

**Barrier Island Ecology 2023**  
**Summer Field Program**  
**University of Southern Mississippi Gulf Coast Research**  
**Laboratory**  
**May 30, 2023-June 13, 2023**

**Instructor:** Dr. Christy Philippoff  
228-990-9614 (cell phone)

**Course Description:** The northern Gulf of Mexico has a unique set of barrier islands, from Alabama to Louisiana that are approximately 8-10 miles offshore. To the north of this chain of barrier islands is the Mississippi Sound, with its shallow brackish waters. To the south of this chain of barrier islands is the deep marine seawater of the Gulf of Mexico. This geological wonder allows for the formation of a unique ecosystem on these barrier islands. Topics covered in this class include geology, ecology, botany, and zoology, and with a variety field research excursions highlighting methods and techniques for sampling in these unique ecosystems.

**Learning Goals:** Students will gain an understanding of the geology, ecology, botany, and zoology of barrier islands along the northern Gulf Coast, found within Alabama, Mississippi, and Louisiana waters. Students will also become familiar with sampling techniques and observation skills while exploring these islands.

**Grading:**

Undergraduate students:

**Lecture:**

4 Quizzes 50 pts  
Lecture Final Exam 100 pts  
**Total 150 pts**

**Lab/Field:**

Field Composition Notebook 100 pts  
Species Presentation 25 pts  
Lab Final Exam 50 pts  
Group/Lab Participation 50 pts  
Trash Collection/Data 10 pts  
**Total 235 pts**

Graduate students:

**Lecture:**

4 Quizzes 50 pts  
Lecture Final Exam 100 pts  
Review Paper 50 pts  
**Total 200 pts**

**Lab/Field:**

Field Composition Notebook 100 pts  
Species Presentation 25 pts  
Lab Final Exam 50 pts  
Group/Lab Participation 80 pts  
Trash Collection/Data 10 pts  
**Total 265 pts**

**Letter grades are based upon a straight percentage breakdown:**

**A = 100-90%, B = 89-80%, C = 79-70%, D = 69-60%, F = 59% or lower**

## **Tentative Schedule:**

### **Week 1**

#### **Tuesday-May 30**

- Introduction
- Library Orientation
- Course Introduction
- Ecology Notes
- Grand Bay NERR

#### **Wednesday-May 31**

- Ecology Notes
- Audubon Center
- East Beach

#### **Thursday-June 1**

- Test 1: Ecology Test
- Cat Island

#### **Friday-June 2**

- Geomorphology Notes
- Squid Dissection
- Graph Tides
- Sandhill Crane Refuge

### **Week 2**

#### **Monday – June 5**

- Chandeleur Island

#### **Tuesday – June 6**

- Plate Tectonics Lab
- Test 2: Geomorphology Test
- Barrier Island Notes
- Gulf Islands National Seashore

#### **Wednesday– June 7**

- Ship Island

#### **Thursday – June 8**

- Test 3: Barrier Island Test
- Anthropogenic Effect Notes

- Belle Fontaine
- Marine Education Center
- Shells Lab
- Carnivorous Plants Lab

**Friday – June 9**

- Dauphin Island

**Week 3**

**Monday – June 12**

- Test 4: Anthropogenic Effects
- Deer Island
- Lab Final
- Presentations

**Tuesday – June 13**

- Lecture Final

**Field Trip Essentials:**

Please be prepared for every field trip. Here is a list of items that are necessary for field trips: closed-toed shoes, hat, sunscreen, bug spray, water, snacks, etc.

If a student has a disability that qualifies under the Americans with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

**Address:**

The University of Southern Mississippi Office for Disability Accommodations 118 College Drive # 8586 Hattiesburg, MS 39406-0001

**Voice Telephone:** 601.266.5024 or 228.214.3232

**Fax:** 601.266.6035

Individuals with hearing impairments can contact ODA using the Mississippi Relay Service at 1.800.582.2233 (TTY) or emailing ODA at [oda@usm.edu](mailto:oda@usm.edu).

**Academic Integrity**

All students at the University of Southern Mississippi are expected to demonstrate the highest levels of academic integrity in all that they do. Forms of academic dishonesty include (but are not limited to):

1. Cheating (including copying from others' work)
2. Plagiarism (representing another person's words or ideas as your own; failure to properly cite the source of your information, argument, or concepts)
3. Falsification of documents

4. Disclosure of test or other assignment content to another student
5. Submission of the same paper or other assignment to more than one class without the explicit approval of all faculty members involved
6. Unauthorized academic collaboration with others
7. Conspiracy to engage in academic misconduct.

Engaging in any of these behaviors or supporting others who do so will result in academic penalties and/or other sanctions. If a faculty member determines that a student has violated our Academic Integrity Policy, sanctions ranging from resubmission of work to course failure may occur, including the possibility of receiving a grade of “XF” for the course, which will be on the student’s transcript with the notation “Failure due to academic misconduct.” For more details, please see the University’s [Academic Integrity Policy](#). Note that repeated acts of academic misconduct will lead to expulsion from the University