

Biology 230 Laboratory Syllabus Fall 2012

Section A03L: Thursday 9:40am-12:40pm

HS-30

Instructor: Timothy Anderson M.S.

Email: andert54@uwosh.edu

Office: HS-317

Office Hours: Monday 3pm-5pm, Tuesday 10am-12pm,
Wednesday 12pm-2pm, Thursday 1pm-3pm or by appointment.

Texts:

“Zoology” Miller and Harley, 8th Edition

Biology of Animals Lab Manual by Donna Charley-Johnson (available at the bookstore only)

Grading:

NO CELL PHONES OR TABLETS! I will deduct 10 points from your overall grade every time I see you with a cell phone/tablet in class. Everything you will need for the course is either in your text book, laboratory manual, or will be presented during the introduction before you start each lab. Your laboratory grade will be worth 42% of your final grade. There will be 3 lab practicals that will determine 80% of your laboratory grade. The other 20% of your lab grade will be determined based on the skill assessments described below. I retain the right to modify grades in the event of extreme circumstances.

Exam 1:	100
Exam 2:	100
<u>Exam 3:</u>	<u>100</u>
Total:	300

Skill Assessments:

20% of each lab exam will come from skill assessment. Those assessments are as follows:

- 1) The first skill assessment will be on your proficiency with the compound microscope. You will be expected to properly use a microscope as the microscope is one of the most important and heavily used tools in biology and microbiology.
- 2) The second assessment will be determined from your dissections that you perform throughout the semester. I understand that not everyone will be good at dissection, but

you are still responsible for understanding the morphology of the animals so they go hand in hand.

- 3) The final assessment will be based on a self determined semester long project that will be published online at the Wisconsin Bestiary website (<http://www.uwosh.edu/wisconsinbestiary/splash>). I will discuss this more in lab.

Exams:

The exams will be 20 questions in length and the format will be a practical exam meaning you will be responsible for identifying structures from mounted or preserved specimens. You will have roughly 3 minutes at each station to answer the question with time at the end to go back to questions that may have been difficult for you.

Attendance:

Attendance is mandatory for all labs. Students are responsible for all material covered in class. If there is a situation that prevents you from attending lab, you need to get in contact with me as soon as possible. If you want to receive credit for attendance, you will need to provide documentation from a doctor or another valid source that vouches for your absence.

Academic Dishonesty:

Don't cheat. If you decide to cheat or engage in other forms of academic dishonesty you will be subject to the Student Academic Disciplinary procedures as outlined in the Student Disciplinary Code (<http://www.uwosh.edu/dean>).

How to Succeed and Objectives:

1. The student should complete the study guides provided in the lab manual while in lab and have the instructor confirm accuracy.
2. The student should ask lots of questions while in lab. You will have an expert there to help you. USE HIM!
3. The student should spend extra time in lab, outside of regular class time, going over the material and honing the skills introduced throughout the course.
4. To achieve maximum retention of material and the best grades students are encouraged to look the material over regularly. "20 minutes a day gets you an A." This is not the class to cram the night before! One bad exam, because they are worth such a large portion of your final grade, can be disastrous.
5. Lab should supplement the material presented in lecture by showing the student what structures look like and where they are located in the organism.
6. The student should be able to identify the organisms studied in lab exercises.
7. The student should be able to provide taxonomic categories for the organisms studied to include kingdom, phylum, class, order, genus, and species.
8. The student should be able to identify structures within an organism and define that structure's function.
9. The student should be able to identify various life cycle stages of the organisms studied.
10. The student should be able to relate the studied organisms to their particular environments.
11. The student should be able to relate the studied organisms to their impact on humans.

12. The student should development significant microscopy skills to include using multiple light sources and objectives proficiently and efficiently.
13. The student should be able to perform a simple fecal analysis and identify the most threatening and common parasitic eggs.
14. The student should be able to use and write a dichotomous key.

Sustainability Objectives:

1. The student should be able to be placed randomly in a setting in Wisconsin and have a reasonable idea of what organisms would be present in that setting.
2. The student should have a reasonable understanding of how these organisms can be assayed.
3. The student should have a general awareness of the current body of knowledge specific to this state, as well as, the rather limited amount of current research and assaying being performed.
4. The student should have an understanding of the organisms' natural limits, as well as, limits imposed by human cohabitation (as evidenced by population changes over time, threatened, endangered, and invasive species).
5. The student should have an understanding of the nine tenets of biomimicry and be able to provide multiple examples of each.
6. The student should have and be able to express a beginning understanding of the inter-relatedness of organisms up to, and especially, including humans.

Laboratory Schedule:

Wk	Date	Subject
1	9/11	Flagellates, Amebas, Apicomplexans
2	9/18	Ciliates, Porifera
3	9/25	Cnidaria and Ctenophora
4	10/2	Exam I
5	10/9	Platyhelminthes
6	10/16	Psuedocoelomates
7	10/23	Mollusca
8	10/30	Annelida
9	11/6	Exam II
10	11/13	Arthropoda
11	11/27	Echinodermata and Chordata
12	12/4	Exam III
13	12/11	NO CLASS