GEOL OGY
AND
ENVIRONMENTAL
GEOSCIENCES
MAJORS, MINORS, & FRIENDS
THE SHOW MUST GO ON

Geology Club
HYBRID MEETINGS

Shenanigans
ROXY & TRISARAHTOPS
MEET PRESIDENT HSU

Field Trips
GEOL 291L AT GADSDEN CREEK

Field Studies & Research
UNDERGRADS IN MONTANA
GEOMETRY CLUB

Officers
PRESIDENT: COLE BUDI
VP: TYLER ROBERTS
TREASURER: JORDAN JAMES
TREASURER: KC PETERSON
SECRETARY: OLIVIA GONZALEZ
SOCIAL CHAIR: AUDREY HAYES
OUTREACH CHAIR: NATHAN FIELDER

Mission
- SCHOLARSHIP & PROFESSIONAL NETWORKING IN THE EARTH SCIENCES
- EMPHASIS ON PROFESSIONAL GROWTH & SOCIAL & EDUCATIONAL ADVANCEMENT

Membership Requirements
- 10+ COMPLETED CREDITS IN GEOL COURSES
- 3.00 GPA IN GEOL COURSES
- 2.67 OVERALL GPA
- $25 INITIATION FEE
- $15/YR MEMBERSHIP DUES
ENVIRONMENTAL GEOSCIENCES IS A DYNAMIC INTERDISCIPLINARY PROGRAM THAT WILL PREPARE STUDENTS FOR THE CHALLENGING NATURE OF ENVIRONMENTAL PROBLEMS TO INCLUDE CLIMATE CHANGE, EMERGING POLLUTANTS, ALTERNATE ENERGY SOURCES, AND SUSTAINABLE SOLUTIONS.

EARTH SYSTEMS
WATER RESOURCES
POLLUTION

EXPERIENTIAL LEARNING
CRITICAL ZONE SCIENCE
COASTAL RESILIENCY
The College of Charleston’s Department of Geology and Environmental Geosciences is introducing a

GEOINFORMATICS MINOR

21 credit hour minor with 15 hours of required courses and at least 6 elective credits
Core courses include:

- GEOL 103, 103L: Environmental Geology & Lab
- DATA 210: Dataset Organization & Management
- CSCI 220, 220L: Computer Programming I & Lab
- GEOL 402: Geospatial Science

Want to learn more? Scan the QR code
• Integrates all physical sciences to understand the processes, interactions, and feedbacks that occur on Earth
• Sustainability focus
• Fulfills a core requirement for Environmental Geosciences
• Delves deeper into topics introduced in GEOL 103: Environmental Geology

GEOL 253
Lecture: TR 9:25 - 10:40 am | Dr. Tim Callahan
Lab: W 1:45 - 4:45 pm | Dr. Vijay Vulava
Classes

Water Resources – Sp. 21
Engineering Geology
Geospatial Science – GIS/RS
Field Exp. in South Africa (21)

Research

Remote Sensing
Ocean color Modelling
image processing & Programming

Project Sites:
US. Virgin Islands
Great Lakes (Lake Huron and Erie)
South Africa

Funding support available for students interested in doing research
Dr. Barbara Beckingham

Courses scheduled for Spring
GEOL 291L: Water Resources lab
ENVT 200: Intro to Environmental & Sustainability Studies

Research area: Environmental pollution & exposure science

Student projects studying water quality and microplastics fate & effects are available!

Interested in getting involved with professional organizations?
- Society of Environmental Toxicology & Chemistry (SETAC)
- Water Environment Federation (WEF)
- American Water Works Association (AWWA)
- SC Chapter for CofC Students

Feel free to get in touch:
beckinghamba@cofc.edu
Wanted: Research Students interested in making an updated igneous dike map for the SE based on geologic maps, will it unveil the answer to the overriding question “Why do we still have Florida?”

GEOL 395: ST Marine Tectonics—Mid-Ocean Ridges, Subduction Zones, Volcanoes, Earthquakes, Plate Reorganization....

GEOL 235: Geology and Civilization—Did a volcano end the Minoan Civilization? Did climate change or a volcano end the Maya empire? Why was Cahokia abandoned? Did climate change end the Khmer empire? Why did Egypt emerge from the nomads of the desert?
Dr. John Chadwick

High-temperature (LAVA) geochemistry and volcanology of the Earth and terrestrial planets

Major and trace element and isotopic geochemical traits of lava samples, remote sensing of planetary volcanic features
“Rocks are records of events that took place at the time they formed. They are books. They have a different vocabulary, a different alphabet, but you learn how to read them.” - John McPhee
GEOL 412: Geophysics
Dr. Steven “Seismo” Jaumé

Geophysics: Remote sensing of the ground beneath your feet for fame and fortune

Gain data processing and problem-solving skills

Learn to use geological techniques to see below Earth’s surface, including:
- Electrical Resistivity
- Active Source Seismology
- Ground Penetrating Radar
Norm Levine
Environmental and Engineering Geology

Courses:
- Intro GIS
- Advanced GIS
- Geomorphology
- HAZARDS
- Remote Sensing
- Computer Modeling

Research Interests:
- Environmental and Natural Hazards
- 3D Visualization
- Geo-Informatics
- Geoarcheology
- GIS / RS

Sigma
Gamma
Epsilon
Advisor

Charleston Resilience Network

Reducing Coastal Risk on the East and Gulf Coasts

Hazards
Landslides
Volcanic
Flooding
Earthquakes

GIS World Model
Data Slicing
Imagery
Elevation
Transportation
Addresses
Boundaries
Water Features
Survey Control
Your Data

Physical User Conceptual Logical Data Create Software Process Model Engineering Techniques Business
Students Wanted - Funds may be available

- Some GIS Experience preferred
  - Hazards focused - Flooding
  - Hazards focused - Earthquakes
  - Webpage Management
Dr. Scott Persons

GEOL 333
Paleobiology
Research:
Dinosaur Evolution
Paleoecology
Functional Morphology

Student Research Inquiries
personss@cofc.edu
Room 242

Curator, Mace Brown Museum of Natural History
Dr. Cass Runyon

FYE - Iceland
FYE - National Park & Moon Rocks
Planetary Geology
NASA Space Mission Design
Geomorphology
NASA WANTS YOU!

If you are interested in NASA, space science, Earth science, or science education, contact us to find out how you can get $$$ to work on exciting NASA research...

For more information, contact:
Dr. Runyon or Ms. Scozzaro – SSMB 202 or 206 | scsgrant@cofc.edu
Marine Geology

- GEOL 107 – Intro. to Coastal and Marine Geology
  (3 credits, no lab)
  - not for Geo Majors;
  - Great for geology minors, and environmental studies minors

- GEOL 257 – Marine Geology *returning next academic year
  (4 credits with lab)
  - Great for Geo Majors and Minors
  - Great for environmental studies minors
  - Pre-requisite to marine geology research, seafloor mapping
BEAMS Program –
Seafloor Mapping!

- Intro. to Seafloor Mapping (GEOL 239)
- Seafloor Research (GEOL 339)
- Indep. Study
- Sidescan Sonar

oceanica.cofc.edu/beamsprogram

Contact:
Doc Sautter
SautterL@cofc.edu
and/or
Dr. Harris
HarrisS@cofc.edu
• Reconstruct paleoenvironmental and biogeochemical changes across mass extinction events and oceanic anoxic events (OAEs)
• Reconstruct ancient and recent changes in marine oxygen contents
• Track the cycling of mercury during the Phanerozoic
• Characterize and map modern mercury distributions in the oceans and on land
GEOCHEMISTRY, EARTH SYSTEMS SCIENCE, POLLUTION, INDIA FIELD STUDIES

ENVIRONMENTAL POLLUTION RESEARCH

STUDENT RESEARCH OPPORTUNITIES
FILLED WITH INSPIRATION AND INTRIGUE. AN INTENSE VISUAL TREAT!

- THE PHOTOGRAPHY REVIEW

ICONIC SNAPSHOTs
A COMPILATION OF PHOTOGRAPHS

Instagram: @cofcgeology | Twitter: @cofcgeology