

# Earth/Space Science (2010-2011)

## Secondary Teacher Certification

This is a **general curriculum** guide and is not applicable to every student and is not a replacement for meeting with your advisor.

**-Assumes student has fulfilled the MTH 110 requirement-**

Fall Semester – Year One	credits	Winter Semester- Year One	credits
GEO 111: Exploring the Earth ( <i>Gen Ed</i> )	4	GEO 112: Earth History	5
MTH 122: College Algebra ( <i>Gen Ed</i> )	3	CHM 115: Principles of Chemistry I	5
WRT 150: Strategies in Writing	4	MTH 123: Trigonometry	3
Gen Ed.	3	Gen Ed.	3
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>16</b>
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
GEO 211: Mineralogy	4	GEO 212: Petrology	5
PHY 220: General Physics I	5	PHY 221: General Physics II	5
ED 315: Diverse Perspectives on Education* ( <i>Gen Ed</i> )	3	PSY 301: Child Development*	3
PSY 101: Introduction to Psychology ( <i>Gen Ed</i> )	3	Minor Elective	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
Spring Semester – Year Two	credits	Summer Semester – Year Two	credits
Minor Elective	3	Minor Elective	3
Gen Ed. or Theme	3	Gen Ed.	3
<b>Total</b>	<b>6</b>	<b>Total</b>	<b>6</b>
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
ED 337: Assessment for Learning*	3	GEO Elective <sup>3</sup>	3-4
NRM 140: The Climatic Factor <b>Or</b>	4	Cognate Elective <sup>4</sup>	3-4
NRM 281: Principles of Soil Science	4	WRT 305: Writing in the Disciplines <sup>1</sup>	3
GEO 430: Oceanography <sup>2</sup>	3	Gen Ed. or Theme	3
Gen Ed.	3	Minor Elective	3
Minor Elective	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15-17</b>
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
GEO 485: Geology Seminar <sup>7</sup>	1	GEO 319: Earth Science in Secondary Education <sup>5</sup>	4
PHY 105: Descriptive Astronomy	3	GEO 320: Geomorphology (Capstone) <sup>6</sup>	4
Gen Ed. or Theme	3	GEO 485: Geology Seminar <sup>7</sup>	1
Gen Ed.	3	Gen Ed. or Theme	3
Minor Elective	3	Minor Elective	3
Minor Elective	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15</b>
Fall Semester – Year Five	credits	Winter Semester – Year Five	credits
ED 331: Methods and Strategies for Secondary Teaching	5	ED 431: Student Teaching, Secondary	10
ED 310: Organizing and Managing Classroom Environments	3	ED 485: The Context of Educational Issues	3
ED 321: Content Area Literacy	3		
ED 370: Technology in Education**	3		
ED 379: Universal Design for Learning: Secondary**	3		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>13</b>

### Notes:

\* These courses are prerequisites to the College of Education. Student must have a minimum GPA of 2.7 in these classes, and both their major and minor. Classes must be completed prior to applying to the School of Education. A student selecting secondary education must also have a teachable minor. Consult with your advisor!

\*\* ED 370 and/or ED 379 may be taken during or after Assisting but must be taken before Student Teaching.

<sup>1</sup> Students who pass out of WRT 305 have room to take a Gen Ed., Theme, or elective course in this semester.

<sup>2</sup> GEO 430 is only offered fall semester of even-numbered years.

<sup>3</sup> 3-4 credits of a Geology elective must be completed. Must be at the 300-400 level.

<sup>4</sup> One Biology or Life Science class must be taken to fulfill the cognate elective category.

<sup>5</sup> GEO 319 is only offered the winter semester of even-numbered years.

<sup>6</sup> Earth Science majors must take this class in the winter. Class only offered winter of even numbered years.

<sup>7</sup> Two semesters of seminar are required. Register for one credit each semester.

### Special Notes:

A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.

B. Courses that have (*Gen Ed*) written after them are classes that are required in the major and also fulfill a section of the general education program.

C. Remember to fulfill your 2 SWS requirements; 1 can be taken in the gen ed. program and 1 in your major.

D. Some classes are in multiple sections within the gen ed. If you take a course that can be counted in two categories, you can open up 1-2 more spots for earth science electives.

E. Earth Science majors are encouraged to take one of the following themes: Theme 02, 07, 11, or 23.

F. You must have **120 credits** to graduate from Grand Valley State University.

It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career. The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising> Prepared by CLAS Academic Advising Center – 2/4/10