

**COA 428/528 – Marine Invertebrate Zoology**  
**Gulf Coast Research Laboratory Summer Field Program**  
**Summer 2017; July 3<sup>rd</sup> – July 28<sup>th</sup>**

**Instructor:** Dr. Brent P. Thoma

**E-mail:** brent.thoma@gmail.com

**Phone:** 337-371-8700

**Required Text:** Brusca, Moore, & Shuster, **Invertebrates**. 3<sup>rd</sup> Edition. ISBN 13: 978-1605353753

**Student Learning Outcomes:** Students will demonstrate a proficiency in:

- The identification of major marine invertebrate groups
- Comparing morphology, reproduction, movement, and physiology of major marine invertebrate groups
- Describing patterns of invertebrate diversity in various marine and estuarine habitats

**Notes & Recording:** Lecture outlines will be provided for each lecture. These “outlines” should form the backbone of your notes and will not take the place of taking notes and asking questions. Questions for the exams will be taken from the material presented in class, your textbook, and assigned readings. You may use a tape recorder for the lectures.

**Lecture Exams:** There will be **two (2)** written exams, a mid-term and final. Exams will cover material from the lectures, handouts, any assigned readings, and discussion. *Each exam will be worth 150 points.*

**Laboratory (Practical) Exams:** There will be **two (2)** practical exams, a mid-term and final. Questions will focus on taxonomic identification and ecological information for estuarine and marine invertebrates collected during the class but will also include preserved specimens provided for demonstration. In addition, there will potentially be a number of “unknowns” that students may not have seen before, but represent higher-level classifications covered in the course (e.g. a specimen of an Australian crawfish: students should know that it is a Crustacean belonging to the class Malacostraca and the order Decapoda). Because the course is primarily field-oriented and taught over a 4-week period, each of the two lab exams will focus on species collected during class field trips and covered in lecture and lab; these species will most likely fall into different phyla and their coverage during exams will not adhere to a phylogenetic framework.

**Species Accounts:** This is a field-intensive course and, as such, we will be in the field collecting a number of specimens. Back in the lab, these specimens will need to be identified and either maintained in aquaria or preserved for future study. Each student will, individually, identify at least four species and then create a species account for each of these species, including information relevant to the identification, classification, and ecology of the species. An example species account will be provided on the first day of class. Species accounts will be worth 100 pts total.

**Grading:** Grade ranges are -- D: 60 to 69; C: 70 to 79; B: 80 to 89; A: anything equal to or greater than 90. Any grade below 60 is failing. Any fractional point equal to or greater than five tenths of a point (i.e.  $\geq 0.5$ ) will be rounded up to the next whole number.

**Points possible:**

	<u>Lecture</u>		<u>Lab</u>
Exam 1	150 pts	Exam 1	100 pts
Exam 2	150 pts	Exam 2	100 pts
		Spp. accounts	100 pts
<b>TOTAL</b>	<b>300 pts</b>	<b>TOTAL</b>	<b>300 pts</b>

**Graduate Students:** In addition to the exams and species accounts listed above, graduate students will be required to complete a 10-12 page research paper and a laboratory exercise (each worth 100 pts for lecture and lab, respectively; totaling to 400 pts possible in lecture and 400 pts possible in lab). The topic of the paper

will be determined based upon your interest and modified as needed. The laboratory exercise could be something as simple as leading a laboratory study group or as complex as a field or laboratory experiment and again this will be based upon your interest and modified as appropriate.

**Class Behavior:** Being an abbreviated, summer field course means that we will be spending a lot of time together (average of 6-8 hours, sometimes much more). While you are not expected to BFF's, you are expected to remain courteous and respectful towards one another. If you find that you are having difficulty with a peer, please feel free to talk to me, send me an email, or drop me a note. This class should be a fun, informative, and formative experience.

*Questions are strongly encouraged. If you have any questions during lecture, lab, or the field ask.*

**Field trips:** Field trips are an integral part of this course. This may include working aboard both larger research vessels and smaller craft, snorkeling in deeper waters, wading in shallow waters, and nearly everything in between. We will often have a number of different pieces of collecting gear and buckets with us thus it is important you lend a hand and participate in the fieldwork. Most of you will find that even the most challenging days in the field are better than the best days you have at your home institutions.

**Success in Class:** *Start right away.* Students who get help from the beginning of the semester typically do better than those who wait. *Come prepared.* Look over the class notes, textbook, and any extra readings to try to identify any problem areas and make a list of specific questions. The more you prepare, the more you will get out of the class and - not to mention - the more time you will have for other activities.

### **Disability Accommodations**

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.