Geophysics Track Requirements: Earth Science Major, Univ. of Oregon

- All courses must be taken for a grade (C- or better)
- Check prerequisites for all upper division courses
- Total Credits: 104

**Core requirements (40 credits):**

- ERTH 315: Earth Physics (4)
- ERTH 363: Computational Tools for Earth Sciences (4)
  - or CIS 122: Intro Programming and Problem Solving (4)
- PHYS 251, 252, 253: Foundations of Physics I (12)
- MATH 251, 252, 253: Calculus I,II,III (12)
- CH 221, 222: General Chem I,II (8)
  - or CH 224H, 225H: Honors General Chem I,II (8)

**Track requirements (36 credits):**

- ERTH 455: Mechanical Earth (4)
- MATH 256: Intro Differential Equations (4)
- MATH 281, 282: Several Variable Calculus I,II (8)
- PHYS 351, 352, 353: Foundations of Physics II (12)
  - or PHYS 411,412,413: Mechanics, Electricity, Magnetism (12)

**Track electives (select 28 credits from the following):**

- ERTH 410 and higher (includes >20 courses spanning a broad swath of Earth Science topics)
- ERTH 101 to 310 (up to 8 credits with average grade of B or higher)
- ERTH 311: Earth Materials (5) (note pre-reqs)
- ERTH 316: Intro Hydrology (4)
- ERTH 318: Intro Field Methods (3) (note pre-reqs)
- ERTH 331, 332: Mineralogy (5), Petrology (5) (note pre-reqs)
- ERTH 334: Sedimentology/Stratigraphy (4) (note prereq)
- ERTH 350, 351, 352: Structural Geology, Laboratory, and Problems (3+) (note prereq)
- ERTH 353: Geologic Hazards (4) (note prereq)
- ERTH 401: Research (up to 4 credits; may be taken for P or P* grade)
- ERTH 403: Thesis (up to 4 credits; may be taken for P or P* grade)
- ERTH 406: Field Studies (up to 12 credits)
- CH (up to 4 credits) from 223: Gen Chem III (4) | 226: Hon Gen Chem III (4) | 411: Phys. Chem (4)
- MATH (up to 8 credits) from 341, 342: Elementary Linear Algebra I,II (4 each) | 411,412: Functions of Complex Variable I,II (4 each) | 421,422: Partial Differential Eqns I,II (4 each)
- CIS (up to 8 credits) from 210,211,212: Computer Science I,II,III (4 each)