Student _____ Date _____ R# _____

# 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 ( ).

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| FIRST YEAR *Fall -15 hours*<br>_____ **GEOL 1303 Physical Geology**<br>_____ **GEOL 1101 Physical Geology Lab**<br>_____ MATH 1451 Calculus I<br>(MPE code 7 or higher, SATM 660, MATH 1321- B, MATH 1550-C;<br>_____ CHEM 1307 Principles of Chemistry I<br>(CHEM Placement exam score of 60% or higher)<br>_____ CHEM 1107 Principles of Chemistry lab<br>(CHEM Placement exam score of 60% or higher)<br>_____ ENGL 1301 Essentials. of Col. Rhetoric | *Spring-15 hours*<br>_____ **GEOL 2401 Historical Geology**<br>(GEOL 1303 +1101)<br>_____ CHEM 1308 Principles of Chemistry II<br>(CHEM 1307+1107; C or better)<br>_____ CHEM 1108 Principles of Chemistry II lab<br>(CHEM 1307+1107; C or better)<br>_____ MATH 1452 Calculus II<br>(MATH 1451)<br>_____ ENGL 1302<br>(ENG 1301) |
| SECOND YEAR *Fall-14 hours*<br>_____**GEOL 3401 Mineralogy and Petrology (2.5 GPA)#**<br>(GEOL 1303+1101, 2401, CHEM 1307+1107, 1308 +1108)<br>_____ **GPH 3300 Geophysics (2.5 GPA)#**<br>(GEOL 1303 +1101, MATH 1451 C or better)<br>_____ PHYS 1403 (or 1408)<br>(MATH 1550 or 1320 +1321) (MATH 1451)<br>_____Foreign Language _____ 2301<br>(F. Language 1507 or 1502 or CLEP test) | *Spring-16 hours*<br>_____ **GCH 3303 Introduction to Geochemistry**<br>(Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)<br>_____ **GEOL 4320 Optical Mineralogy**<br>(GEOL 3401 C- or better)<br>_____ PHYS 1404 (or 2401)<br>(PHYS 1403 or 1408) (MATH 1452)<br>_____ Foreign Language _____ 2302<br>_____ HIST 2300 US History Pre 1877 |
| THIRD YEAR *Fall-14 hours*<br>_____ **GEOL 3402 Structural Geology**<br>(GEOL 3401 PHYS 1403 or 1408 c- or better),<br>_____ **GEOL 4325 Sedimentology & Stratigraphy**<br>GEOL 2401, GEOL 3401, GEOL 4320 c- or better)<br>_____ POLS 1301 American Govt Org<br>_____ English Literature<br>_____ Personal Fitness and Wellness + | *Spring- 14 hours*<br>_____ **GEOL 4321 Igneous and Meta Petrology**<br>(GCH 3303, GEOL 4320 C or better)<br>_____ **GEOL 4201 Sedimentary Field Methods**<br>(GEOL 4325, 3402 C- or better)<br>_____ English Literature<br>_____ POLS 2302 American Govt Org<br>_____ Personal Fitness and Wellness + |
| Summer I _____ GEOL 4301 Advanced Field Methods<br>(GEOL 3402, 4325, 4321, 4201: all with a C or better) | |
| FORTH YEAR *Fall- 13 hours*<br>_____ **GEOL 4101 Undergraduate Seminar**<br>(Senior Standing)<br>_____ **GEOS Elective Jr/Sr**<br>_____ Minor elective Jr/Sr<br>_____ Social and Behavioral Sciences Elective*<br>(Select choice that also meet Multicultural)<br>_____ Oral Com Elective | *Spring- 15 hours*<br>_____ **GEOL 4312 Undergraduate Research**<br>(Senior Standing)<br>_____ HIST 2301 US History since 1877<br>_____ Creative Arts Elective<br>_____ Minor elective Jr/Sr<br>_____ 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):***

Fall

GEOL 3301 Geomorphology
GEOL 3323 Environmental Geology
GEOL 3450 Paleontology (even years)
GEOL 4306 Intro to Petroleum Systems
GEOL 4300 Petrophysics
GCH 4405 Inorganic Geochemistry
GPH 4321 Seismic Methods

Spring

GCH 4308 Techniques/Applications Mineral Sciences
GEOL 3322 Oceanography
GEOL 3328 Energy Resources
GEOL 4310 Planetary Geology
GEOL 4318 Geology of Texas
GEOL 4331 Digital Imagery
GEOL 4351 Image Spectroscopy
GEOL 4361 Advanced Structural Geology (odd years)
GEOL 4362 Tectonics (even years)
GEOL 4370 Hydrogeology

+ 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.

Revised May 23, 2016