### Bachelor of Science in Geosciences
#### Geology Concentration
2016-2017 Catalog

A grade of C- or better must be earned to meet prerequisite requirements and to apply to major, minor or adjunct. Prerequisites shown in ( )

#### FIRST YEAR
**Fall - 15 hours**
- GEOL 1303 Physical Geology
- GEOL 1101 Physical Geology Lab
- MATH 1451 Calculus I (MPE code 7 or higher, SATM 660, MATH 1321, B, MATH 1550-C)
- CHEM 1307 Principles of Chemistry I (CHEM Placement exam score of 60% or higher)
- CHEM 1107 Principles of Chemistry lab (CHEM Placement exam score of 60% or higher)
- ENGL 1301 Essentials of Col. Rhetoric

**Spring - 15 hours**
- GEOL 2401 Historical Geology (GEOL 1303 +1101)
- CHEM 1308 Principles of Chemistry II (CHEM 1307+1107; C or better)
- CHEM 1108 Principles of Chemistry II lab (CHEM 1307+1107; C or better)
- MATH 1452 Calculus II (MATH 1451)
- ENGL 1302 (ENG 1301)

#### SECOND YEAR
**Fall - 14 hours**
- GEOL 3401 Mineralogy and Petrology (2.5 GPA)# (GEOL 1303+1101, GEOL 2401, CHEM 1307+1107, 1308 +1108)
- GPH 3300 Geophysics (2.5 GPA)# (GEOL 1303 +1101, MATH 1451 C or better)
- PHYS 1403 (or 1408) (MATH 1550 or 1320 +1321) (MATH 1451)
- Foreign Language ______ 2301 (F. Language 1507 or 1502 or CLEP test)

**Spring - 16 hours**
- GCH 3303 Introduction to Geochemistry (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)
- GEOL 4320 Optical Mineralogy (GEOL 3401 C- or better)
- PHYS 1404 (or 2401) (PHYS 1403 or 1408) (MATH 1452)
- Foreign Language ______ 2302
- HIST 2300 US History Pre 1877

**Summer I** _______ GEOL 4301 Advanced Field Methods (GEOL 3402, 4325, 4321, 4201; all with a C or better)

#### THIRD YEAR
**Fall - 14 hours**
- GEOL 3402 Structural Geology (GEOL 3401 PHYS 1403 or 1408 c- or better),
- GEOL 4325 Sedimentology & Stratigraphy (GEOL 2401, GEOL 3401, GEOL 4320 c- or better)
- POLS 1301 American Govt Org
- English Literature
- English Language
- Personal Fitness and Wellness +

**Spring - 14 hours**
- GEOL 4321 Igneous and Meta Petrology (GCH 3303, GEOL 4320 C or better)
- GEOL 4201 Sedimentary Field Methods (GEOL 3401, 3402 C- or better)
- English Literature
- English Language
- POLS 2302 American Govt Org
- Personal Fitness and Wellness +

**Summer I** _______ GEOL 4301 Advanced Field Methods

#### FORTH YEAR
**Fall - 13 hours**
- GEOL 4101 Undergraduate Seminar (Senior Standing)
- GEOS Elective Jr/Sr
- Social and Behavioral Sciences Elective*
- Oral Com Elective

**Spring - 15 hours**
- GEOL 4312 Undergraduate Research (Senior Standing)
- HIST 2301 US History since 1877
- Creative Arts Elective
- Minor elective Jr/Sr
- Minor elective

*Minors must be in Math, Science, Engineering or a Composite of these fields.

**Common minors:** Geophysics, GIST, Composite, Math, Chemistry, Physics, Civil Engineering.

**Major Elective (GEOS):**

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<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>GEOL 3301 Geomorphology</td>
<td>GCH 4308 Techniques/Applications Mineral Sciences</td>
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<tr>
<td>GEOL 3323 Environmental Geology</td>
<td>GEOL 3322 Oceanography</td>
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<td>GEOL 3450 Paleontology (even years)</td>
<td>GEOL 3328 Energy Resources</td>
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<td>GEOL 4306 Intro to Petroleum Systems</td>
<td>GEOL 4310 Planetary Geology</td>
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<td>GEOL 4300 Petrophysics</td>
<td>GEOL 4318 Geology of Texas</td>
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<td>GCH 4405 Inorganic Geochemistry</td>
<td>GEOL 4331 Digital Imagery</td>
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<td>GPH 4321 Seismic Methods</td>
<td>GEOL 4351 Image Spectroscopy</td>
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<td>GEOL 4361 Advanced Structural Geology (odd years)</td>
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<td>GEOL 4362 Tectonics (even years)</td>
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<td>GEOL 4370 Hydrogeology</td>
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+ PFW only required for students under 25 year of age

# GPA is cumulative with includes all college credits at all institutions. Starting with the 2017-2018 catalog GPA 2.75.