

## Earth/Space Science: MAJOR Requirements for Secondary Teacher Certification

*These requirements are for students entering the program in summer 2008 or later.*

*Major/minor requirements are subject to change. All candidates are expected to consult with a School of Education advisor as they plan and progress through their program.*

### Prerequisite Courses

(Note: These do not count toward the required credits for the major.)

Course Number	Course Title	Credits	Completed?
CHEM 210/211	Structure and Reactivity I/Investigations in Chemistry	5	
MATH 115	Calculus I	4	
MATH 116	Calculus II	4	
PHYSICS 125/127	General Physics: Mechanics and Sound/Lab	5	

Earth/Space Science majors must complete a minimum of **38 credits** including the following:

### Major Requirements

Course Number	Course Title	Credits	Completed?
EDUC 422	Teaching of Science in the Secondary School	3	
ASTRO 101	Introductory Astronomy: The Solar System and the Search for Life Beyond Earth	4	
ASTRO 102	Introductory Astronomy: Stars, Galaxies, and the Universe	4	
GEOSCI 130	The Physical World	4	
GEOSCI 222/223	Introductory Oceanography/Lab	4	
GEOSCI 305	Sedimentary Geology	4	
AOSS 102 <b>OR</b> AOSS 202	Extreme Weather <b>OR</b> The Atmosphere	3	

### Select one of the following:

GEOSCI 116	Introductory Geology in the Field	6	
GEOSCI 118 <b>AND</b> GEOSCI 119	Introductory Geology Lab Introductory Geology Lecture	5	

**Select a total of six credits from the following courses:**

ASTRO 160	Introductory Astrophysics	4	
ASTRO 361	Astronomical Techniques	4	
ASTRO 404	Galaxies and the Universe	3	
GEOSCI 125	Evolution and Extinction	3	
GEOSCI 171	Introduction to Global Change: Physical Processes	4	
GEOSCI 201	Introduction to Geography: Earth Systems Science	3 or 4	
GEOSCI 231	Elements of Mineralogy	4	
GEOSCI 232	Earth Minerals	4	
GEOSCI 284	Environmental Geology	4	
GEOSCI 310	Petrology	4	
GEOSCI 351	Structural Geology	4	
GEOSCI 411	Geology of Michigan	3	
GEOSCI 442	Earth Surface Processes and Soils	4	