

Instructor - Dr. Ted Uyeno

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Hours -

Office: Tue 4:00 – 5:00, Wed 10:00-11:00 (or by appointment)

Course: Lecture – Mon, Wed, Fri, 9:00 - 9:50 am, BSC 1202

Lab – Fri, 10:30 am - 1:20 pm, BC 1043

Textbook – Invertebrate Zoology, Ruppert, Fox, & Barnes 7th ed. Brooks/Cole Cengage.

Laboratory - Dissection tools are required (can be purchased at the bookstore)

Course Description: This course surveys the major phyla of aquatic, terrestrial and aerial invertebrate organisms on our planet. We will look at how these interesting organisms evolved to exist today with their extremely diverse functional morphologies and inhabit their current ecological niches.

Pre-Requisite: Biology 1107-1108 or instructor permission.

Attendance: MANDATORY! Please note: 1) I keep track of attendance. 2) Disruptive students will be asked to leave. 3) **NO** electronics or associated earpieces are allowed in **lecture or laboratory**. Viewing a cell-phone during a quiz or exam will be treated as an instance of **CHEATING**. 4) Those wishing to use laptop computers as part of the class are required to sit in the first row of the classroom. Viewing anything other than BIOL 2651 coursework on a computer during course time is prohibited. Any of these violations may result in the loss of one **LETTER GRADE** from your final grade. Students missing 20% of the lectures will receive a grade of “F” **regardless** of standing.

Attendance on two course field trips are mandatory.

Students with Documented Disabilities: I would like to teach everyone; Students needing accommodations should contact me at the beginning of the semester. Students may need to register with the Access Office for Students with Disabilities (Farber Hall, 245-2498).

Assessment: The **lecture grade (250 pts)** is composed of *four exams (50 pts each)* and a *research paper (50 pts)*. There will be a **final exam that is optional**. It can replace one of the four lecture exams in case you miss or do poorly on one. The **lab grade (150 pts)** is composed of *two lab practicals (50 pts each)* and a *lab notebook/participation grade (50 pts)*. The final grade will be out of 400 points.

Grade Scale: **90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F**

Privacy Act: The FERPA Privacy Act does not allow me to discuss grades over the phone, sent to non-VSU email addresses, or be given to friends or relatives.

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class. No first warning will be given.

Important Dates: Mid-Term – February 28, Final Exam – May 2, 8:00 AM

*** The Instructor reserves the right to modify the above contents with prior notification.**

Learning contract – Dr. T. Ayeno

- 1) **I care** – I teach because I want to make a contribution to your successful career. You must also promise to make the effort to rise to expectations worthy of your own future goals.
- 2) **Knowledge ownership** – “You can lead a horse to water, but you can’t make him drink”. I try really hard do three things to lead students to knowledge. A) I select only the most important topics. B) I organize the topics so each lecture builds on previous ones. C) I include current and personal details to make the class relevant, interesting, and cutting edge. This effort is lost on students who expect proficiency to come from little more than simply listening to lectures and last minute cramming. Your success is proportional to your amount of effort and review.
- 3) **Self-motivation** – College is not an extension of a kid’s legally-required high-school education. It is an adult’s entry into the job market. The distinction is important because your future career job application will hinge on your college transcript. Your peer competition understands this and is doing all he or she can to out-perform you. I try hard to motivate you, but ultimately, good grades only go to students with high internal drive.
- 4) **Synthetic thinking** – A fancy way of saying “make connections”. I will give you new conceptual “tools”, so become a tool user. Own your newfound knowledge and use it to understand your world. If you come across something that’s peripherally related to class material, ask questions about it. You can’t help but become motivated when you’re mentally engaged.
- 5) **Honesty and integrity** – Do not cheat. People who care about you, including me, expect more from you than that. I punish cheaters to the fullest extent allowed by the Student Code and in the future it is tough explaining why you should be given the job or admitted to grad school when your transcript has an F because you got caught plagiarizing or palming a crib note.
- 6) **Participate!** – Have a question? Ask it! Here is a universal truth: if you have a question, chances are good that someone else is wondering the same thing. You’re not alone and I will never, ever belittle you for trying to learn. It makes for engaged learning and who knows, maybe your question unlocks a fundamental concept that half of the final exam questions are about. My deal for shy people: I won’t pick on you if you promise not to keep questions bottled up.
- 7) **Email etiquette** – Emails lack non-verbal cues and often lead to unintended consequences. As such, I require you to email me using standard formal etiquette: A) Include a salutation, (e.g. Dear Dr. X or Hello Prof. X, not Hey), B) follow this by a complete description of your question/message, and C) always sign off using a complementary closing and your name/ID number. I do not respond to emails that do not have all these components. Use your VSU email address; others are often blocked by our inbox system.
- 8) **Start early** – This class is fast moving, and builds on itself; there is no time later to catch up.
- 9) **Priorities** – In signing this, you have made the commitment to learn. It is a priority that is similar to that of a paying job. To teach you effectively, I require you to show up on time, to be mindful of the above points and be respectful to me and your fellow students.

I have read and understand these crucial tips for success: _____
Name Date

BIOL 3800/5800
Invertebrate Zoology
Dr. Ted Uyeno

Tentative Lecture Outline - This is the order in which we will cover topics.

| TOPIC | TEXT CHAPTERS |
|-------------------------------------|----------------------|
| Intro to diversity and phylogeny | 1 |
| Intro to Protozoa | 2,3 |
| Intro to Metazoa | 4 |
| Porifera | 5 |
| Eumetazoa | 6 |
| Cnidaria and Ctenophora | 7,8 |
| Exam 1 | |
| Platyhelminthes and Nemertea | 10,11 |
| Nematoda | 22 |
| Annelida | 13 |
| Other worms: Echiura sipuncula | 14 |
| Exam 2 | |
| Mollusca | 12 |
| Biom mineralization | |
| Structural support | |
| Exam 3 | |
| Tardigrades and intro to arthropods | 15,16 |
| Chelicerata | 18 |
| Crustacea | 19 |
| Hexapods/myriapods | 20,21 |
| Deuterostomes | 27 |
| Echinoderms | 28 |
| Chordata | 29 |
| Exam 4 | |
| Final Exam | |

Lecture Exams:

- 1 – February 4
- 2 – February 27
- 3 – April 1
- 4 – April 29

Final Exam:

Lecture – Wednesday, May 1, 12:30 – 1:30

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Tentative Lab Schedule - This is the order in which we will cover topics.

| DAY | TOPIC | Specimens |
|---------------|-----------------------------|------------------|
| 1 January 11 | Phylogenetics | Notebooks |
| 2 January 18 | Porifera | Sponges |
| 3 January 25 | Cnidaria | Jellyfish |
| 4 February 1 | Worms 1 | Flat/roundworm |
| 5 February 8 | Worms 2 | Earthworms |
| 6 February 15 | Molluscs 1 | Snails/clams |
| 7 February 22 | Molluscs 2 | Squids |
| 8 March 1 | LAB PRACTICAL 1 | |
| 9 March 8 | Gulf Coast trip preparation | |
| 10 March 9 | Gulf Coast trip | Panacea, FL |
| 11 March 15 | Arthropod 1 | Crayfish |
| 12 March 22 | Arthropod 2 | Field Collection |
| 13 March 29 | Georgia Academy of Science | |
| 13 April 5 | Arthropod 3 | Grasshopper |
| 14 April 12 | Echinoderms | Seastar |
| 15 April 19 | Chordates | Sea squirts |
| 16 April 26 | LAB PRACTICAL 2 | |
