

## Requirements for Geophysics Subplan 2016-17 Catalog Year

### SECOND LANGUAGE REQUIREMENT

(Requirement can be met with proficiency exam):

Semester One		4
Semester Two	(completion with a grade of C or better)	4

### TIER ONE

**Traditions and Culture (xxxx160) (6 units):**

		3
		3

**Individuals and Societies (xxxx150) (6 units):**

		3
		3

### TIER TWO

**Arts (3 units):**

		3
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**Individuals and Societies (3 units):**

		3
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**Humanities (3 units):**

		3
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**Diversity Emphasis (3 units) (gender, race, class):**

(Can be fulfilled with qualified Tier One or Tier Two)		
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**English (6 units):**

ENGL 101	Composition	3
ENGL 102	Composition (grade of B or higher to meet MCWA)	3

**Mathematics (16 units):**

MATH 122A& 122B	Calculus I (P: MATH 120R, or MATH 112 plus MATH 111, with a grade of C or higher)	5
MATH 129	Calculus II (P: MATH 122B or MATH 125 with grade of C or higher)	3
MATH 223	Vector Calculus (P: MATH 129)	4
MATH 254	Differential Equations (P: MATH 129 or 223)	3
MATH 322	Mathematical Analysis for Engineers (P: MATH 254)	3

STUDENTS planning to take one additional course to complete a MATH minor should take MATH 313, Introduction to Linear Algebra.

\*This plan equals 117 units. An additional 3 units of elective credit are required for graduation.

### Advisor Approved Emphasis Courses – Geophysics

ASTR 403, ASTR 442, GEOG 419, GEOG 420, GEOS 400, GEOS 403, GEOS 417, GEOS 423, GEOS 424A, GEOS 425, GEOS 427, GEOS 442, GEOS 446, GEOS 469, GEOS 477, GEOS 482, GEOS 567, GEOS 568, HWRS 431, PHYS 403, PTYS 403, PTYS 407, PTYS 442, PTYS 449, PTYS 567, RNR 419, RNR 420

**Chemistry (8 units)::**

CHEM 151	General Chemistry I (P: MATH 112 or Math Placement level, Calc 65+)	4
CHEM 152	General Chemistry II (P: CHEM 151)	4

**Physics (14 units)::**

PHYS 141	Introductory Mechanics (P: MATH 122B; CR: MATH 129)	4
PHYS 142	Introductory Optics and Thermodynamics (P: PHYS 141, MATH 129)	3
PHYS 241	Introductory Electricity and Magnetism (P: PHYS 141, MATH 129)	4

**Computer Science (3 units)**

(Course in programming – see advisement report or advisor)		
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**Geophysics Core (Complete all 9 courses):**

GEOS 251	Physical Geology (Fall and Spring)	4
GEOS 302	Principles Stratigraphy and Sedimentation (P: GEOS 251, CHEM 151, PHYS 102 or 141) (Fall) (Writing Proficiency course)	4
GEOS 304	Structural Geology (P: GEOS 251, PHYS 102 or 141) (Spring)	4
GEOS 306	Mineralogy (P: GEOS 251, CHEM 151) (Fall only)	3
GEOS 322	Intro to Geophysics (P: GEOS 251; P: MATH 122B or 125) (Spring only)	3
GEOS 356	Petrology (P: GEOS 306, MATH 122B, PHYS 102 or 141) (Spring only)	4
GEOS 419	Physics of the Earth (P: MATH 254) (Spring)	3
GEOS 432	Intro to Seismology (P: MATH 254) (Fall)	3
GEOS 434A	Intro to Exploration Seismology (P: MATH 129) (Fall)	3

**Field Course (6 units):**

GEOS 414	Geology Field Camp (P: GEOS 251, 302, 304, 306, 356) (Summer Session)	6
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**GEOPHYSICS ADVISOR APPROVED EMPHASIS COURSES (15 units)**

Majority of courses should consist of GEOS 300 or 400 level		
Full list of approved classes on advisement report		
No more than 3 units of Preceptor (GEOS 397A)		