

Instructor: Karin L. Willoughby

Office: SBDG 207 Telephone: 641-3379 Email: [karinw@usca.edu](mailto:karinw@usca.edu)

Office Hours: T@1 – 1:30 pm; W@10 – 10:45 am; W@2 – 2:30 pm; Th@10 – 10:30 am; F@11 – 11:30 pm. Other times by appt. only.

Class meets: W, 6 – 7:15 pm and F, 1 – 2:15 pm

Text: None, outside readings as assigned

Credit: 1 Semester Hour

Course description: Discussion and presentation of current topics in biology and geology by students, faculty and visiting scientists. Emphasis is placed on effective oral communication, critical examination of scientific information and ideas and also, improving grant-writing skills. Students will prepare a mini-grant, 2 class talks and will read and discuss research papers by visiting scientists.

Course objectives: Students will be introduced to current research in the fields of biology and geology through literature searches, seminars, student presentations and discussion. BS students will be expected to present their own current research projects and BA students will be expected to present the state of current research in a field of their choice. BA and BS students will be expected to prepare and submit a mini-grant proposal to fund their research (BS students) or hypothetical research (BA students). Successful students will:

1. critically discuss current research papers in written and oral form;
2. develop strategies for proper oral presentation of scientific data; and
3. prepare a mini-grant to fund research on an appropriate scientific question or hypothesis.

Attendance policy: Refer to the USCA Student Handbook regarding the number of absences permitted and for a list of acceptable excuses. Excuses must have written documentation to be considered. The instructor reserves the right to assign an "F" for the course as the penalty for missing 25% or more of the regularly scheduled class meetings. In particular, a student who misses more than two of the Friday seminar guest speakers or more than one day of the public presentations of fellow students will fail the course, unless excused. Students are responsible for all assigned work, whether absences are excused or unexcused.

Disability statement: If you have a physical, psychological, and/or learning disability, which might affect your performance in class, please contact the Office of Disability Services, 126A B&E (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

Methods of Presentation and Evaluation: The course is evaluated for a letter grade. The student will be evaluated as follows:

- 25% for mini-grant application
- 25% for 1<sup>st</sup> in-class presentation
- 25% for 2<sup>nd</sup> in-class presentation
- 25% for participation in discussions and for attendance.

SEMINAR SCHEDULE		
Aug.25		
Sept. 1	MFAT	
Sept. 8	Corey Feraldi	
Sept. 15	Dr. Sara Strycharz, PhD, University of South Carolina Columbia	"Molecular Mechanisms of Plant-mediated Trichloroethylene Degradation"
Sept. 22	Dr. Edward Inscho, Director of the MD/PhD Program, Department of Physiology, School of Medicine Medical College of Georgia	"Renal Hemodynamics in Hypertension and the Relationship of Inflammatory Processes to Hypertensive Renal Injury."
Sept. 29	Mr. Rudy Mancke, Distinguished Lecturer in Natural History, School of the Environment, University of South Carolina	
Oct. 6	Dr. Omar Bagasra, MD, PhD, Claflin College	"A microRNA-based vaccine for HIV"
Oct. 13	Dr. Lucia Pirisi-Creek, M.D., Interim Deputy Director for Research and Education South Carolina Cancer Center	"Papillomavirus-mediated transformation of human cells: a model to dissect the genesis of cervical cancer"
Oct. 20	FALL BREAK	
Oct. 27	Dr. Gary Mills, Research Scientist & Program Manager Organic Analysis / Mass Spectrometry, SRS	" Bioaccumulation and trophic transfer of PCBs in fiddler crabs and clapper rails in a Georgia salt marsh"
Nov, 3	Dr. Madilyn Fletcher, Director, School of the Environment; Professor, Marine and Biological Sciences, University of South Carolina	"Coastal Ocean Observations -- Possibilities for Problem- Solving, Predictions, and Partnerships."
Nov. 10	Dr. Sally Walker, Paleontological Society Distinguished Lecturer; Associate Professor, Department of Geology, University of Georgia	"Deep-Sea Taphonomy: Carbonate - preservation in shelf-to-slope environments"
Nov. 17	Independent Research Talks	
Nov. 24	THANKSGIVING BREAK	
Dec. 1	Independent Research Talks	
Dec. 8	Independent Research Talks	