

CURRICULUM GUIDE
Chemistry, B.S. (Chemistry Concentration with ACS Certification)
2018-2019

Website: www.chemistry.eku.edu
 Email Contact: chemistry@eku.edu

Department of Chemistry
 521 Lancaster Ave.
 4126 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.

	Fall Semester		Spring Semester	
Freshman Year	SCO 100C	1	CHE 112	3
	CHE 111	3	CHE 112L	1
	CHE 111L	1	MAT 244	4
	§ ⁶ MAT 234 (fulfills Gen. Ed. 2)	4	Gen. Ed. 1B (ENG 102)	3
	Gen. Ed. 1A (ENG 101)	3	Gen. Ed. 1C (Oral Comm.)	3
	Gen. Ed. 3A (Arts)	3	Gen. Ed. 5B	3
	TOTAL	15	TOTAL	17
Sophomore Year	CHE 250	2	CHE 325	3
	CHE 361	3	CHE 325L	2
	CHE 361L	1	CHE 362	3
	MAT 254	4	CHE 362L	1
	¶ PHY 201 (fulfills Gen. Ed. 4)	5	CHE 385W	3
			PHY 202	5
	TOTAL	15	TOTAL	17
Junior Year	¶ BIO 111 (fulfills Gen. Ed. 4)	4	CHE 411, 432, 495A/B, <u>or</u> 501L	1
	CHE 425	3	CHE 430	3
	CHE 425L	1	CHE 575	3
	CHE 574	1	CHE 575L	1
	CHE 574L	1	Gen. Ed. 6 (Diversity)	3
	Gen. Ed. 6 (Diversity)	3	Gen. Ed. 5A	3
	TOTAL	15	TOTAL	14
Senior Year	CHE 484	1	CHE 485	1
	CHE 450	3	CHE 515 (ACCT)	5
	‡ CHE/FOR (400/500 level)	3	Free Elective	3
	Gen. Ed. 3B	3	Free Elective	3
	Free Elective	3		
	Free Elective	2		
	TOTAL	15	TOTAL	12
HOURS TO DEGREE COMPLETION				120

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division CHE courses. MAT 122 (see § below), 234, 244; PHY 201.

§ A preparatory course in mathematics (MAT 122) may be required before admission to MAT 234.

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100C	Student Success Seminar for Chemistry (1)
CORE COURSE REQUIREMENTS (26)	
{ 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 250	Descriptive Inorganic Chemistry (2)
{ CHE 325	Analytical Chemistry (3)
{ CHE 325L	Analytical Chemistry Lab (2)
{ 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)
<i>Bracketed items must be taken concurrently.</i>	
ACS CHEMISTRY CONCENTRATION REQUIREMENTS (29)	
CHE 385W	Chemical Literature (writing intensive) (3)
{ CHE 425	Instrumental Analysis (3)
{ CHE 425L	Instrumental Analysis Lab (1)
CHE 450	Inorganic Chemistry (3)
CHE 484	Chemistry Colloquium (1)
CHE 485	Chemistry Seminar (1)
CHE 515	Synthetic & Analytical Methods (5)
{ CHE 574	Physical Chemistry I (3)
{ CHE 574L	Physical Chemistry Lab I (1)
{ CHE 575	Physical Chemistry II (3)
{ CHE 575L	Physical Chemistry Lab II (1)
† PLUS ONE (1) HOUR selected from the following (Lab elective):	
CHE 411	Practicum (1)
CHE 432	Biochemistry Laboratory (1)
CHE 495A	Independent Chemical Research (1)
CHE 495B	Chemistry Lab. Independent Res. (1)
CHE 501L	Chemtopics Lab (1)
‡ PLUS THREE (3) HOURS from either 400 or 500 level CHE or FOR electives. (At least 3 hours of CHE 495A and/or 495B is recommended).	
ACS CHEMISTRY SUPPORTING COURSE REQUIREMENTS (17)	
¶ BIO 111	Cell and Molecular Biology (4)
* § MAT 234	Calculus I (4)
* MAT 244	Calculus II (4)
* MAT 254	Calculus III (4)
* § PHY 201	University Physics I (5)
* PHY 202	University Physics II (5)
<i>For ACS certification, PHY 201(5) and PHY 202(5) along with additional courses in calculus, MAT 244(4) and MAT 245(4) or are required.</i>	
FREE ELECTIVES (11)	

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

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: Chemistry majors will fulfill ACCT with: CHE 411, 495A, 495B, 515, or CED 499