



COLLEGE of CHARLESTON

DEPARTMENT OF GEOLOGY AND ENVIRONMENTAL GEOSCIENCES

Program of Study Guidelines
 122 total credit hours for the degree
 Full time schedule: 15+ credits per semester

rev. September 2021

GEOLOGY & ENVIRONMENTAL GEOSCIENCES

PROPOSED SCHEDULE (subject to change)

These core courses are 4 credits/6 contact-hour, lecture + lab format.

| SPRING 2022 | | FALL 2022 | | |
|--|---|--|--|--|
| 250: Introduction to Geochemistry (or CHEM 112^) | | 253: Earth System Science (GEOL elective)* | | |
| 272: Stratigraphy and Sedimentation | | 256: Mineralogy/Petrology | | |
| 291: Water Resources | | 291: Water Resources (tentative) | | |
| 333: Paleobiology | | 352: Structural Geology | | |
| | | 492: Senior Seminar | | |
| SPRING 2023 | | FALL 2023 | | |
| 250: Introduction to Geochemistry (or CHEM 112^) | | 253: Earth System Science (GEOL elective)* | | |
| 272: Stratigraphy and Sedimentation | | 256: Mineralogy/Petrology | | |
| 291: Water Resources | | 291: Water Resources | | |
| 313: Critical Zone Science (GEOL elective)* | | 352: Structural Geology | | |
| 333: Paleobiology | | 492: Senior Seminar | | |
| SUMMER FIELD STUDIES COURSES (B.S.) | | | | |
| GEOL 360: Geology (New Mexico). Every Maymester | GEOL 362: Environ. Geosci. (Colorado)* 2023 – Summer 1 | GEOL 364: Water Resources (India). 2022 - Summer 1 | GEOL 365: Environ. Geosci. (South Africa). 2023 | GEOL 366: Paleontology (Wyoming). 2022 - Summer 1 |

Core courses for GEOL are in red.

* New Course

^See Chemistry Department for course schedule

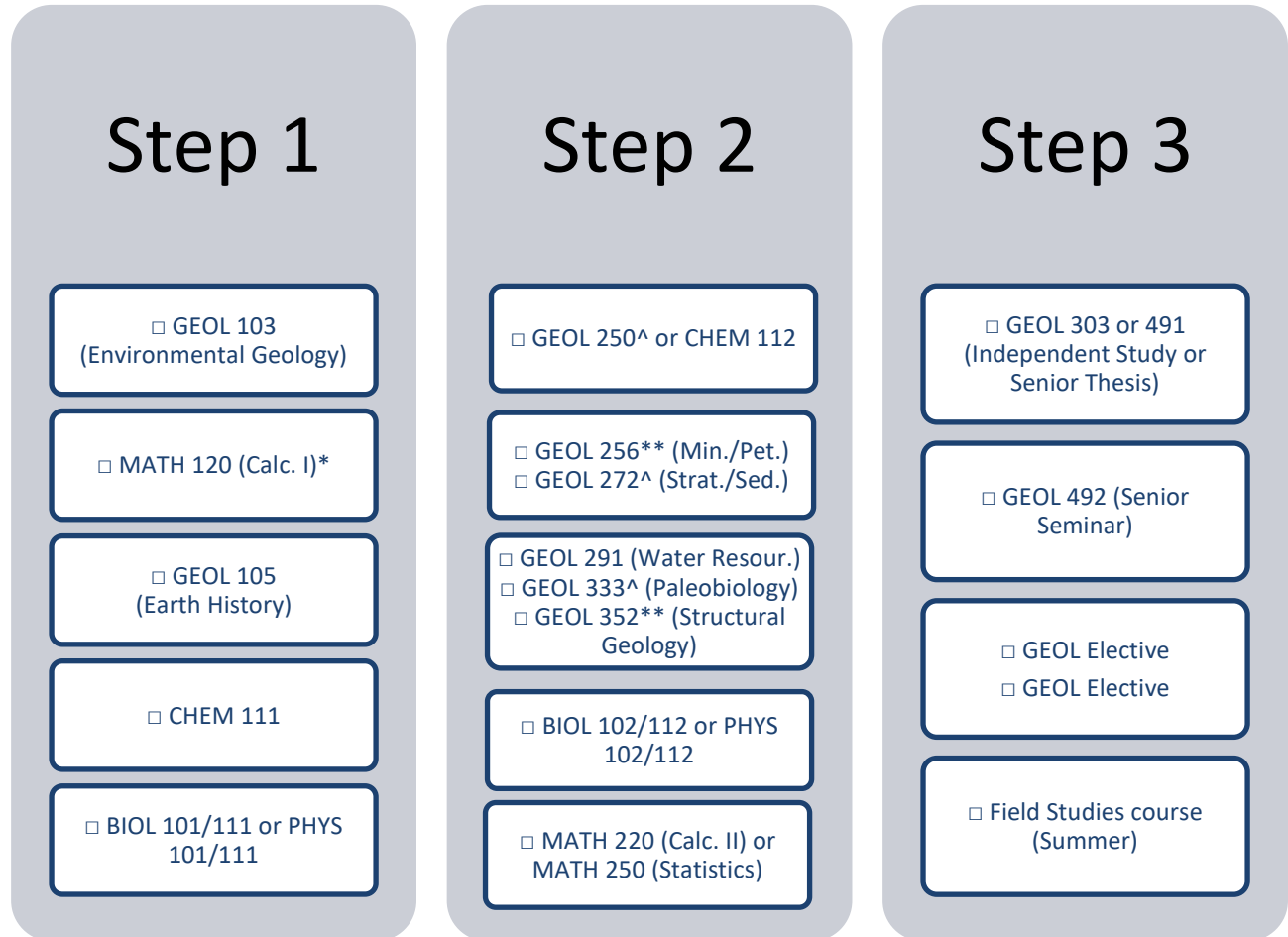


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Geology B.S.



*Geology B.S. majors should take MATH 110 (if needed) (formerly MATH 101) and then MATH 111 (Pre-Calc) to prepare for MATH 120.

**Usually Fall only ^Usually Spring only

Contact the Department for more information:
callahant@cofc.edu or whitekl@cofc.edu



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Required Courses:

[GEOL 103 Environmental Geology \(3\)](#)

[GEOL 103L Environmental Geology Laboratory \(1\)](#)

[GEOL 105 Earth History \(3\)](#)

[GEOL 105L Earth History Laboratory \(1\)](#)

[GEOL 256 Mineralogy and Petrology \(4\)](#)

[GEOL 272 Stratigraphy and Sedimentation \(4\)](#)

[GEOL 291 Water Resources \(4\)](#)

[GEOL 333 Paleobiology \(4\)](#)

[GEOL 352 Structural Geology \(4\)](#)

[GEOL 360 \(4\) OR GEOL 364 \(4\) OR GEOL 365 \(4\) OR GEOL 366 \(4\) \[All are Field Studies\]](#)

[GEOL 492 Senior Seminar \(1\)](#)

Complete 9 or more Credit Hours of:

(at least 6 of these credit hours must be at the 250-level with a maximum of 3 credit hours from [GEOL 260](#) and [GEOL 260L](#) or [GEOL 460L](#)):

[GEOL 206 Planetary Geology \(3\)](#)

[GEOL 213 Natural Hazards \(3\)](#)

[GEOL 235 Geology and Civilization \(3\)](#)

[GEOL 239 Introduction to Seafloor Mapping \(2\)](#)

[GEOL 240 Special Topics in Geology \(1-4\)](#)

[GEOL 253 Earth Systems Science \(4\)](#)

[GEOL 257 Marine Geology \(4\)](#)

[GEOL 260 NASA Space Mission Design \(2\)](#)

[GEOL 260L NASA Lab \(1\)](#)

OR

[GEOL 460L NASA Leadership Lab \(1\)](#)

[GEOL 275 Geomorphology \(4\)](#)

[GEOL 303 Independent Study in Geology \(1-3\)](#)

[GEOL 312 Environmental Field Methods \(3\)](#)

[GEOL 313 Critical Zone Science \(3\)](#)

[GEOL 314 Introduction to Remote Sensing \(4\)](#)

[GEOL 320 Earth Resources \(3\)](#)

[GEOL 339 Seafloor Research \(3\)](#)

[GEOL 357 Oceanographic Research-the Transect Program \(4\)](#)

[GEOL 360 Field Studies \(4\)](#)

[GEOL 364 Field Studies: Environmental Geology and Water Resources in the Developing World \(4\)](#)

[GEOL 365 Field Studies: Geology and Environmental Geosciences in Africa \(4\)](#)

[GEOL 366 Field Studies: Geology and Paleontology \(4\)](#)

[GEOL 395 Special Topics in Geology \(1-4\)](#)

[GEOL 402 Geospatial Science \(4\)](#)

[GEOL 411 Tectonics \(3\)](#)

[GEOL 412 Crustal Geophysics \(3\)](#)

[GEOL 416 Paleoecology \(4\)](#)

[GEOL 430 Sedimentary Petrology \(4\)](#)

[GEOL 434 Geology of the Carolinas \(3\)](#)



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[GEOL 438 Hydrogeology \(4\)](#)

[GEOL 440 Igneous & Metamorphic Petrology \(4\)](#)

[GEOL 441 Pollution in the Environment \(4\)](#)

[GEOL 444 Quantitative Hydrogeology \(3\)](#)

[GEOL 449 Geographical Information Systems \(4\)](#)

[GEOL 469 Advanced GIS - Environmental and Hazards Modeling \(4\)](#)

[GEOL 495 Special Topics \(1-4\)](#)

[GEOL 499A Bachelor's Essay \(3\)](#)

[GEOL 499B Bachelor's Essay \(3\)](#)

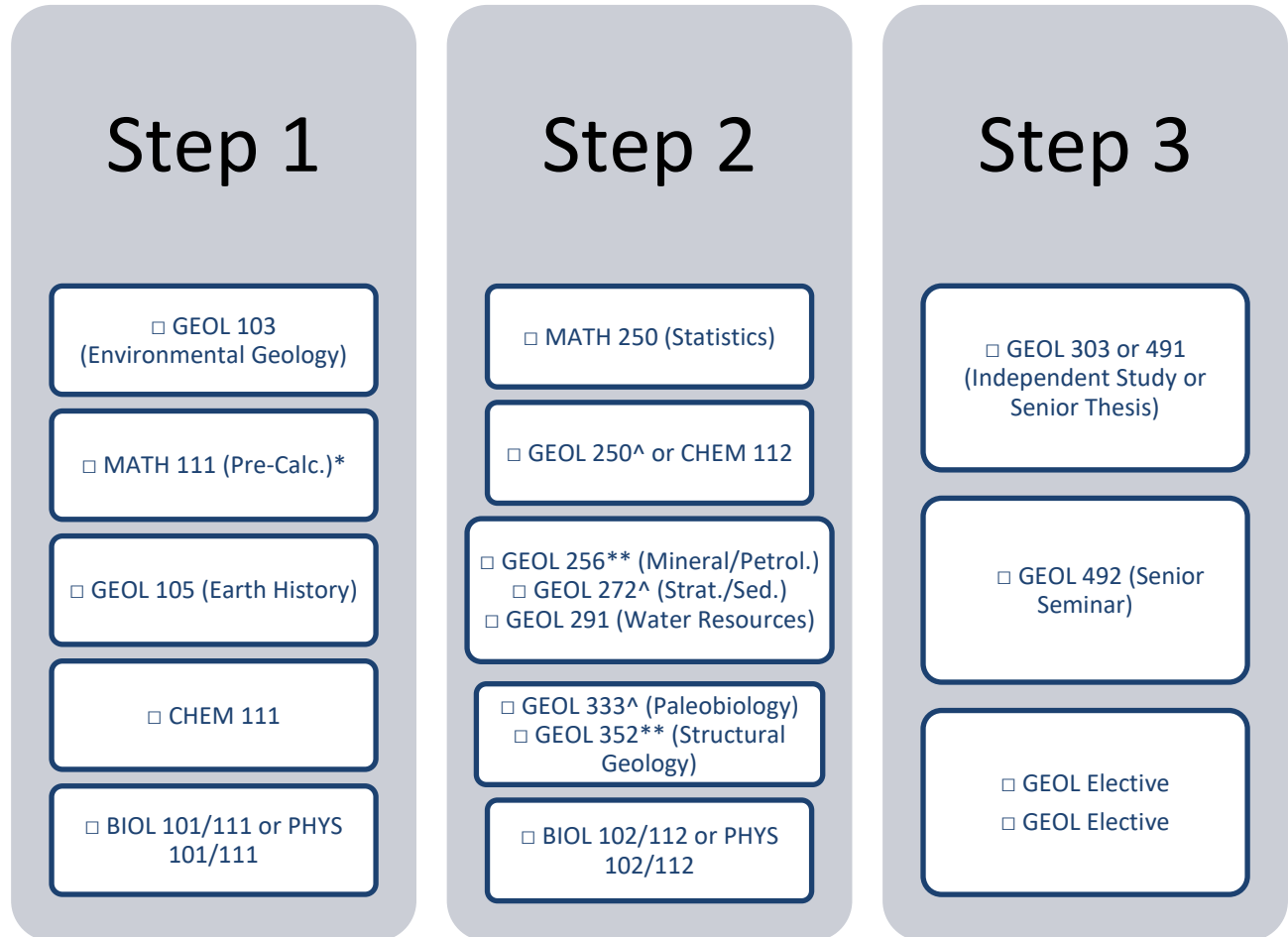


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[GEOL 103L Environmental Geology Laboratory \(1\)](#)

[GEOL 105 Earth History \(3\)](#)

[GEOL 105L Earth History Laboratory \(1\)](#)

[GEOL 256 Mineralogy and Petrology \(4\)](#)

[GEOL 272 Stratigraphy and Sedimentation \(4\)](#)

[GEOL 291 Water Resources \(4\)](#)

[GEOL 333 Paleobiology \(4\)](#)

[GEOL 352 Structural Geology \(4\)](#)

[GEOL 492 Senior Seminar \(1\)](#)

[Note: one of the GEOL 360, 364, 365, 366 Field Studies courses are NOT required for the B.A. degree]

Complete 7 Credit Hours of

(at least 6 of these credit hours must be at the 250-level with a maximum of 3 credit hours from [GEOL 260](#) and [GEOL 260L](#) or [GEOL 460L](#)):

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[GEOL 213 Natural Hazards \(3\)](#)

[GEOL 235 Geology and Civilization \(3\)](#)

[GEOL 239 Introduction to Seafloor Mapping \(2\)](#)

[GEOL 240 Special Topics in Geology \(1-4\)](#)

[GEOL 253 Earth Systems Science \(4\)](#)

[GEOL 257 Marine Geology \(4\)](#)

[GEOL 260 NASA Space Mission Design \(2\)](#)

[GEOL 260L NASA Lab \(1\)](#)

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[GEOL 339 Seafloor Research \(3\)](#)

[GEOL 357 Oceanographic Research-the Transect Program \(4\)](#)

[GEOL 360 Field Studies \(4\)](#)

[GEOL 364 Field Studies: Environmental Geology and Water Resources in the Developing World \(4\)](#)

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[GEOL 366 Field Studies: Geology and Paleontology \(4\)](#)

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University requirements:

| | | |
|---|--|--|
| <p>Humanities</p> <input type="checkbox"/> _____ <input type="checkbox"/> _____ 12 credits from approved Humanities courses with no more than 6 from the same discipline | <p>First Year Experience</p> <input type="checkbox"/> _____ <input type="checkbox"/> FYE or Hons BGS | <p>English</p> <input type="checkbox"/> _____ <input type="checkbox"/> English 110 OR a combination of approved courses (101*, 102*, 215); Exemption is possible |
| <p>Foreign Language</p> <input type="checkbox"/> _____ <input type="checkbox"/> Completion of 202 or its equivalent; Exemption is possible | <p>History</p> <input type="checkbox"/> _____ <input type="checkbox"/> Pre-modern History <input type="checkbox"/> Modern era History | <p>Social Science</p> <input type="checkbox"/> _____ <input type="checkbox"/> Social Science 1 <input type="checkbox"/> Social Science 2 |

Course number, semester

First Year Experience: _____

Foreign Language: _____

Humanities _____

Social Sciences: _____

English*: _____

History: _____

*English 101 and 102 are not offered by College of Charleston but continue to be available through approved credit [Advanced Placement (AP), International Baccalaureate (IB), or Transfer (TR)].