

# Geology & Earth Science, BA



## University of Wyoming, 2015-16

| Freshman Fall Semester |      |                                | Hrs       | Min | Grade | Notes   |
|------------------------|------|--------------------------------|-----------|-----|-------|---|
|                        |      | USP First-Year Seminar         | 3         |     | C     | FY  |
|                        |      | USP US & Wyoming Constitutions | 3         |     |       | V   |
| CHEM                   | 1020 | General Chemistry I *          | 4         |     | C     | PN  |
| MATH                   | 1405 | Trigonometry **                | 3         |     | C     | Q; can substitute MATH 1450 (Algebra and Trigonometry) ***. |
|                        |      | Elective                       | 3         |     |       |   |
| Credit hours subtotal: |      |                                | <b>16</b> |     |       |   |

| Freshman Spring Semester |      |                     | Hrs       | Min | Grade | Notes   |
|--------------------------|------|---------------------|-----------|-----|-------|---|
|                          |      | USP Communication 1 | 3         |     | C     | C1  |
| GEOL                     | 1100 | Physical Geology    | 4         |     | C     | Can substitute with alternate course; consult with advisor. |
| LIFE                     | 1010 | General Biology     | 4         |     | C     | PN  |
| PHYS                     | 1110 | General Physics I   | 4         |     | C     | Can substitute PHYS 1210 (Engineering Physics I).           |
| Credit hours subtotal:   |      |                     | <b>15</b> |     |       |   |

| Sophomore Fall Semester |      |   | Hrs       | Min | Grade | Notes |
|-------------------------|------|---|-----------|-----|-------|-------|
|                         |      | USP Human Culture                       | 3         |     |       | H     |
| GEOL                    | 2000 | Geochemical Cycles and the Earth System | 4         |     | C     |       |
| GEOL                    | 2010 | Mineralogy                              | 3         |     | C     |       |
| GEOL                    | 2080 | General Field Geology                   | 3         |     | C     |       |
|                         |      | Elective                                | 3         |     |       |       |
| Credit hours subtotal:  |      |   | <b>16</b> |     |       |       |

| Sophomore Spring Semester |      |                                | Hrs       | Min | Grade | Notes |
|---------------------------|------|--------------------------------|-----------|-----|-------|-------|
|                           |      | USP Communication 2            | 3         |     | C     | C2    |
|                           |      | USP Human Culture              | 3         |     |       | H     |
| GEOL                      | 2020 | Introduction to Petrology      | 2         |     | C     |       |
| GEOL                      | 2100 | Stratigraphy and Sedimentation | 4         |     | C     |       |
|                           |      | Elective                       | 3         |     |       |       |
| Credit hours subtotal:    |      |                                | <b>15</b> |     |       |       |

This is a guide for course work in the major; actual course sequence may vary by student. Please refer to the online student degree evaluation, and consult with an academic advisor. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the *University Catalog* and consult with their academic advisor to plan accordingly.

### University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major

### College of Arts and Sciences requirements:

Students must take two "core" courses in addition to the USP requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. • At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more).

### Geology and Earth Science Program Notes:

• A grade of C or better is required in all geology and allied courses.

\* Requires MATH ACT  $\geq$  23, MATH SAT  $\geq$  600, Math Placement Exam  $\geq$  3, or concurrent enrollment in Math 1400, 1405, or 1450. (University standard)

\*\* Requires MATH ACT  $\geq$  25, MATH SAT  $\geq$  600, Math Placement Exam  $\geq$  4, or  $\geq$  C in Math 1400. (University standard)

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## University of Wyoming, 2015-16

| Junior Fall Semester         |  | Hrs       | Min Grade | Notes |
|------------------------------|--|-----------|-----------|-------|
| A&S Core Diversity in the US |  | 3         |           | ASD   |
| List B Electives ****        |  | 10        | C         |       |
| Upper Division Elective      |  | 3         |           |       |
| Credit hours subtotal:       |  | <b>16</b> |           |       |

| Junior Spring Semester   |  | Hrs       | Min Grade | Notes |
|--------------------------|--|-----------|-----------|-------|
| List B Elective ****     |  | 4         | C         |       |
| Part C Electives *****   |  | 6         | C         |       |
| Upper Division Electives |  | 6         |           |       |
| Credit hours subtotal:   |  | <b>16</b> |           |       |

| Senior Fall Semester      |  | Hrs       | Min Grade | Notes |
|---------------------------|--|-----------|-----------|-------|
| A&S Core Global Awareness |  | 3         |           | ASG   |
| List B Elective ****      |  | 4         | C         |       |
| Part C Elective *****     |  | 3         | C         |       |
| Upper Division Elective   |  | 3         |           |       |
| Credit hours subtotal:    |  | <b>13</b> |           |       |

| Senior Spring Semester  |          | Hrs       | Min Grade | Notes |
|-------------------------|----------|-----------|-----------|-------|
| GEOL 4820               | Capstone | 3         | C         | C3    |
| List B Elective ****    |          | 3         | C         |       |
| Part C Elective *****   |          | 4         | C         |       |
| Upper Division Elective |          | 3         |           |       |
| Credit hours subtotal:  |          | <b>13</b> |           |       |

**TOTAL CREDIT HOURS: 120**

### Geology and Earth Science Program Notes con't:

\*\*\* Requires MATH ACT  $\geq$  23, MATH SAT  $\geq$  600, Math Placement Exam  $\geq$  3, or  $\geq$  C in Math 0925. (University standard)

\*\*\*\* **List B Electives.** Six (6) elective courses must be chosen from this list; upper division choices are recommended. Please plan carefully for the prerequisites of some courses.

- ATSC 2000 Introduction to Meteorology (4 hrs) OR
- GEOG 3450 Weather and Climate (3 hrs)
- ECON 2400 Economics of the Environment (3 hrs)
- ECON 4400 Environmental Economics (3 hrs) OR
- ECON 4410 Natural Resource Economics (3 hrs)
- GEOG 3010 Geomorphology of Earth's Dynamic Landscapes (3 hrs)
- GEOL 2005 Introduction to Geophysics (4 hrs) OR
- GEOL 3005 Principles of Geophysics (4 hrs)
- GEOL 2050 Principles of Paleontology (3 hrs)
- GEOL 2070 Introduction to Oceanography (4 hrs)
- GEOL 3400 Geologic Hazards: A Historical and Scientific Review (4 hrs)
- GEOL 3500 Global Change: A Geological Perspective (4 hrs)
- GEOL 3600 Earth and Mineral Resources (4 hrs)
- GEOL 3650 Energy for Society: Addressing the Energy Grand Challenge (4 hrs)
- GEOL 4444 Geohydrology (4 hrs)
- GEOL 4490 Geochemistry (4 hrs)
- GEOL 4610 Structural Geology and Tectonics (4 hrs)
- GEOL 4835 Applied/Exploration Geophysics (3 hrs)
- POLS 4051 Environmental Politics (3 hrs)
- SOIL 4120 Genesis, Morphology, and Classification of Soils (4 hrs)

\*\*\*\*\* **Part C Electives.** An additional 12 hours of electives, chosen in consultation with an advisor, at least six (6) hours of which must be taken outside of the Department of Geology & Geophysics; upper division choices are recommended.