

# MILLERSVILLE UNIVERSITY

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

DEGREE: BSE	<b>MAJOR REQUIREMENTS FOR A BSE DEGREE IN EARTH SCIENCES</b>
MAJOR: ESCI	Total credit hours required: 126.0 minimum
OPTION:	

## REQUIREMENTS AND POLICIES FOR THE BSE EARTH SCIENCES MAJOR

### A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Earth Sciences major by the Office of Admissions upon admission to the University.
2. Admission into the Earth Sciences major from other departments is upon approval of the chairperson of the Earth Sciences Department.
3. Non-degree and continuing education students must be admitted to the Earth Sciences 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, ESCI 221, ESCI 241, ESCI 261.

### C. Policies for Completion of the Major

Completion of all Departmental and University curricular requirements.

### D. Admission to Advanced Professional Studies and Certification (Education Majors)

All students enrolled in teacher preparation programs must be admitted to Advanced Professional Studies and meet Pennsylvania State requirements and university requirements prior to being enrolled in their initial Advanced Professional Studies course. Students must meet additional Pennsylvania State requirements in order to be certified. A listing of Advanced Professional Studies courses and requirements is available in each department office, the Early Field Experience office, and on the Early Field Experience website.

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

## MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BSE EARTH SCIENCES**

Option:

Major Field Requirements: **28.0 credits**

Other Requirements: **63.0 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	Q.P.	Course No.	Short Title	C.H.	Grade	Q.P.
<b>REQUIRED EARTH SCIENCES COURSES (28.0 credits)</b>					<b>REQUIRED RELATED (30.0 credits)</b>				
ESCI	221 Physical Geology	4.0	_____	_____	<b>Mathematics (8.0 credits)</b>				
ESCI	222 Historical Geology	4.0	_____	_____	MATH	160 Pre-Calculus	4.0	_____	_____
ESCI	241 Meteorology	4.0	_____	_____	MATH	161 Calculus I	4.0	_____	_____
ESCI	245 Environ Meteorology	3.0	_____	_____	<b>Physics (11.0 credits)</b>				
ESCI	261 Intro Oceanography	4.0	_____	_____	PHYS	131 Physics I w/Algebra	4.0	_____	_____
ESCI	366 Ocean Resources*	3.0	_____	_____	PHYS	132 Physics II w/Algebra	4.0	_____	_____
ESCI	428 Planetary Geology	3.0	_____	_____	PHYS	117 General Astronomy	3.0	_____	_____
	-or-					----- or -----			
ESCI	202 Earth in Space	3.0	_____	_____	PHYS	317 Intro to Astronomy	3.0	_____	_____
*Another Oceanography course may be substituted with the approval of your adviser.					<b>Chemistry (8.0 credits)</b>				
<b>EARTH SCIENCES ELECTIVES</b>					CHEM 111 Intro Chemistry I 4.0 _____				
Choose an additional 3.0 credit Earth Science course which is approved by your adviser.					CHEM 112 Intro Chemistry II 4.0 _____				
ESCI	_____	_____	_____	_____	<b>Biology (3.0 credits)</b>				
<b>PROFESSIONAL EDUCATION (33.0 credits)</b>					BIOL 241* Principles of Ecology 3.0 _____				
EDFN	211 Found Modern Educ	3.0	_____	_____	<b>General Electives (as necessary)</b>				
EDFN	241 Psych Found Teach	3.0	_____	_____	_____	_____	_____	_____	_____
EDSE	321 Issues in Sec. Educ.	3.0	_____	_____	_____	_____	_____	_____	_____
EDFN	330 Instr. Tech. Design	3.0	_____	_____	_____	_____	_____	_____	_____
EDSE	435 Teaching Science	3.0	_____	_____	_____	_____	_____	_____	_____
EDSE	340 Content Area Literacy	3.0	_____	_____	_____	_____	_____	_____	_____
SPED	346 Sec Students w/Dis.	3.0	_____	_____	_____	_____	_____	_____	_____
EDSE	471 Differentiating Instruct	3.0	_____	_____	_____	_____	_____	_____	_____
EDSC	461 Student Teaching	9.0	_____	_____	_____	_____	_____	_____	_____
					*Requires demonstrated competency in Biology as prerequisite. Competency may be demonstrated by one of the following:				
					1. a course grade of A or B in AP Biology;				
					2. a score of 3 or better in the national AP exam.				
					3. a successful score on the CLEP exam;				
					4. a successful score on a General Biology challenge or placement examination.				
					5. a passing grade for General Biology (BIOL 100)				