Earth & Space Science with Option to Add Science

Candidates also complete a secondary education professional program. Grade required for endorsement courses: C (2.0) or better. Course substitutions must be clearly noted below.

### Earth & Space Science (70-85 Credits)

- One course from:
  - ASTR 103 - Introduction to Astronomy (4)
  - ASTR 113 - Sun, Moon, and Planets (3)
- CHEM 121 - General Chemistry I (5)
- CHEM 122 - General Chemistry II (5)
- One course from:
  - GEOL 211 - Physical Geology (5)
  - GEOL 211A - Physical Geology Review (2)
  - HNRS 212 – Colloquium in Geology (4)
  - GEOL 212 - Historical Geology (4)
  - GEOL 213 - GIS in Geology (3)
  - GEOL 252 - The Earth and Its Weather (4)
  - GEOL 310 – Geomorphology (5)
  - GEOL 340 - Geological Oceanography (3)
- Choose either:
  - GEOL 311 - Earth Materials (5)
  - OR
  - GEOL 306 - Mineralogy (4) and
  - GEOL 406 - Igneous and Metamorphic Petrology (4)
- MATH 240 - Introduction to Statistics (4)
- Choose one of the following series:
  - PHYS 114 - Principles of Physics I (5)
  - PHYS 115 - Principles of Physics II (5)
  - OR
  - PHYS 161 - Physics with Calculus I (5)
  - PHYS 162 - Physics with Calculus II (5)
- SCED 370 - Science and Society (3) or equivalent
- SCED 481 - Fundamentals of Teaching Science (2)
- SCED 491 - Methods in Secondary Education for Science Teachers (5)

### Electives (choose two of the following):

- GEOL 303 – Dinosaurs and Their Environment (3)
- GEOL 308 - Earthquakes (3)
- GEOL 309 - Volcanology (3)
- GEOL 314 - Engineering Geology (4)
- GEOL 316 - Research in Marine Paleontology (4)
- GEOL 318 - Structural Geology (5)
- GEOL 407 - Advanced Petrography
- GEOL 414 - Geology of Washington (3-5)
- GEOL 415 - Stratigraphy and Sedimentation (4)
- GEOL 430 - Image Interpretation (3)
- GEOL 440 - Glacial Geology (4)
- NES Earth Science Test Code 307

(Math through prerequisites: Algebra, Precalc or Calculus)

### Add Science (Optional, 23 Credits)*

- BIOL 204 - Introduction to Evolution, Ecology and Biodiversity (4)
- BIOL 205 - Introduction to Cellular and Molecular Biology (5)
- BIOL 206 - Introduction to Organismal Biology (5)
- CHEM 123 - General Chemistry III (4)
- Choose either:
  - PHYS 116 - Principles of Physics III (5)
  - OR
  - PHYS 163 - Physics with Calculus III (5)
- NES Science Test Code 311

* May be added via testing after certification via Pathway 1

Outstanding Courses:

July 2017

Endorsement Advisor Signature / Date