Geology Majors & Minors Meeting

Thursday, 9/19 @ 4:45pm
SSMB 129 (Auditorium)

REFRESHMENTS PROVIDED

Events! Scholarships! Spring Courses! Summer 2020 Opportunities!

Facebook: Geology.CofC
Instagram and Twitter: @cofcgeology
Linked In: College of Charleston - Geology
LinkedIn: College of Charleston - Geology

Facebook: Geology.CofC

Instagram & Twitter: @cofcgeology

Jumping for Joy to be Geologists - Field Studies, 2018!
Next meeting:
September 30th 4:30 PM
SSMB room 211
Come check us out!
Sigma Gamma Epsilon (SGE): the Earth Sciences Academic Fraternity

**Mission and Motivation:**
- Scholarship and professional networking in the Earth Sciences
- Emphasis on professional growth and social and educational advancement

**Requirements for Membership:**
- At least 10 completed credits in GEOL courses
- 2.67 GPA in all courses
- 3.00 GPA in GEOL courses
- $25 initiation fee
- $15/year membership dues
IMPORTANT DATES

*TODAY: Last day for students to withdraw with “W” from Express I classes.
*10/1: **Last day to apply for December Graduation**
*10/11: Last day to Drop/Add Express II classes.
*10/14-15: **Fall Break**.
*10/25: Last for students to withdraw with “W” from full semester classes.
*10/28: **Spring 2020 early registration begins based on hours**.
*11/14: Last day for students to withdraw with “W” from Express II classes.
*11/27-12/1: Thanksgiving Holiday.
*12/2: Last day of classes.
*12/3: Reading Day.
*12/4-11: **Exams**
*12/14: Fall 2019 Graduation Commencement.
Fossil Field Trip!
Sign up sheet in Geology Office (SSMB 224)

Open to ALL students!
See Kendrick Marion in Geology office for questions

Friday September 20 – Folly Beach
Starts at 4:00pm at boardwalk to beach – 3rd street W

Come collect fossils and seashells –
learn about lowcountry natural history!
NEWS & NOTES: COURSES & OUR FACULTY

Dr. Adem Ali
• GEOL 438: Hydrogeology
• Engineering Geology

Dr. Barbara Beckingham
• GEOL 291: Water Resources
• Environ. Pollution

Dr. Erin Beutel
• GEOL 492: Senior Seminar
• Tectonics

Dr. Tim Callahan
• GEOL 291L: Water Resources Lab
• GEOL 438L: Hydro Lab

Dr. John Chadwick
• GEOL 256: Mineralogy and Petrology

Dr. Mitchell Colgan
• GEOL 272: Stratigraphy and Sedimentation
• Global Change

Dr. Scott Colgan
• GEOL 395: Advan Mapp. (Fall EXPRESS II)
• Coastal & Marine Geology

Dr. Steve Jaume
• GEOL 412: Crustal Geophysics
• Natural Hazards

Dr. Norm Levine
• GEOL 275: Geomorphology
• GEOL 402: Geospatial Science

Dr. Scott Persons
• GEOL 333: Paleobiology

Dr. Cassandra Runyon
• GEOL 260/460: NASA Space Mission Design

Dr. Leslie “Doc” Sautter
• GEOL 291: Intro to Seafloor Mapping
• GEOL 339: Seafloor research

Dr. Teddy Them
• GEOL 257: Marine Geology

Dr. Vijay Vulava
• GEOL 250: Intro to Geochemistry
• Environ. Pollution

Emma Paz
• GEOL 449: GIS class and lab

Dr. Robert Boessenecker:
• Paleontology research
• Earth History

Jennifer Kist
• GEOL 395: Oceanographic Mapping

Lauren Maurizio
• GEOL 239: Intro SeaMap (Fall Express II); also offered in Spring

Dr. Robin Humphreys
• Environ. Geology
• Earth History
• Lab Coordinator

Kendrick Marion
• Office Manager
• El Jefe

Dr. Robert Boessenecker
• Paleontology research
• Earth History

Dr. Vijay Vulava
• GEOL 250: Intro to Geochemistry
• Environ. Pollution

Dr. Robin Humphreys
• Environ. Geology
• Earth History
• Lab Coordinator
JUNE 2020
STUDY ABROAD
IN INDIA
WATER
RESOURCES & POLLUTION
FIELD STUDIES
EXPLORE THE GANGES RIVER FROM THE HIMALAYA TO THE BAY OF BENGAL IN 3 WEEKS
GEOL 364 / 240
GEOLGY WATER SUSTAINABILITY
SCAN ME!
The GAMES Laboratory
Geochemistry of Ancient and Modern Environmental Systems

- 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
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
  (4 credits with lab)
  • Great for Geo Majors and Minors
  • Great for environmental studies minors
  • Pre-requisite to marine geology research, seafloor mapping

Dr. Leslie “Doc” Sautter
BEAMS Program – Seafloor Mapping!

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

Contact:
Doc Sautter
SautterL@cofc.edu
and/or
Dr. Harris
HarrisS@cofc.edu

oceanica.cofc.edu/beamsprogram
If you are interested in NASA, space 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
Dr. Norm Levine

GIS – Remote Sensing – Environmental / Engineering Geology

Modeling and Visualization of Natural and Environmental Problems – Hazards, Disasters

2D and 3D Visualization and Data Collection

Web Based Mapping – GIS App Development

Use of Drones in Geologic and Environmental Applications
Current Projects

• Charleston Resilience Network – Technical Lead for Grant program
  – High Resolution Flood Model Development for Greater Charleston Region
  – Student Researchers Needed - Some GIS skills – Hydrology Interest

• South Carolina Earthquake Education and Preparedness Program
  – Students Needed for Outreach Program

• Student needed for Website updates and maintenance
GEOL 412: Geophysics
Spring 2020: CRN 23530
TR: 9:25-10:40 AM with Dr. Steven “Seismo” Jaumé

Gain data processing and problem-solving skills

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

Learn to use geological techniques to see below Earth’s surface, including:
- Electrical Resistivity
- Active Source Seismology
- Ground Penetrating Radar
Steven C. Jaume: Courses

GEOL 213: Natural Hazards (every Fall)
GEOL 395: ST-Earthquake Seismology (even year Spring)
GEOL 412: Crustal Geophysics (Spring 2020)

Research Opportunities

Earthquake Hazard Studies in South Carolina
Funding from SC Emergency Management, US Geological Survey, College of Charleston (SURF grants, etc.) and (fingers crossed) maybe even a big pile of $$$ from SC Department of Transportation...
Off to a ROCKING start!
Thank you SO much for being a TA for one or more labs this semester!

TA positions still available:

Mon 11 – 2: Anton Dumars
Wed 11 – 2: Caitlyn Mayer
Fri 1 – 4: Mike Jordan
Tues & Thurs 1:45 – 4:45: Dr. Ali (Water Resources)

*Other opportunities for grading may be available*

If interested – please contact me – humphreysr@cofc.edu
Professional Geology
Knowledge + Practice + Exams = Professional Geologist

• Professional Registration as a Geologist takes time and a broad skillset, but puts you ahead in business.

1. GIT (geologist in training) down to business – Fundamentals of Geology exam
2. Get the experience in the field of geology
3. Become a Professional Geologist – Practice of Geology exam

see Dr. Harris for details
GEOL 256: Mineralogy and Petrology

Formation and identification of minerals and rocks, mineral uses, plate tectonics

Dr. John Chadwick

Spring 2020 - 4 credits

Are you a Junior? It’s time for
FIELD STUDIES 2020!

New Mexico, Colorado, Utah, Arizona

Maymester 2020 (first meeting in Nov.)
Dr. Mitchell Colgan

• Strat/Sed: GEOL 272
• Global Change
• Oil & Gas
• Earth History
Student Paleontology Research!
- Student research on lowcountry fossil collections: scientific writing, methods, and publication
- 1-2 credit independent study (or Bachelor’s essay)

Museum-based independent studies
- fossil preparation, specimen care, cataloging, digitizing, photogrammetry/3D modeling, and more – 1-2 credits
New course! GEOL 395: Applied Paleontology: Fossils as Data, from Excavation to Exhibit Hall

Dr. Robert W. Boessenecker
GEOL 395: Special Topics
Intended enrollment: 10-20
Prerequisites: GEOL 105
Time/day: TBA
Spring 2020

Interested in paleontology? This course is an introduction to the practical methods every paleontologist should learn. Specimen-based science often involves a number of quirky methods that are usually learned “on the fly” as they are normally not taught in a formal setting. Most methods learned in this class are broadly applicable to other fields in Natural History (biology, zoology) and other geological sciences emphasizing sample collection/management.

In this class we will explore:
- Field notes & collecting field data
- Fossil preparation & curation
- Specimen illustration
- Specimen photography
- Reading and writing scientific papers
- Peer review
Dr. Erin Beutel:  beutele@cofc.edu
Spring Courses for Majors:  
Senior Seminar for Rising Seniors

Research Opportunities:

Why do we still have Florida?  Why didn’t it rift away when Pangea broke-up?

Methods:

- Computer modelling of stress and strain
- Fracture zone pattern analysis
- Mapping of Rift zones

What are you interested in?
I am also interested in mid-ocean ridges, back-arc basins….just about all tectonic processes…
WANTED:
Entry Level Research Assistance

WHY:
Study flooding in Charleston

WHEN:
Whenever it floods

WHERE:
Outside your dorm/house

NO EXPERIENCE NEEDED—Training Provided

Minimum obligation:
One meeting a month and uploading photos.

More involvement and research is welcome!

Take picture to join

Email Dr. Erin Beutel:
BeutelE@cofc.edu

https://arcg.is/0S1v89

Help us document flooding where you see it

https://arcg.is/0S1v89

Info Meetings: SSMB 213
Sept 16th @ 3 pm; Sept 20th @ 3 pm; Sept 26th @ 5 pm
Environmental pollution research

- Pollution sources, movement & effects
- Novel environmental monitoring
- Microplastics in the environment
- Water resources

Dr. Barbara Beckingham

Come see me to discuss independent study or summer research!
CofC Water Club
A student chapter of

- Volunteer to support our environment and shared water resources
- Webinars / Career / Professional development
- Scholarships available
- Speakers and other events

Come be a part of it!

For more information please contact
Contact: Dr. Barbara Beckingham, beckinghamba@cofc.edu

www.awwa.org; www.scwaters.org
Dr. Adem Ali
Research
Remote Sensing
Ocean color
Modelling
image processing
&
Programming
Project Sites:
Virgin Islands
Guam
Michigan/Ohio
South Carolina

Classes
Water Resources
Engineering Geology
Geospatial Science – GIS/RS
Field Exp. in South Africa

Funding support available for students interested in doing research