

## BI 546: MARINE INVERTEBRATES

Fanuchanan (Fall) 2024

**Instructor:** Rob Lasley

**Office:** House 4, Dean's Circle

**Contact Info:** office phone: NA; email: rlasleyjr@gmail.com

**Office Hours:** Tue and Thu 3:20PM-4PM in classroom or by appointment

**Textbook:** Brusca *et al.* 2023. Invertebrates, 4th edition.

An additional very useful resource for this course: Micronesica Vol. 35-36: Marine biodiversity of Guam and the Marianas. This can be downloaded as a pdf.

<http://www.uog.edu/up/micronesica/Vol36abstracts.asp>.

BI546 is a 4-credit graduate level course that will introduce you to the major (and not-so-major) marine invertebrate phyla. Lectures will address topics of higher-level phylogeny, anatomical and morphological diversity, life history, ecology, anatomy and physiology of each group. Laboratories will provide hands-on experience with representatives of the groups we cover in lecture. We will go to field sites as well, so that you can get experience identifying invertebrates in situ. The class will meet for two lectures per week on Tuesdays and Thursdays 2-3:20 PM and one laboratory on Friday 1:00-3:50 PM.

**Lectures:** I will handle most lectures, though there may be a couple of guest lecturers on certain topics. The lecture schedule will surely change as the course progresses.

**Readings:** Readings will be assigned from the textbook, to augment the class lectures. Most of the lecture exam questions will come from lecture material, but Brusca *et al.* (2023) is a comprehensive text and good resource. Reading is strongly recommended.

**Laboratories:** Indoor labs will help familiarize you with the diversity of form and function within each invertebrate phylum. We will be working with fixed and fresh whole specimens, microscopic slides and a laboratory manual (which I will print for you each week). There are some dissecting tools available in the classroom, but I highly recommend that you supply yourself with a good pair of forceps. I do not recommend buying a student dissecting kit since they are often of poor quality.

**Exams:** There will be three lecture exams and two lab practical exams. These will be in-class and closed-book. Lecture make-up exams are not allowed except under extenuating circumstances and only after discussion with me. The lab practical exams cannot be made up.

**Final Project:** Each student will complete a photo hunt. A list of taxa will be provided, and each student will find, photograph, and identify species in each taxon. Guidelines and format will be provided in class.

**Field trips:** I will lead three field trips during lab times and two (or more) outside of lab times—at night or on the weekends. You are required to attend four field trips. Grades will be determined based on participation and knowledge of encountered taxa. Taxa encountered on

the trips can be photographed and used for your final projects... Attendance on all field trips is encouraged. Please see me if you cannot snorkel.

**Lab Notebooks/Assignments:** You will need to buy a sketchbook for the lab. The lab manual will direct students to sketch and label specimens in a lab notebook. There will be additional questions and assignments. You will answer the questions and complete assignments in the lab notebooks. The lab notebooks will be graded on accuracy, completeness, neatness (manual submitted when you take your lab practical exams). Yes, you need to hand draw the specimens.

**Attendance:** You are required to attend all lectures and laboratories and to be on time for all. If you have scheduled travel during the semester, please let me know in advance. I can make allowances for this if I know about it ahead of time. You are responsible for letting me know about this.

Course requirements and grading: to summarize, you will be graded on the following scheme:

Three lecture exams.....	30%
Two lab practicals.....	20%
Field trips.....	20%
Lab notebook/assignments.....	15%
Final project.....	10%
Attendance and participation in class discussions.....	5%

I will provide more information on how grades will be assessed as we discuss the requirements of each within the next couple of weeks.

## **Some UOG Rules and Policies:**

### **Student Workload**

Students should expect to spend a minimum of two hours in outside preparation for each hour spent in lecture sessions. Preparation of research projects will require substantial time out of normal classroom hours.

### **Special needs**

Students with special needs must make arrangements through the ADA office. The University makes every attempt to accommodate such requests (see below). Students who cannot meet the requirements of a particular field trip or activity must discuss the problem with me several days in advance.

### **Drop dates**

University policy sets the dates for dropping a class. You can withdraw from classes “voluntarily” until mid October (i.e., without notifying me) and as late as the end of the semester with my signature on a withdrawal form. Be aware of your standing in the course. When in doubt, ask—you are responsible for keeping on top of your performance in class.

## **UOG Disabilities Policy**

In accordance with the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973, the University of Guam does not discriminate against students and applicants on the basis of disability in the administration of its educational and other programs. The University offers reasonable accommodations for a student or applicant who is otherwise qualified, if the accommodation is reasonable, effective and will not alter a fundamental aspect of the University's program nor will otherwise impose an undue hardship on the University, and/or there are not equivalent alternatives. Students are expected to make timely requests for accommodation, using the procedure below\*. If appropriate, the University may choose to consult with such individuals, at or outside the University, to provide expertise needed to evaluate the request for accommodation. Each student bears the responsibility for initiating and then documenting a disability-related request for accommodation in the manner requested in this Policy. [\*full text at: [www.uog.edu/eeo/PolicyDisability.pdf](http://www.uog.edu/eeo/PolicyDisability.pdf)]

## **Tobacco-free/Smoke-free campus**

UOG is a tobacco-free campus. Thank you for not using tobacco products on campus, and for helping make UOG a healthy learning and living environment.

## **Policies and Definitions: Plagiarism and Cheating**

**Academic dishonesty:** All assignments and tests must be your own original work.

Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without adequate acknowledgement of the original source. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations, e.g., looking at other students' answers, using crib notes (including electronic), getting information from another person via any kind of communication.

Plagiarizing in the term paper or cheating on tests will result in a score of 0 for that paper or exam. If a plagiarized paper is not replaced with original work during the semester, a grade of F will be assigned for the course. No retaking of an exam for which a 0 for cheating has been received will be allowed. If you are not sure what plagiarism is and how to avoid it in using sources for your work, see [www.indiana.edu/~wts/pamphlets/plagiarism.shtml](http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml), and contact me as well. We will also discuss this in class, as well as how to correctly cite others' work in a scientific paper.

## **Other Issues**

Unforeseen circumstances may (and almost certainly will) make it necessary to amend parts of this syllabus. In such cases, I will inform you in class, or by email, of the changes to be made and, whenever possible, will consult with you prior to initiating the change.

# BI 546 Course Schedule

11-Aug-24		Lecture	Lab
Tu	No Class		
Th	CourseIntro, IntroToMetazoa		
Fr			
18-Aug-24			
Tu	IntroductionToMetazoa		
Th	Porifera		
Fr	Porifera		
25-Aug-24			
Tu	Porifera		
Th	Project and Cnidaria		
Fr	Cnidaria		
1-Sep-24			
Tu	Cnidaria		
Th	Cnidaria		
Fr	Project and Deadheads		
8-Sep-24			
Tu	Cnidaria - Corals by Dave Burdick		
Th	Placozoa and Ctenophora		
Fr	Coral Workshop		
15-Sep-24			
Tu	Ctenophora and Mesozoa		
Th	Exam 1		
Fr	off		
22-Sep-24			
Tu	Platyhelminthes		
Th	Platyhelminthes		
Fr	Field		
29-Sep-24			
Tu	Rotifera		
Th	Nematoda		
Fr	Worm Diversity		
6-Oct-24			
Tu	No Class		
Th	No Class		
Fr	No Class		
13-Oct-24			
Tu	Annelida		
Th	Annelida		
Fr	Bulk samples		
20-Oct-24			
Tu	Mollusca		
Th	Mollusca		
Fr	Lab Practical 1		
27-Oct-24			
Tu	Mollusca		
Th	Mollusca		
Fr	Mollusca		
3-Nov-24			
Tu	Exam 2		
Th	Tardigrada		
Fr	Field		
10-Nov-24			
Tu	Arthropoda		
Th	Arthropoda		
Fr	Arthropoda		
17-Nov-24			
Tu	Arthropoda		
Th	Lophophorata		
Fr	Field		
24-Nov-24			
Tu	Chordata		
Th	No Class		
Fr	No Class		
1-Dec-24			
Tu	Chordata		
Th	Echinodermata		
Fr	Chordata		
8-Dec-24			
Tu	Echinodermata		
Th	Echinodermata		
Fr	Echinodermata		
15-Dec-24			
Tu	Exam 3		
Th			
Fr	Lab Practical 2, projects due		