



Major Map: BS Biology (Bioinformatics)

Catalog year: 2009-2010

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.

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.

Course Subject and Title	Hrs.	Upper Division	Transfer Course	Minimum Grade if Required	Date Completed	Final Grade	Pre-requisites met	Additional Critical Tracking Notes
Fall Semester Year 1: <u> 13 </u> hours								
BIOLOGY 108 General Biology I	3			C-				BIOLOGY 108 and 109 may be taken in any order
BIOLOGY 108L General Biology I Lab	1			C-				
CHEM 211 General Chemistry I	4			C-				
CHEM 211L General Chemistry I Lab	1			C-				
GER* (ex. COMM-ST 110)	3							
BIOLOGY 115 First Year Seminar	1							
Spring Semester Year 1: <u> 15 </u> hours								
BIOLOGY 109 General Biology II	3			C-				
BIOLOGY 109L General Biology II Lab	1			C-				
CHEM 212R General Chemistry II	4			C-				
CHEM 212LR General Chemistry II Lab	1			C-				
STAT 235 Elementary Statistics	3			C-				
CS 101 Problem Solving & Program I	3			C-				
Summer Semester Year 1								
May use summer semester to lighten fall and winter course loads.								
Fall Semester Year 2: <u> 17 </u> hours								
BIOLOGY 202 Cell Biology	3			C-				Math 210 requires a score of 15 or better on the Mathematics Entrance Exam to enroll
CHEM 321 Organic Chemistry I	3			C-				
CHEM 321L Organic Chemistry I Lab	1			C-				
MATH 210 Calculus I	3			C-				
GER (ex. English 110)	3							
GER (ex. Constitution Requirement)	3							
Spring Semester Year 2: <u> 14 </u> hours								
BIOLOGY 206 Genetics	3			C-				
CHEM 322R Organic Chemistry II	3			C-				
CHEM 322LR Organic Chemistry II Lab	1			C-				
MATH 220 Calculus II	4			C-				
CS 191 Discrete Structures I	3			C-				
GER (ex. English 225)								
Summer Semester Year 2: <u> </u> hours								
Fall Semester Year 3: <u> 16-17 </u> hours								
LS BIOC 341 Basic Biochemistry	3			C-				Complete WEPT Apply for Graduation
BIOLOGY 405 Intro to Evolution	3			C-				
PHYSICS 210 General Physics I Or PHYSICS 240 Physics Science Eng I	4-5			C-				
CS 201 Problem Solving & Program II	3			C-				
GER (ex. Humanities)	3							
*GER=General Education Requirement								



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Spring Semester Year 3: <u>14-15</u> hours								
LS BIOC 360WL Biochemistry & Molecular Biology Lab	3			C-				
LS BIOC 430 Molecular Biology & Genetic Engineering	3			C-				
PHYSICS 220 General Physics II Or PHYSICS250 Physics Science Eng II	4-5			C-				
Elective	3							
Summer Semester Year 3: <u> </u> hours								
Fall Semester Year 4: <u>15</u> hours								
Biology Elective	3			C-				Take MAPP Exam
Biology Elective	3			C-				
Biology Lab Elective	3			C-				
GER (ex. Social & Behavioral Science)	3							
GER (ex. Fine Art)	3							
Spring Semester Year 4: <u>15</u> hours								
Biology Synthesis	3			C-				Take Major Field Exam
LS BIOC 425 Bioinformatics	3			C-				
Biology Elective	3			C-				
GER (ex. Social & Behavioral Science)	3							
Elective	1							

Non-course requirements

Written English Proficiency Test (WEPT)
Major Field Exam (MFE)
Measure of Academic Proficiency and Progress (MAPP)

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 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.

Graduation Requirements Summary:

Biology Hours: 42 minimum, 26 of which are Upper Level (300-400 level)	Totals Hrs from UMKC School of Biological Sciences: 21 minimum	Writing Intensive Course Required	UMKC Biology GPA: 2.0 minimum
Total Hours: 120 minimum, 36 of which are Upper Level (300-400 level)	Totals Hrs at UMKC: 30 hours minimum	Math and Science hours: 60 minimum	UMKC GPA: 2.0 minimum

All students completing an undergraduate biology degree must meet the above conditions in order to graduate and be recommended for graduation.

Academic Advisor: _____ Date: _____

Director of Curriculum: _____ Date: _____