



# Department of Geosciences

## BS in Earth Science

*Education, Research, and Service in Geography, Geology, and Earth Science*

### Public Interpretation Option

Student's Name \_\_\_\_\_ Advisor \_\_\_\_\_ Date \_\_\_\_\_

#### University Baccalaureate Core Course (BCC) Requirements (48 credits + WIC course)

Courses must be from BCC approved list. No single course may be used to satisfy more than one area of the Baccalaureate Core even though some courses are approved for more than one area. Up to 15 credits required in the major can also be used to satisfy BCC requirements.

#### Skills (15 credits)

- (9) \_\_\_ WR 121 \_\_\_ WR II \_\_\_ Writing/Speech III
- (3) \_\_\_ MTH 105 or higher (MTH 251 required)
- (3) \_\_\_ Fitness
- \_\_\_ Writing Intensive Course (WIC) (included in credits within the major; GEO 409 required)

#### Perspectives (27 credits; must be from BCC approved list; no more than two courses from the same department)

- (4) \_\_\_ Physical Science with Lab (GEO 101 or 201 required)
- (4) \_\_\_ Biological Science with Lab
- (4) \_\_\_ Physical or Biological Science with Lab (GEO 102 or 202 required)
- (3) \_\_\_ Western Culture
- (3) \_\_\_ Cultural Diversity
- (3) \_\_\_ Literature and the Arts
- (3) \_\_\_ Social Processes and Institutions
- (3) \_\_\_ Difference, Power and Discrimination

#### Synthesis (6 credits; upper division courses from BCC approved list and from different departments)

- (3) \_\_\_ Contemporary Global Issues
- (3) \_\_\_ Science, Technology, and Society (CSS/GEO 335 required)

---

#### Earth Science Major Requirements (81-85 credits)

Substitutions to these requirements can only be made with the written approval of the Head Advisor. Any substitutions should be noted in your file.

#### Basic Science Skills (30-32 credits):

- (4) \_\_\_ MTH 251
- (4) \_\_\_ ST 351 or ST 314
- (4) \_\_\_ ST 352 or MTH 252
- (10) \_\_\_ CH 121 or CH 221 \_\_\_ CH 122 or CH 222
- (8-10) \_\_\_ PH 201 or PH 211 \_\_\_ PH 202 or PH 212

#### Geosciences Core Courses (25-26 credits):

- (4) \_\_\_ GEO 101 The Solid Earth or GEO 201 Physical Geology
- (4) \_\_\_ GEO 102 The Surface of the Earth or GEO 202 Earth System Science
- (4) \_\_\_ GEO 322 Surface Processes
- (4) \_\_\_ CSS 305 Principles of Soil Science
- (3) \_\_\_ CSS/GEO 335 Water Science and Policy
- (3) \_\_\_ OC 331 Intro to Oceanography
- (3-4) \_\_\_ ATS 210 Intro to Atmospheric Sci (3) or GEO 203 Evolution of Planet Earth (4) or GEO 323 Climatology (4)

#### Earth Science Techniques (7-8 credits):

- (4) \_\_\_ GEO 301 Map and Image Interpretation
- (3-4) \_\_\_ GEO 365 Introduction to GIS (4) or GEO 265 GIS Practicum (3)

#### Upper Division Earth Science (15 credits, with at least 2 courses from one focus):

##### Geology Focus:

- (4) \_\_\_ GEO 310 Mineralogy
- (4) \_\_\_ GEO 315 Petrology
- (4) \_\_\_ GEO 340 Structural Geology
- (4) \_\_\_ GEO 430 Geochemistry

##### Soil Science Focus:

- (4) \_\_\_ CSS 435 Physics of Soil Ecosystems
- (4) \_\_\_ CSS 445 Geochemistry of Soil Ecosystems
- (4) \_\_\_ CSS 455 Biology of Soil Ecosystems
- (4) \_\_\_ CSS 466 Soil Morphology and Classification

##### Oceanic and Atmospheric Sciences Focus:

- (4) \_\_\_ ATS 420 Atmospheric Science
- (3) \_\_\_ GEO 431 Applied Climatology
- (3) \_\_\_ OC 332 Coastal Oceanography
- (3) \_\_\_ OC 430 Physical Oceanography
- (3) \_\_\_ OC 440 Biological Oceanography
- (3) \_\_\_ OC 450 Chemical Oceanography
- (3) \_\_\_ OC 460 Geological Oceanography

##### Water Science Focus:

- (4) \_\_\_ CE 412 Hydrology (note the prereqs) or FE 430 Watershed Processes
- (3) \_\_\_ GEO 432 Applied Geomorphology
- (5) \_\_\_ FW 456 Limnology
- (3) \_\_\_ GEO 483 Snow Hydrology
- (4) \_\_\_ GEO 487 Hydrogeology

#### Capstone Experience (4 credits)

- (1) \_\_\_ GEO 407 Professional Seminar
  - (3) \_\_\_ GEO 409 Contemp. Earth Sci. Issues (WIC)
-

### 3. Public Interpretation Option (35 credits)

#### 3a. Required Courses (9 credits)

- (3) \_\_\_ FOR 391 Natural Resources Communications
- (3) \_\_\_ GEO 307 Geology of National Parks
- (4) \_\_\_ GEO 464 Geoscience Interpretation

#### 3b. Earth Science Electives (11 credits)

- (3) \_\_\_ GEO 305 Living w/ Active Cascade Volcan.
- (3) \_\_\_ GEO 308 Global Change and Earth Sciences
- (4) \_\_\_ GEO 322 Surface Processes and Geomorph.
- (3) \_\_\_ GEO 380 Earthquakes in the Pacific NW
- (4) \_\_\_ GEO 427 Volcanology
- (4) \_\_\_ GEO 461 Geology of Earthquakes
- (4) \_\_\_ GEO 463 Geophysics and Tectonics
- (4) \_\_\_ GEO 470 Stratigraphy and Sedimentology
- (4) \_\_\_ GEO 481 Glacial Geology
- (4) \_\_\_ GEO 487 Hydrogeology

#### 3c. Interpretation Skills Electives (14 credits)

- (3) \_\_\_ COMM 312 Advanced Public Speaking
- (4) \_\_\_ COMM 382 Telemedia Design and Prod.
- (4) \_\_\_ CS 395 Intermediate Multimedia
- (3) \_\_\_ FOR 493 Environmental Interpretation
- (4) \_\_\_ GEO 360 Cartography
- (4) \_\_\_ GEO 410 Internship (Interpretation)
- (4) \_\_\_ GEO 422 Reconstructing Historic Landscapes
- (3) \_\_\_ NMC 351 New Media Visualization
- (3) \_\_\_ SOC 480 Environmental Sociology
- (3) \_\_\_ WR 362 Science Writing

---

### 4. OSU Graduation Requirements

- \_\_\_ 180 total credits
- \_\_\_ 60 upper division (course numbered 300 or higher) credits
- \_\_\_ 2.00 minimum overall GPA
- \_\_\_ 2.00 minimum GPA in major
- \_\_\_ 24 upper division credits within the major
- \_\_\_ 15 of the upper division credits in the major from regularly listed courses
- \_\_\_ Foreign Language (2 years high school or 2 terms college)
- \_\_\_ Residence requirement--last 45 credits of course work must be from OSU