

# MILLERSVILLE UNIVERSITY

Student Name: \_\_\_\_\_ Student I.D.# \_\_\_\_\_

DEGREE: BS	<b>MAJOR REQUIREMENTS FOR A BS DEGREE IN GEOLOGY</b> Total credit hours required: 120.0 minimum
MAJOR: GEOL	
OPTION:	

## REQUIREMENTS AND POLICIES FOR THE BS GEOLOGY MAJOR

### A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Geology major by the Office of Admissions upon admission to the University.
2. Admission into the Geology major from other departments is upon approval of the chair person of the Earth Sciences Department.
3. Non-degree and continuing education students must be admitted to the Geology major by the Office of Admissions.

### B. Policies for Retention in the Major

In order to remain a major in good academic standing in the Department of Earth Sciences, a student must earn a grade of at least a C- in the following courses: MATH 161, CHEM 111, PHYS 131 or 231, ESCI 221, and ESCI 222.

### C. Policies for Completion of the Major

Completion of all Departmental and University curricular requirements.  
No more than one "P" or "D" course can be counted toward major requirements.  
Per University policy, cumulative GPA in major courses must be 2.0 or higher.

**Note to the student:** *This form is provided as a guide. It is your responsibility to consult regularly with your advisor to be aware of changes and curriculum details which are not incorporated on this form.*

## MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BS GEOLOGY**

Option:

Major Field Requirements: **41.0-44.0 credits**

Other Requirements: **23.0-26.0.0 credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

Course No.	Short Title	C.H.	Grade	Course No.	Short Title	C.H.	Grade
<b>REQUIRED EARTH SCIENCES COURSES (32.0-35.0 credits)</b>				<b>REQUIRED RELATED (23.0-26.0.0 credits)</b>			
ESCI	221 Physical Geology	4.0	_____	<b>Mathematics and Computer Science (7.0-8.0 credits)</b>			
ESCI	222 Historical Geology	4.0	_____	MATH	161 Calculus I	4.0	_____
ESCI	321 Structural Geology	3.0	_____	---AND---			
ESCI	326 Sedimentation & Stratigraphy	4.0	_____	Choose one course from the following:			
ESCI	327 Mineralogy	4.0	_____	MATH	211 Calculus II	4.0	_____
ESCI	328 Petrog./Ign.-Met. Petrol. (W)	4.0	_____	MATH	235 Survey of Statistics	3.0	_____
ESCI	421 Advanced Geology (W)	2.0	_____	CSCI	161 Intro. to Programming I	4.0	_____
ESCI	422 Geologic Field Mapping	3.0-6.0	_____	ESCI	282 FORTRAN for Erth Sci Apps	3.0	_____
ESCI	423 Geophysics	3.0	_____	ESCI	446 Statistical Meteorology	3.0	_____
ESCI	424 Geology Assessment Exam	1.0	_____	NOTE: some graduate programs may require MATH 211 and/or MATH 235.			
<b>GEOLOGY ELECTIVES (9.0 credits)</b>				<b>Physics (8.0-10.0 credits)</b>			
Choose three courses from the following:				PHYS	131 Physics I with Algebra	4.0	_____
ESCI	225 Geomorphology	3.0	_____	PHYS	132 Physics II with Algebra	4.0	_____
ESCI	226 Geology of Earth Resources	3.0	_____	---OR---			
ESCI	322 Environmental Hydrology	3.0	_____	PHYS	231 Physics I with Calculus	5.0	_____
ESCI	329 Aqueous Geochemistry (W)	3.0	_____	PHYS	232 Physics II with Calculus	5.0	_____
ESCI	382 Water Wars (P)	3.0	_____	NOTE: some graduate programs may require PHYS 231/232.			
ESCI	426 Groundwater Geology	3.0	_____	<b>Chemistry (8.0 credits)</b>			
ESCI	427 Field Studies of Mtn Belts (W)	3.0	_____	CHEM	111 Introductory Chemistry I	4.0	_____
ESCI	428 Planetary Geology (W)	3.0	_____	CHEM	112 Introductory Chemistry II	4.0	_____
ESCI	281 GIS Applications for ESCI	3.0	_____				
---OR---							
GEOG	295 Geographic Info. Systems	3.0	_____				