

# EARTH SCIENCE-BS-SECONDARY EDUCATION

## EDUCATION MAJOR & TEACHABLE MINOR REQUIRED

THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

### A 2.7 cumulative GPA in the Earth Science major is required for admission to the College of Education

Year One			
WRT 150 Strategies of Writing	4	CHM 115 Principles of Chemistry I	5
GEO 111 Exploring the Earth	4	Prerequisites: High school chemistry, MTH 110 or MTH 122 or MTH 125 or MTH 201	
MTH 122 College Algebra	3	GEO 112 Earth History	4
Prerequisite: MTH 110 or assignment through math placement exam		Prerequisite: A course in physical or general geology	
Gen Ed	3	MTH 123 Trigonometry	3
EDF 100 Introduction to Education (optional)	1	Prerequisites: MTH 122 (can be taken concurrently) or assignment through math placement exam	
		GEO 175 Research tools for Geosciences	1
		Prerequisites: GEO 111 and GEO 112 (can be taken concurrently).	
		Gen Ed	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16*</b>
Year Two			
GEO 211 Mineralogy	4	GEO 212 Petrology	4
Prerequisites: GEO 111 and CHM 115		Prerequisites: GEO 112, GEO 211, and CHM 115	
<sup>3</sup> PHY 220 General Physics I	5	<sup>3</sup> PHY 221 General Physics II	5
Prerequisites: MTH 122 and MTH 123		Prerequisites: PHY 220	
PSY 101 Introductory Psychology	3	PSY 301 Child Development	3
EDF 315 Diverse Perspectives for Education	3	Prerequisite: PSY 101	
		Minor Course	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>
Year Three			
NRM 140 The Climatic Factor	4	PHY 105 Descriptive Astronomy	3
EDI 337 Introduction to Learning and Assessment	3	Gen Ed	3
GEO 430 Oceanography	3	Issue/Theme	3
Prerequisite: GEO 112		Minor Course	3
Gen Ed	3	Minor Course	3
Minor Course	3		
<b>Total</b>	<b>16*</b>	<b>Total</b>	<b>15</b>
Year Four			
GEO 485 Geology Seminar	1	GEO 319 Teaching Earth Science in Secondary Education	4
Prerequisites: Geology or Earth Science major or minor		Prerequisites: Earth Science major or minor, teacher certification candidate, and 18 credits of Earth Science	
Gen Ed	3	GEO 320 Geomorphology (Capstone)	4
Gen Ed/Issue/Theme	3	Prerequisites: GEO 112	
Minor Course	3	<sup>1</sup> GEO 485 SWS Geology Seminar	1
Minor Course	3	Gen Ed	3
		Minor Course	3
<b>Total</b>	<b>13</b>	<b>Total</b>	<b>15</b>
Year Five			
<b>Teacher Assisting</b>		<b>Student Teaching</b>	
EDI 331 Methods and Strategies of Secondary Teaching	5	EDI 431 Student Teaching: Secondary	8
EDF 310 Organizing and Managing Classroom Environments	3	EDI 432 Student Teaching: Secondary Content	2
EDR 321 Content Area Literacy	3	EDF 485 The Context of Educational Issues	3
EDT 370 Technology in Education	3	Must be taken with or after EDI 431	
Must be taken with or after EDI 331 but before EDI 431			
<sup>2</sup> EDS 379 Universal Design for Learning: Secondary	3		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>13</b>

\* The block tuition rate is 12-15 credits. You will pay additional tuition for any credits over 15.

<sup>1</sup> Students must complete a total of two courses with an SWS attribute

<sup>2</sup> Starting Fall 2013, EDS 379 may be taken prior to the Teacher Assisting Semester. Please consult with your College of Education Advisor to determine an appropriate time to take this course.

<sup>3</sup> For students with the Advanced Waiver/Override for Mathematics based on ACT scores, it is **STRONGLY RECOMMENDED** that proficiency in MTH 123 – Trigonometry – be demonstrated by either taking the MTH 123 course or by achieving a passing score on the GVSU math placement test **PRIOR** to taking PHY 220 and 221.

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly.

The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising>

Earth Science students only have the option of a Bachelor of Science degree. The BS degree requirements are incorporated into the major requirements and include GEO 211, GEO 212, and MTH 123.

### Declaring the Earth Science and Education Major with Teachable Minor:

1. Log into myBanner from the GVSU homepage
2. Once logged in select "Student", "Student Records", and then, "Change Major"
3. Click on the "Change Major 1/Program" box
4. Click on the down arrow in the box next to "New Major 1/Program," from here scroll down and choose "Earth Science-BS Secondary Education"
5. Click "Submit" and then "Change to New Program"
6. Return to the Change Major Screen and select "Add or Change Second Major"
7. Click on the down arrow in the box next to "New Major 2," from here, scroll down and choose "Education" from the list and then click "Submit" and "Add Second Major"
8. Return to Change Major Screen and select "Add a Minor" or "Add or Delete Minor", scroll to and select chosen minor and then click "Submit" and "Add Minor" (see below for minor options)

### Teachable Majors and Teachable Minors for Secondary Education

Teachable Majors		Teachable Minors	
Biology	Mathematics	Biology-Teaching	History-Teaching
Chemistry	Music (K-12)	Chemistry-Teaching	Mathematics-Secondary Education
Earth/Space Science	Physical Education (K-12)	Computer Science-Teaching	Physical Education-Teaching
English	Physics	Earth/Space Science-Teaching	Physics-Teaching
French	Social Studies	Economics-Teaching	Political Science-Teaching
German	Spanish	English-Teaching	Psychology-Teaching
History	Visual Arts (K-12)	French-Teaching	School Health Education
Latin		Geography-Teaching	Spanish-Teaching
		German-Teaching	

### General Education Overlap

General Education Categories fulfilled by the Earth Science Major for Secondary Education:	
Physical Science with Lab: GEO 111	Social and Behavioral Sciences: PSY 101
Mathematical Sciences: MTH 122	U.S. Diversity: EDF 315

Second Major in Education	
Education Major Prerequisites (9 credits)	
A 2.7 cumulative GPA in the Education Major Prerequisites is required with no grade lower than a C	
— EDF 315 Diverse Perspectives on Education (3)	— PSY 301 Child Development (3)
— EDI 337 Introduction to Learning and Assessment (3)	Prerequisite: PSY 101
Teacher Assisting (14 - 17 credits)	Student Teaching (13 credits)
— EDI 331 Teacher Assisting-Secondary (5)	— EDI 431 Student Teaching, Secondary (8)
— EDF 310 Organizing and Managing Classroom Environments (3)	— EDI 432 Student Teaching, Secondary Content (2)
— EDR 321 Content Area Literacy (3)	— EDF 485 The Context of Educational Issues (3)
— EDT 370 Technology in Education (3)	Must be taken with or after EDI 431
Must be taken with or after EDI 331 but before EDI 431	
— EDS 379 Universal Design for Learning: Secondary (3)**	
** Starting Fall 2013, EDS 379 may be taken prior to the Teacher Assisting Semester. Please consult with your College of Education Advisor to determine an appropriate time to take this course.	