

**Major Map: Geology B.A.**  
**First-time College Students**  
**Catalog Year: 2013-2014**

**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 of checking prerequisites to any courses. Critical Courses (and Min. Grades as noted below) provide feedback regarding major fit and help indicate the likelihood of successful completion of chosen academic program and degree.*

**Mathematics: Math 110 or MATH 116, or 200-level MATH/STAT      Foreign Language Requirement: Yes      Free Elective Hours: 16-27**

Critical Course or Benchmark ◆	Course Subject, Number, and Title and Academic Plan <b>Benchmarks</b> <b>Bold = UMKC General Education Core Requirement</b> *Prerequisite May Be Required **Co-Requisite Enrollment Required	Hours	Min. Recommended Grade	Notes
<b>Fall Semester Year 1: 16 hours</b>				
	<b>**Anchor I: Reasoning and Values</b> – Click for Options	3		⚙️BIOLOGY 108: General Biology is required for the Geology B.A., but High School Biology satisfies this requirement.
	<b>**Discourse I: DISC 100 – Reasoning and Values</b> (Speech and Writing)	3		
◆	<b>** GEOLOGY 220: General Geology (Focus B – Scientific Reasoning &amp; Quantitative Analysis)</b>	3	C	
◆	<b>** GEOLOGY 220L: General Geology Laboratory (CAS Laboratory Requirement)</b>	2	C	
	⚙️BIOLOGY 108: General Biology I ( <b>Focus Elective</b> ) or Free Elective (if already fulfilled by high school credit)	3		
◆	Complete 12 term hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
<b>Spring Semester Year 1: 16-17 hours</b>				
	<b>**Anchor II: Culture and Diversity - Click for Options</b>	3		Math Entrance Exam required prior to enrollment in several MATH/STAT courses, including Math 110.
	<b>**Discourse II: DISC 200 - Culture and Diversity</b> (Speech and Writing)	3		
◆	GEOG 203: Introduction to GIS	4	C	⚙️MATH 110 will fulfill <b>Focus Elective</b> if Biology is satisfied by high school credit.
	<b>Focus A – Arts &amp; Humanities</b> – Click for Options	3		
	⚙️MATH 110: College Algebra (CAS Science & Math Requirement) OR Foreign Language Requirement (110 or higher) – Click for Options	3-5		
◆	Complete 12 term hours minimum toward degree Complete Discourse I and Anchor I Complete 28 total hours minimum toward degree Earn minimum 2.000 term GPA			Foreign Language is required for all B.A. degrees in the College of Arts and Sciences; The <a href="#">foreign language placement exam</a> is highly recommended to ensure placement in the correct level.

	Earn minimum 2.000 cumulative UM GPA			
Summer Semester Year 1				
◆	Complete at least one Foreign Language course (110 or higher) Complete MATH 110: College Algebra			
Fall Semester Year 2: 14-16 hours				
	GEOLOGY 250L: Field Methods in Earth and Environmental Science OR Free Elective	3	C	Take the <b>RooWriter Writing Assessment</b> the semester immediately following Discourse II and at least a semester before registering for a Writing Intensive course.
	GEOLOGY 325: Sedimentology/Stratigraphy	4	C	
	PHYSICS 210: General Physics I (CAS Science & Math Requirement)	4		
	Foreign Language Requirement (120 or higher) – Click for Options	3-5		
◆	Complete 12 term hours minimum toward degree Complete 60 total hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Spring Semester Year 2: 14-15 hours				
	GEOLOGY 251: Field Methods in Earth and Environmental Science (if GEOLOGY 250L not taken above) OR Free Elective	3-4		
	Foreign Language (211 or higher) – Click for Options	3		
	CAS Arts & Humanities – Click for Options	3		
	**CHEM 211: General Chemistry I (CAS Science & Math Requirement)	4		
	**CHEM 211L: General Chemistry I Laboratory	1		
◆	Complete Discourse II and Anchor II Complete Foreign Language Requirement (211 or higher) Complete 60 total hours toward degree Earn 2.0 minimum Cumulative Grade Point Average			
Summer Semester Year 2				
				GEOLOGY 490 may be taken Summer Semester Year 2 by permission
Fall Semester Year 3: 13 hours				
	GEOLOGY 312: Mineralogy	4		POL-SCI 210, HIST 1100 or 1101 fulfill <b>Focus C</b> as well as the Constitution requirement.  Math Entrance Exam required prior to enrollment in STAT 235.
	<b>Focus C – Human Values &amp; Ethical Reasoning</b> – Click for Options (May choose Focus C Course to also fulfill MO Constitution Requirement)	3		
	STAT 235: Elementary Statistics	3		
	Missouri Constitution course (if not fulfilled by above) – Click for Options OR other CAS Social & Behavioral Sciences Requirement – Click for Options	3		
◆	Complete RooWriter Writing Assessment Complete 12 term hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Spring Semester Year 3: 13-14 hours				
	<b>Discourse III: Civic and Community Engagement</b>	3		
	<b>Anchor III: Civic and Community Engagement</b> — Recommended: GEOLOGY 327: Archaeology of Ancient Disasters	3		

	GEOLOGY 350: Earth Structures and Tectonics	4		
	GEOLOGY 313: Evolution and the Geologic Record OR GEOLOGY 314: Geomorphology OR GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4		
<b>Summer Semester Year 3: 6 hours</b>				
	Complete GEOLOGY 490: Geology Field Camp (offered even years)			
<b>Fall Semester Year 4: 15-16 hours</b>				
	GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4		Apply for graduation and complete Final Degree Audits for the following: UMKC General Education Core, CAS Degree Requirements, Major Requirements, and/or Minor Requirements.  Take the ETS Proficiency Profile (EPP) exit exam.
	CAS Social & Behavioral Sciences Requirement - Click for Options	3		
	CAS Arts & Humanities – Click for Options	3		
	Free Elective	3		
	Free Elective	3		
<b>Spring Semester Year 4: 8-13 hours</b>				
	GEOLOGY 499WI: Geology Seminar (CAS Writing Intensive Requirement)	3		In combination with required upper-level courses, take enough Free Elective hours at the 300/400-level to meet the minimum requirement of 36 upper-level credit hours.
	GEOLOGY 313: Evolution and the Geologic Record (if not taken above) OR GEOLOGY 314: Geomorphology OR GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4		
	Free Elective	2		
	<i>Free Elective (only take these credits if needed to reach 120 minimum hours)</i>	0-5		

**Non-course requirements**

RooWriter Writing Assessment  
ETS Proficiency Profile (EPP) exam

**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.

**Graduation Requirements Summary:**

Total Hours (120 minimum)	Totals Hrs at UMKC (30 hours minimum)	Upper-level Hours (36 minimum)	Major GPA (2.0 Minimum)	UMKC GPA

All students completing an undergraduate education degree must meet the following conditions in order to graduate and be recommended for graduation or certification:

- [list of requirements as stated in the catalog pertaining to minimum GPA, capstone coursework, additional licensure exams, etc.]

## Program Description

The UMKC Undergraduate Geology degree program educates students on fundamental geologic concepts, provides training in field and laboratory techniques and problem solving, and prepares students for careers as professional geoscientists. Through course work instruction, field experiences, and mentoring, students develop an understanding of Earth materials and the underlying principles and dynamic processes that change the Earth through time. The geology curriculum emphasizes developing the ability to collect and interpret field data as well as familiarity with mapping techniques and laboratory analyses, as these are vital components of training for all geologists.

## Admission Requirements

The Admissions requirements for the Geology B.A. are the same as the requirements for admission to UMKC. However, the department prefers students to have a high school degree that includes three to four years of math, three to four years of science including at least one Biology course, and at least two years of a foreign language.

## Career Opportunities

The US Department of Labor and Statistics projects excellent job opportunities for geoscientists for the next 15 years. Current rates of retirement of geologists exceed the production of new geologists, suggesting an increasing need for geoscientists in the coming years. Career opportunities for geologists include employment in academics, government, and industry in diverse fields such as oil and gas exploration and production, water resources, mining, and environmental geology and work for the U.S. Army Corps of Engineers, U.S. Geological Survey, petroleum and mining companies, and a large number of geotechnical engineering and environmental firms.

## Contact Information

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