

Four Year Graduation Plan – Courses & Critical Benchmarks:

The following is a sample course of study. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement. For more information see the University Catalog at umkc.edu/catalog.

Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. Critical Courses and minimum recommended grades (as noted below) provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Please Note: Students who do not place into MATH 110 Precalculus Algebra or higher may have to complete preparatory math coursework, potentially adding hours to the total hours required for the degree.

First Math Course:	MATH 110 Precalculus Algebra OR MATH 120 Pre-Calculus	Foreign Language Requirement:	No	General Elective Hours:	59
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Critical Course	Course Subject, Number, & Title and Academic Plan Benchmarks Bold = UMKC General Education Core requirement ** Co-Requisite Enrollment Required	Min. Recom. Grade	Credit Hours	Notes
Fall Semester Year 1: 15-17 hours				
◆	**CHEM 211 + 211L General Chemistry I with Lab (Focus B)	B	5	1 Enrollment restricted. Must take ALEKS Math Placement Exam or show prerequisite requirement has been met prior to enrolling.
◆	MATH 110 Precalculus Algebra ¹ (Focus Elective) OR MATH 120 Pre-Calculus ¹ (Focus Elective)	B	3-5	
	**Anchor I Reasoning & Values Click for options		3	A grade of B (3.00) or higher in Chemistry & Mathematics courses is a realistic benchmark for students to successfully complete a chemistry degree. A grade of C- or higher is required to satisfy major requirements.
	**DISC 100 Reasoning & Values (Speech & Writing) Click for options		3	
	BIOLOGY 115 First Year Seminar (Recommended elective)		1	
Complete 15+ credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Spring Semester Year 1: 15-16 hours				
◆	**CHEM 212R + 212LR General Chemistry II with Lab	B	5	Register for UMKC Handshake career network .
◆	MATH 210 Calculus I OR STAT 235 Elementary Statistics	B	3-4	
	BIOLOGY 250 Careers in Biology/Chemistry I (Recommended elective option)		1	Students who are planning to complete their degree in 4-years should aim to average at least 30 credit hours per academic year (Fall, Spring, Summer) to stay on track.
	**Anchor II Culture & Diversity Click for options		3	
	**DISC 200 Culture & Diversity (Speech & Writing) Click for options		3	
Complete 15+ credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Summer Semester Year 1: 0-4 hours				
◆	MATH 210 OR STAT 235 (if not previously completed)	B	3-4	Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
Complete Math Requirement Complete Anchor I & DISC 100 Complete at least 30 total credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				

Fall Semester Year 2: 17 hours				
◆	**CHEM 321 + 321L Organic Chemistry I with Lab	B	4	Take the RooWriter Assessment after completing DISC 200. Must complete prior to enrolling in a Writing Intensive (WI) course.
◆	PHYSICS 210 General Physics I	B	4	
	General Elective		3	
	General Elective		3	
	General Elective		3	
Complete 17 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Spring Semester Year 2: 14 hours				
◆	**CHEM 322R + 322L Organic Chemistry II with Lab	B	4	Students planning to continue their education in professional or graduate programs should meet with their advisor to discuss application timelines and requirements.
	PHYSICS 220 General Physics I		4	
	General Elective		3	
	General Elective		3	
Complete 14 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Summer Semester Year 2: 0 hours				
Complete Anchor II & DISC 200 Complete RooWriter Assessment Complete at least 60 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
Fall Semester Year 3: 13 hours				
	**Anchor III Civic & Community Engagement Click for options		3	² Helps prepare students for application to internships, graduate programs, or employment. Skills assessment, resume development, opportunity identification, application, interview, and letters of evaluation are discussed.
	**DISC 300 Civic & Community Engagement (Speech & Writing) Click for options		3	
	General Elective		3	
	General Elective		3	
	BIOLOGY 201 ² Preparing for Careers in Biology/Chemistry (Recommended elective option)		1	
Complete 13 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Spring Semester Year 3: 15 hours				
	Focus A Arts & Humanities Click for options		3	³ HISTORY 101, 102, & POL-SCI 210 fulfill both the Focus C & Missouri Constitution requirement .
	Focus C Human Actions, Values, & Ethics HISTORY 101, 102, or POL-SCI 210 recommended ³ Click for options		3	
	General Elective (300/400 level)		3	
	General Elective		3	
	General Elective		3	
Complete 15 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				
Summer Semester Year 3: 0 hours				
Complete Anchor III & DISC 300 Complete at least 90 credit hours towards degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA				Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.

Fall Semester Year 4: 16 hours			
	CHEM 341WI Analytical Chemistry I		4
	CHEM 3XX/4XX Major Elective		3
	General Elective (Complete MO Constitution Requirement if not met above ³)		3
	BIOLOGY 397 Experience Based Education OR General Elective (300/400 level)		3
	General Elective (300/400 level)		3
Complete 16 credit hours toward degree Maintain minimum 2.00 UM cumulative GPA and UM Chemistry GPA			
Spring Semester Year 4: 12-15 hours			
	CHEM 3XX/4XX Major Elective		3
	General Elective (300/400 level)		3
	General Elective (300/400 level)		3
	BIOLOGY 397 Experience Based Education OR General Elective (300/400 level)		3
	General Elective (Only if needed to reach 120 hours)		0-3
Earn minimum 2.00 UM cumulative GPA and UM Chemistry GPA Complete a minimum of 120 total hours toward degree			

[Apply for graduation](#) & complete your Final Degree Audit for Major and Minor (if applicable).
Take the [HElghten](#) exit exam.

Graduation Requirements Summary					
Total Hours	Total Hours at UMKC	Upper Lvl Hrs in Major at UMKC	Upper (300 / 400) Level Hours	Major GPA	UMKC GPA
120 minimum	30 minimum	12 minimum	36 minimum	2.00 minimum	2.00 minimum

Other Information

A minimum of 30 hours must be earned at the University of Missouri-Kansas City, regardless of the number and level of hours earned at another institution. Undergraduate degree-seeking students are required to earn credit in at least 36 hours of coursework numbered 300 and above at UMKC. In the case of transfer credit, the coursework must be numbered as junior-senior level work by the transferring institution. Community-college transfer coursework cannot count towards the 36-hour requirement.

Non-course Requirements

Missouri Higher Education Civics Achievement Examination _____
 RooWriter Assessment _____
 HElghten exit exam _____

Policy

The University reserves the right to make changes in courses and course schedules. Students are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the program. Students are expected to maintain academic standards, perform satisfactorily in courses, refrain from academic dishonesty, comply with the established University requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

Advising Contact Information

School of Biological Sciences Academic Support
SBS-undergrad@umkc.edu
<https://sbc.umkc.edu/current-students/academic-advising.html>
 816-235-2580

Career Opportunities

UMKC Career Services – career.umkc.edu | 816-235-1636 | 2nd Floor, Atterbury Student Success Center.

O*Net OnLine – OnetOnline.org Learn about careers related to your major, income potential, and more.