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

**GEOLOGY & ENVIRONMENTAL GEOSCIENCES**

**PROPOSED CORE COURSE SCHEDULE** (subject to change)

Required core courses listed are for **GENV** majors.
Courses are 4 credits/6 contact-hour, lecture + lab format, unless noted.

<table>
<thead>
<tr>
<th>SPRING 2023</th>
<th>FALL 2023</th>
</tr>
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<tbody>
<tr>
<td>250: Introduction to Geochemistry <em>(or CHEM 112)</em></td>
<td>253: Earth Systems Science (tentative)</td>
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<td>272: Stratigraphy and Sedimentation</td>
<td>291: Water Resources (tentative)</td>
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<td>313: Critical Zone Science (3 hr) (tentative)</td>
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</table>

**SUMMER FIELD STUDIES COURSES** (choose one)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>TBA - Summer 2</td>
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</tbody>
</table>

Core courses for **GENV** are in red.

* New Course

^See Chemistry Department for course schedule
Program of Study Guidelines
122 total credit hours for the degree
63+ credits for GENV
Full time schedule: 15+ credits per semester

Environmental Geosciences B.S.

Step 1
- □ GEOL 103 (Environmental Geology)
- □ MATH 111 (Pre-Calc)*
- □ GEOL 105 (Earth History)
- □ CHEM 111
- □ BIOL 101/111 or PHYS 101/111

Step 2
- □ GEOL 250^ or CHEM 112
- □ GEOL 253** (Earth Syst.) □ GEOL 272^ (Strat./Sed.)
- □ GEOL 291 (Water Resour.) □ GEOL 313^ (Critical Zone)
- □ BIOL 102/112 or PHYS 102/112 □ Elective‡
- □ MATH 250 (Statistics) □ Elective

Step 3
- □ GEOL 303, 491 or 499 (Independent Study, Senior Thesis or Bachelor’s Essay)
- □ GEOL 492 (Senior Seminar) □ Elective
- □ Elective □ Elective
- □ Field Studies course (Summer)

* Students should first complete MATH 110 (formerly MATH 101) if they did not place into MATH 111 (Pre-Calc).

** Usually Fall only  ▲ Usually Spring only

‡ Students must take 3 credits from a selected list of BIOL, CHEM, ECON, PHYS, POLS or URST courses

Contact the Department for more information:
callahant@cofc.edu or whitekl@cofc.edu
Program of Study Guidelines

122 total credit hours for the degree
63+ credits for GENV

Full time schedule: 15+ credits per semester

**Environmental Geosciences B.S.**

### Course Descriptions

#### 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 253 Earth Systems Science (4)
- GEOL 272 Stratigraphy and Sedimentation (4)
- GEOL 291 Water Resources (4)
- GEOL 313 Critical Zone Science (3)
- GEOL 362 (4) OR GEOL 364 (4) OR GEOL 365 (4) [All are Field Studies]
- GEOL 492 Senior Seminar (1)

Complete 15 or more Credit Hours of:
(at least 6 of these credit hours must be at the 250-level):

- GEOL 213 Natural Hazards (3)
- GEOL 240 Special Topics in Geology (1-4)
- GEOL 257 Marine Geology (4)
- GEOL 275 Geomorphology (4)
- GEOL 288 Global Change (3)
- GEOL 303 Independent Study in Geology (1-3)
- GEOL 312 Environmental Field Methods (3)
- GEOL 320 Earth Resources (3)
- GEOL 385 Internship (1-4)
- GEOL 395 Special Topics in Geology (1-4)
- GEOL 399 Tutorial (1-3)
- GEOL 402 Geospatial Science (4)
- GEOL 412 Crustal Geophysics (3)
- GEOL 438 Hydrogeology (4)
- GEOL 441 Pollution in the Environment (4)
- GEOL 442 Geological Application of Remote Sensing (4)
- GEOL 449 Geographical Information Systems (4)
- GEOL 469 Advanced GIS - Environmental and Hazards Modeling (4)
- GEOL 491 Senior Thesis
- GEOL 495 Special Topics (1-4)
- GEOL 499A Bachelor’s Essay (3)
- GEOL 499B Bachelor’s Essay (3)
Program of Study Guidelines

122 total credit hours for the degree
63+ credits for GENV

Full time schedule: 15+ credits per semester

Environmental Geosciences B.S.

Complete 3 or more Credit Hours of:

- BIOL 204 Humans and the Environment (3)
- BIOL 211 Biodiversity, Ecology, and Conservation Biology (4)
- BIOL 213 Marine Biodiversity, Ecology, and Conservation Biology (4)
- BIOL 341 General Ecology (4)
- CHEM 220 Fundamentals of Analytical Chemistry (3)
- CHEM 220L Fundamentals of Analytical Chemistry Laboratory (2)
- CHEM 422 Environmental Chemistry (3)
- CHEM 422L Environmental Chemistry Laboratory (1)
- ECON 311 Environmental Economics (3)
- ENVT 200 Introduction to Environmental and Sustainability Studies (3)
- ENVT 352 Special Topics in Environmental and Sustainability Studies (1-4)
- ENVT 452 Advanced Special Topics in Environmental and Sustainability Studies (1-4)
- PHIL 155 Environmental Ethics (3)
- PHYS 105 Introduction to Meteorology (3)
- PHYS 106L Exercises in Weather and Climate (2)
- PHYS 210 Introduction to Air Pollution (3)
- PHYS 215 Synoptic Meteorology (3)
- PHYS 225 Climate (3)
- PHYS 457 Satellite Meteorology (3)
- RELS 276 Religion and the Environment (3)
- SOCY 346 Environmental Sociology (3)
- URST 310 Urban Planning (3)

See the Environmental Geosciences B.S. Program of Study in the 2022-2023 Undergraduate Catalog for Chemistry, Cognate Science, and Math requirements.
University requirements:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>First Year Experience</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FYE or Hons BGS</td>
<td>English 110 OR a combination of approved courses (101*, 102*, 215); Exemption is possible</td>
</tr>
</tbody>
</table>

- Humanities: 12 credits from approved Humanities courses with no more than 6 from the same discipline

<table>
<thead>
<tr>
<th>Foreign Language</th>
<th>History</th>
<th>Social Science</th>
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<tbody>
<tr>
<td>Completion of 202 or its equivalent; Exemption is possible</td>
<td>Pre-modern History</td>
<td>Social Science 1</td>
</tr>
<tr>
<td></td>
<td>Modern era History</td>
<td>Social Science 2</td>
</tr>
</tbody>
</table>

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)].