## GEOLOGY, MINOR LIBERAL ARTS

| Liberal Arts (Code 160-401) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Minimum 24 semester credits in geology, including: |  |  |
| Select one of the following: |  | 4 |
| GEOL 106 | Earth Science |  |
| GEOL 110 | Physical Geology |  |
| GEOL 115 | Environmental Geology |  |
| GEOL 118 | Societal Issues in Earth Science |  |
| Required: |  |  |
| GEOL 312 | Mineralogy and Petrology I | 5 |
| Select a minimum of six semester credits from the following: |  | 6 |
| GEOL 291 | Special Topics |  |
| GEOL 301 | Earth Resources and Sustainability |  |
| GEOL 303 | Rocky Mountain Field Studies |  |
| GEOL 304 | Global Environmental Change |  |
| GEOL 308 | Water Resources |  |
| GEOL 313 | Mineralogy and Petrology II |  |
| GEOL 315 | Hydrogeology I |  |
| GEOL 320 | Sedimentology and Stratigraphy |  |
| GEOL 330 | Structural Geology |  |
| GEOL 336 | Introduction to Geochemistry |  |
| GEOL 337 | Analytical Geochemistry Laboratory |  |
| GEOL 343 | Geological Field Excursion |  |
| GEOL 345 | Geomorphology and Aerial Photography Interpretation |  |
| GEOL 365 | Economic Mineral Deposits |  |
| GEOL 390 | Geologic Immersion Experience |  |
| GEOL 395 | Directed Studies |  |
| GEOL 416 | Hydrogeology II |  |
| GEOL 418 | Earth History |  |
| GEOL 420 | Glacial Geology |  |
| GEOL 445 | Engineering Geology and Geophysics |  |
| GEOL 468 | Computers in Geology |  |
| GEOL 470 | Field Geology I |  |
| GEOL 471 | Field Geology II |  |
| GEOL 491 | Advanced Special Topics |  |

NOTE 1: No degree credit may be earned under the Satisfactory/Unsatisfactory option in any required courses in a geology major or minor.

NOTE 2: Recommended electives: GEOL 470 and GEOL 471.

## Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Explain Earth processes.
- Use mathematics and computational methods to analyze scientific and geological data.
- Read, write, and critically evaluate geological papers.
- Construct an internally consistent geological map utilizing field data, topographic maps, geological maps, air photos, geographic information systems (GIS) data, and geological cross sections.
- Evaluate a geological field site and produce a professional report.

