Geophysics Degree Requirements: Carolina Core

☐ **CMW Written Communication (Grade of C or higher required)**
  - ENGL-101  (3)
  - ENGL-102  (3)

☐ **ARP Analytical Reasoning & Problem Solving** (also fulfills cognate)
  - MATH 141: Calculus I  (4)
  - MATH 142: Calculus II  (4)
  - MATH 241: Vector Calculus  (3)
  - MATH 242: Elementary Differential Equations  (3)
  - MATH 344 and 344L: Applied Linear Algebra and the Lab  (3)+ (1)
  - Choose one class from MATH 520-522, 524-527, 550 or 552  (3)
  - STAT 509 or STAT 515  (3)
  - CSCE 206 Scientific Applications Programming or CSCE 207 UNIX System Admin  (3)

☐ **SCI Scientific Literacy**
  - PHYS 211/211L: Essentials of Physics I and lab  (3/1)
  - PHYS 212/212L: Essentials of Physics II and lab  (3/1)
  - CHEM 111/L: General Chemistry I and lab  (3/1)
  - CHEM 112/L: General Chemistry II and lab  (3/1)

**Global Citizenship & Multicultural Understanding**

☐ **GFL Communicating Effectively In More Than One Language**
  - Foreign Language thru 122 level (0-9 credits)
    - (may include language 109, 110 (or 121) and 122)

☐ **GHS Historical Thinking**
  - History: HIST 100-level US  (3)
  - History: HIST 100-level non US  (3)

☐ **GSS Social Sciences**
  - Select 2 courses (6 credits); at least one must be from:
    - AFAM 201; ANTH 101, 102, 204, 205, 211, 211, 213; CRJU 101; GEOG 103, 105, 121, 210, 221-226, 228;
    - LING 101; POLI 101, 201; PSYC 101; SOCY 101, 102; WGST 112, 113, 210
  - (3, 3)

☐ **AIU Aesthetic & Interpretive Understanding**
  - Select 2 courses (6 credits) from Fine Arts, Literature, or Humanities; at least one must be from:
    - ARTE 101, 260; ARTH 105, 106; ARTS 103, 104; CLAS 220; CPLT 150, 270; DANC 101; ENGL 270, 282-288;
    - FILM 110, 180, 240; FREN 290; GERM 290; MART 210; MUSC 110, 113-115, 140; RUSS 280; SOST 101;
    - SPAN 220; THEA 170, 181, 200
  - (3, 3)
Geophysics Degree Requirements: Major Requirements

**Geology Courses (Pass with C or higher)**

- GEOL 101, 103 or 201 (4)
- GEOL 302: Rocks and Minerals (4)
- Select one of:
  - GEOL 315: Surface and Near Surface Processes (Prereq PHYS 201 or 211) OR
  - GEOL 325: Stratigraphy and Sedimentary Basins (Prereq: GEOL 302) OR
  - GEOL 345: Igneous & Metamorphic Processes (prereq GEOL 302, MATH 122 or 141) (4)
- GEOL 355: Structural Geology & Tectonics (prereq GEOL 302, PHYS 201 or 211) (4)
- GEOL 531: Plate Tectonics (prereq: 2-300 level GEOL courses) (3)
- GEOL 554: Applied Seismology (3)
- GEOL 555: Elementary Seismology (3)
- GEOL 556: Seismic Reflection Interpretation (3)
- GEOL 575: Numerical Modeling for Earth Science Applications (3)
- GEOL 582: Marine Hydrodynamics or GEOL 546 Marine Geophysics (3)

**Senior Capstone Experience**

- GEOL 548: Environmental Geophysics (3)
  (note: an approved field course may substitute)

**Cognate** (See: Math classes above - MATH 241, 242, 344/L and selected 500 as listed above)

128 Credits needed for graduation (includes electives; does not include PEDU, Band and other one-credit performance courses)

Updated 2/2019