	3	CHE 112L	1	CORE COURSE REQUIREMENTS (26)	
	CHE 111L	1	Gen. Ed. 1B (ENG 102)	3	[CHE 111	General Chemistry I (3)
	§ ° MAT 234 (fulfills Gen. Ed. 2)	4	Gen. Ed. 1C (Oral Comm.)	3	[CHE 111L	General Chemistry Lab I (1)
	Gen. Ed. 1A (ENG 101)	3	Gen. Ed. 3A (Arts)	3	[CHE 112	General Chemistry II (3)
					[CHE 112L	General Chemistry Lab II (1)
	TOTAL	16	TOTAL	17	CHE 250	Descriptive Inorganic Chemistry (2) (fall only)
					[CHE 325	Analytical Chemistry (3)
					[CHE 325L	Analytical Chemistry Lab (2)
Sophomore Year	BIO 307	3	CHE 325	3	[CHE 361	Organic Chemistry I (3)
	CHE 250 (fall only)	2	CHE 325L	2	[CHE 361L	Organic Chemistry Lab I (1)
	CHE 361	3	CHE 362	3	[CHE 362	Organic Chemistry II (3)
	CHE 361L	1	CHE 362L	1	[CHE 362L	Organic Chemistry Lab II (1)
	° PHY 131 or ‡ 201 (fulfills Gen. Ed. 4)	5	PHY 132 or ‡ 202	5	CHE 430	Biochemistry of Macromolecules (3)
					Bracketed items must be taken concurrently.	
	TOTAL	14	TOTAL	14	PREHEALTH CONCENTRATION REQUIREMENTS (26)	
					CHE 385	Chemical Literature (3)
					[CHE 425	Instrumental Analysis (3) (fall only)
					[CHE 425L	Instrumental Analysis Lab (1) (fall only)
Junior Year	BIO 331	3	BIO 348	3	CHE 431	Metabolic Biochemistry (3) (spring only)
	CHE 385	3	CHE 431 (spring only)	1	CHE 432	Biochemistry Laboratory (1) (spring only)
	CHE 411, 495A/B, or 501L	1	CHE 432 (spring only)	3	CHE 450	Inorganic Chemistry (3) (fall only)
	CHE 425 (fall only)	3	400/500-level CHE/FOR elective	2	CHE 485	Chemistry Seminar (1)
	CHE 425L (fall only)	1	Gen. Ed. 3B (Humanities)	3	CHE 502	Polymers and Particles (1) (fall only)
	CHE 430	3	Gen. Ed. 6 (Diversity)	3	CHE 570	Biophysical Chemistry I (4)
	TOTAL	14	TOTAL	15	† PLUS ONE (1) HOUR selected from the following:	
					CHE 411	Practicum (1)
					CHE 495A	Independent Chemical Research (1)
					CHE 495B	Chemistry Lab Independent Res. (1-3)
Senior Year	CHE 450	3	CHE 485	1	CHE 501L	Chemtopics Lab (1)
	CHE 502	1	400/500-level CHE/FOR elective	3	PLUS FIVE (5) HOURS 400 or 500-level CHE or FOR electives	
	° PSY 200 (fulfills Gen. Ed. 5B)	3	PHI 383	3	PRE-HEALTH CONCENTRATION SUPPORTING COURSE REQUIREMENTS (28)	
	SOC 131	3	Gen. Ed. 5A (History)	3	° BIO 111	Cell and Molecular Biology (4)
	CHE 570	4	Gen. Ed. 6 (Diversity)	3	BIO 112	Ecology and Evolution (4)
			Free Elective	3	BIO 307	Human Anatomy & Physiology (3)
	TOTAL	14	TOTAL	16	BIO 331	Cell Biology (3)
					BIO 348	Vertebrate Physiology (3)
					§ ° MAT 234	Calculus I (4)
					PHI 383	Health and Biomedical Ethics (3)
TOTAL HOURS TO DEGREE COMPLETION					120	

* PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division courses.

§ 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.

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