

## Major requirements to complete a degree in Geology (1998-2010)

Course No.	Hrs.	Course Name	Prerequisite
CHEM 200, 201	3, 1	Intro to Chemical Principles + Lab	high school algebra and chemistry
CHEM 210, 211	3, 1	General and Inorganic Chem + Lab	CHEM 200, 201 with C or better
PHYS 203A, 253A	3, 1	College Physics I + Laboratory	MATH 109
GEOL 220 or 222	3	The Dynamic Earth or Environmental Geology (Fall)	
GEOL 221	3	Earth Through Time (Spring)	
GEOL 223	1	Introductory Geology Laboratory	co-requisite: GEOL 220 or 222
GEOL 224	1	Earth Through Time Laboratory	co-requisite: GEOL 221
GEOL 302	4	Fundamentals of Structural Geology I	GEOL 220, MATH 111; PHYS recommended
GEOL 310	4	Mineralogy	GEOL 220 or 222; 223; CHEM 200, 201
GEOL 315	4	Petrology	GEOL 310
GEOL 325	4	Sedimentology and Stratigraphy	GEOL 220 or 222; 221, 223, 224, 310

### **Additional course for the B.A. degree to total 38-42 hours**

GEOL 450 or 454      2 or 6      Introduction to Field Geology or Field Geology

### **Additional courses for the B.S. degree to total 59-60 hours**

MATH 150	4	Calculus I	MATH 111 or equivalent with C or better
PHYS 203B, 253B	3,1	College Physics II + Lab	PHYS 203A with grade of C or better
GEOL 454	6	Field Geology	GEOL 302, 315; 450 recommended

Plus complete three courses from one of the following specializations for the B.S. degree.

#### **Geology Specialization**

GEOL 412-3      Advanced Petrology  
 GEOL 418-3      Low Temperature Geochemistry  
 GEOL 425-3      Inver Paleontology and Paleoecology  
 GEOL 474-3      Geomorphology  
 GEOL 481-3      Sedimentary Basin Analysis

Only one of the following may be used:

GEOL 435-3      Solid Earth Geophysics  
 GEOL 436-3      Elementary Exploration Geophysics  
 GEOL 466-3      Tectonics

#### **Geophysics Specialization**

GEOL 435-3      Solid Earth Geophysics  
 GEOL 436-4      Elementary Exploration Geophysics  
 GEOL 437-3      Field Course in Geophysics  
 GEOL 466-3      Tectonics

#### **Environmental Geology Specialization**

GEOL 418-3      Low Temperature Geochemistry  
 GEOL 421-3      Organic Geochemistry  
 GEOL 434-3      Engr and Environmental Geophysics  
 GEOL 474-3      Geomorphology  
 GEOL 476-3      Quaternary Geology  
 GEOL 478-3      Advanced Environmental Geology  
 GEOL 470, 471-3,1      Hydrogeology + Laboratory

#### **Resource Geology Specialization**

GEOL 418-3      Low Temperature Geochemistry  
 GEOL 419-3      Ore Deposits  
 GEOL 420-3      Petroleum Geology  
 GEOL 421-3      Organic Geochemistry  
 GEOL 480-3      Geology of Coal  
 GEOL 482-3      Coal Petrology

Plus complete 11-12 hours of electives in Geology Science Technology for the B.S. degree. These are usually 300-400 level science courses and must be approved by the student's Geology faculty advisor.

**Supportive Skills** - at least 6 credit hours chosen from: CS 105 or 200B or 201 or 202; ENGL 290 or 291; MATH 282; a year of foreign language.

**Geology majors must see their department advisor before registering for EACH semester.** The Department of Geology is located in Parkinson 102, phone 618-453-3351, fax 618-453-7393, email [geology@geo.siu.edu](mailto:geology@geo.siu.edu) Make an appointment with your Geology faculty advisor by calling the department.

The College of Science Advisement office is located in Neckers A185, phone 618-536-5537, fax 618-453-7067, email us at [advise@cos.siu.edu](mailto:advise@cos.siu.edu), or see our web site at <http://www.science.siu.edu/advisement/index.html> The College of Science advisors are Dana McKenzie, Jean McPherson and Becky Reed.

Updated 5/6/09