

Four-Year Graduation Plan - Courses and 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. **All incoming freshmen must develop an academic plan (which maps out all courses needed to graduate within your intended major/degree). Your academic advisor is available to meet with you and create your specific plan.**

Your path to graduation may vary slightly 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.



First Math	MATH 210: Calculus I , MATH 216: Biomath I, or STAT 235: Statistics	Foreign Language Requirement	No	Free Elective Hours	Minimum of 15
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Critical Course or Benchmark	Course Subject, Number, and Title and Academic Plan Benchmarks Bold = UMKC General Education Core Requirement *Prerequisite May Be Required **Co-Requisite Enrollment Required	Min Recom Grade	Credit Hours (CH)	Notes
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Fall Semester Year 1: 15 hours

	**Anchor I: Reasoning and Values Click for options		3	BIOLOGY 102 is a non-majors biology course but may be recommended for students needing additional background in biology. Students should plan for summer enrollment to remain on track. A grade of B or higher in biology, chemistry, and math courses is a realistic benchmark for students to successfully complete a biology degree. ALEKS Math Placement Exam or college credit with a grade of C- or higher in prerequisite required prior to enrollment in MATH 110 and MATH 120. Students must earn a grade of C- or higher for courses to satisfy majors requirements.
	**DISC 100: Reasoning and Values (Speech and Writing)		3	
	BIOLOGY 102: Biology And Living OR BIOLOGY 108: General Biology I OR BIOLOGY 109: General Biology II	B B B	3 3 3	
	BIOLOGY 108L: General Biology I Laboratory OR BIOLOGY 109L: General Biology II Laboratory	B B	1 1	
	MATH 110: College Algebra OR MATH 120: Precalculus OR MATH 210: Calculus I OR CHEM 211: General Chemistry I AND CHEM 211L: Experimental General Chemistry I	B B B B B	3 5 4 4 1	
	BIOLOGY 115: First Year Seminar		1	
	Complete 12 term hours minimum toward degree Earn 2.250 minimum UM GPA Earn 2.250 minimum UM Biology GPA			

Spring Semester Year 1: 15-17 hours


	BIOLOGY 108: General Biology I OR BIOLOGY 109: General Biology II	B B	3 3	Register for UMKC Roo Career Network
	BIOLOGY 108L: General Biology I Laboratory OR BIOLOGY 109L: General Biology II Laboratory	B B	1 1	Students who are planning to complete their degree in 4-years should aim to complete a minimum of 30 credit hours per academic year (Fall, Spring, Summer).
	CHEM 211: General Chemistry I AND CHEM 211L: Experimental General Chemistry I OR CHEM 212R: General Chemistry II AND CHEM 212LR: Experimental General Chemistry II	B B B B	4 1 4 1	

UMKC Major Map: Bachelor of Science in Biology (Clinical Laboratory Sciences)


First-Time College Students

Catalog Year: 2015 - 2016



MATH 210: Calculus I OR	B	4
MATH 216: Calculus for Biological Sciences OR	B	4
STAT 235: Elementary Statistics	B	3

 Complete Anchor I and DISC 100 Complete 12 term hours minimum toward degree Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA



Summer Semester Year 1: 0 hours if previous courses completed

				May use summer semester to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
 Complete BIOLOGY 108: General Biology I Complete BIOLOGY 108L: General Biology I Laboratory Complete BIOLOGY 109: General Biology II Complete BIOLOGY 109L: General Biology II Laboratory Complete CHEM 211: General Chemistry I Complete CHEM 211L: Experimental General Chemistry I Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA Complete 30 total hours toward degree				

Fall Semester Year 2: 15 hours

	**Anchor II: Culture and Diversity Click for options		3	HISTORY 101, 102 or POL-SCI 210 recommended for Focus C and Constitution Requirement.
	**DISC 200: Culture and Diversity (Speech and Writing)		3	
 BIOLOGY 202: Cell Biology OR BIOLOGY 206 Genetics	B B	3 3		
	PHYSICS 210: General Physics I OR PHYSICS 240: Physics For Scientists and Engineers I	B B	4 5	
	Focus Elective (A or C) Click for options		3	
 Complete 12 term hours minimum toward degree Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA				

Spring Semester Year 2: 15-16 hours


 BIOLOGY 202: Cell Biology OR BIOLOGY 206 Genetics	B B	3 3	When designing a plan of study please note that students must choose a minimum of three (3) hours from the following: <BIOLOGY 328: Histology <BIOLOGY 328L/WL: Laboratory In Histology And Cellular Ultrastructure <LS-ANATO 118: Introductory Anatomy <LS-ANATO 118L: Introductory Anatomy Laboratory <LS-MCRB 431: Virology <LIFE-SCI 401: Biophysical Principles <LS-BIOC 360L/WL: Laboratory In Biochemistry And Molecular	
	CHEM 320: Elementary Organic Chemistry AND CHEM 320L: Experimental Organic Chemistry	B B		4 1
	PHYSICS 220: General Physics II OR PHYSICS 250: Physics For Scientists and Engineers II	B B		5 4
	Focus Elective (A or C) Click for options			3
 Complete Anchor II and DISC 200 Complete CHEM 320: Elementary Organic Chemistry Complete CHEM 320L: Experimental Organic Chemistry Complete 12 term hours minimum toward degree Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA				

Biology


Summer Semester Year 2: 0 hours if all previous courses completed

				May use summer semester to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.
	Complete 60 total hours toward degree			

Fall Semester Year 3: 15 hours

	LS-BIOC 341: Basic Biochemistry	B	3	Apply to Clinical Affiliate Program.
	LS-PHYS 316: Principles of Physiology	B	3	
	LS-MCRB 313: Microbiology	B	3	
	LS-MCRB 313WL: Laboratory In Microbiology	B	3	File an Application for Graduation.
	Elective		3	Students must complete RooWriter Writing Assessment prior to enrolling in a Writing Intensive Course.
	Complete RooWriter Assessment Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA			Students must complete a Writing Intensive course in the School of Biological Sciences.

Spring Semester Year 3: 13 hours

	**Anchor III: Community & Civic Engagement Click for options		3	
	**DISC 300: Community & Civic Engagement (Speech and Writing)		3	
	LS-MCRB 435: Immunology	B	3	
	CHEM 341: Analytical Chemistry I: Quantitative Analysis	B	4	
	Complete Anchor III and DISC 300 Earn 2.250 minimum cumulative UM GPA Earn 2.250 minimum cumulative UM Biology GPA			

Summer Semester Year 3: Clinical hours

	Clinical Program at Affiliate Hospital			Successful completion of the Clinical Program will count as ten (10) hours of upper level Biology course work and twenty (20) additional hours of upper level course work. Successful completion of the Clinical Program satisfies the Biology Synthesis Requirement.
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Fall Semester Year 4: Clinical hours

	Clinical Program at Affiliate Hospital		
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Spring Semester Year 4: Clinical hours

	Clinical Program at Affiliate Hospital		
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	Complete ETS Proficiency Profile		
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Earn 2.250 minimum cumulative UM GPA
 Earn 2.250 minimum cumulative UM Biology GPA

Graduation Requirements Summary

Total Hours (120 minimum)	Total Hours at UMKC (30 hours min)	Major GPA	UMKC GPA
120	30	2.00	2.00

Other Information

Non-course requirements
 RooWriter Assessment

Met

The School reserves the right to make changes in courses, degree requirements and course schedules without notice.

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 and teacher education timetables and 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
 816-235-2580
 SBS-undergrad@umkc.edu
http://sbs.umkc.edu/undergraduate_support.cfm

Career Opportunities

UMKC Career Services Resources: <http://www.career.umkc.edu/?q=node/87>
 O*Net OnLine: <http://www.onetonline.org/find/>