

INTRODUCTION TO ANIMAL BIOLOGY SYLLABUS

Bio 160 – Fall 2012

Instructor: Dr. Jamee Hubbard

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Office Hours: Tue & Thu 10-11 in TNR 339 OR TNR 477; Fri 10:30-11:30am in Knutzen Hall Lobby, or by appointment

Office: TNR 339

Office Phone: 715-346-2498

Textbook: Raven, Johnson, Losos, Mason, Singer. 2007. *Biology, 8th Ed.* Bookstore Rental.

For Lab: *Introduction to Animal Biology Lab Manual* (for purchase in the university bookstore). Dissecting kit (plan to bring every week)

Course learning outcomes: You will leave this course knowing a heck of a lot about how animals work, from cells to organ systems and how animals interact with each other and their environment. You will also have a strong knowledge of animal classification, diversity in form and function of animals, and evolutionary relationship between many different types of organisms covered in lab, from sponges to mammals, as well as how those evolutionary relationships take shape (i.e., how evolution occurs). Even if you are not a biology major, you will leave this course with information that will affect your life in some way, whether it is personally or professionally.

Exams and Assignments, Points, Dates (tentative^a) (Projected Points = 98)

Lecture Exam I	100 (+/-)	Fri, Sep 28, 9-10am, TNR 120
Lecture Exam II	100 (+/-)	Fri, Oct 26, 9-10am, TNR 120
Lecture Exam III	100 (+/-)	Tue, Nov 20, 9-10am, TNR 120
Lecture Exam IV (mini)	75 (+/-)	Thu, Dec 13, 9-10am, TNR 120
Final Lecture Exam ^b	150 (+/-)	Thu, Dec 20, 2:45-4:45pm TNR 120
Lab Exam I	50	Wed, Oct 3, 5pm (sec. 1), 6pm (sec. 2), TNR 351
Lab Exam II	50	Wed, Oct 31, 5pm (sec. 1), 6pm (sec. 2), TNR 351
Lab Exam III	75	Wed, Dec 5, 5pm (sec. 1), 6pm (sec. 2), TNR 351
Practice quiz & discussion	0	+/-4@0pt, two Fridays before each lecture exam
Point quiz & discussion	80	+/-4@20pt, one Friday before each lecture exam
Lab Assignment 1	12	Due in lab, week of Sep. 17 (color arteries/veins)
Lab Assignment 2	6	Due in lab, week of Sep. 17 (label heart, label circulation diagram)

Lecture exams can have a combination of multiple choice, true/false, short answer, and essay. Lab exams typically are short answer but can also have any of the aforementioned combination.

^a Quizzes and Assignments can be added at any time at my discretion.

^b **Final exam is comprehensive;** study your old exams; exam will include some new stuff. I *hope* to have all grades up-to-date by Tuesday Dec 18 at 5pm; **if you have an A- or higher by then, you will be notified that you may opt out of the final exam.** *In order to opt out of the exam, you must also attend lecture and lab through the last day of class.*

Grades: A=93-100%, A-=90- 92%, B+=87-89%, B=83-86%, B-=80-82%, C+=77-79%, C=73-76%, C-=70-72%, D+=67-69%, D=60-66%, F=< 60%

Attendance:

- Attendance for lecture and lab is mandatory, and there is a strong positive correlation between the amount of time a student spends in class and her/his final grade. Missing class could result in a loss of points (see Class Conduct below)
- If a quiz, exam, or other assignment is missed and you are not involved in a university-sponsored event, I will evaluate whether or not to excuse the absence and how to administer the assignment on a one-on-one basis. Pop quizzes and any extra credit assignments cannot be made up unless you have an official university excuse, and I must be notified ahead of time.
- I **STRONGLY recommend** that you do not miss a lab exam. Lab exams are disassembled immediately after the exam, so alternate arrangements will have to be made at the discretion of the instructor.
- See UWSP 22.03 in the university handbook regarding absences due to religious beliefs (and no, hunting is not considered a religious belief.)

I typically do not give extra credit assignments: I would rather you use any extra time you have toward your best effort on the assigned material. I will work with you in any way I can to help you get a better grade on future course work.

Students with Disabilities: Students with disabilities are welcome and encouraged in this class. You should contact the Office of Disability Services during the first two weeks of the semester if you wish to request specific accommodations. Also, if you have a medical problem (for example, serious migraine headaches that require medical attention or depression) that may cause you to miss class or exams often, then please contact the Office of Disability Services so your professors can be notified appropriately of accommodations that should be made for you. Office of Disability Services Contact Information: 715-346-3365, 103 Student Services Building, 1108 Fremont St.

Students' Rights and Responsibilities & Academic Misconduct: You can find out about your rights and responsibilities as a UWSP community member at <http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf>. Any form of cheating, plagiarism, or any misrepresentation of your work will result in a grade of zero (0) points for that test, quiz, or other assignment. In addition, if a person is knowingly assisting someone in cheating, that person will also get a grade of zero (0) points for that test, quiz, or other assignment. You can find out more about academic misconduct on pages 4-9 of the above Community Bill of Rights and Responsibilities electronic link.

Class Conduct: I expect good conduct and a high level of respect in the classroom, between you and your peers and between you and me. If there is any misconduct in the lecture or lab, a minimum of five points will be deducted from your grade for each offense. Misconduct can include, but may not be limited to: texting, answering or making phone calls, talking while I'm lecturing, repeatedly entering the classroom late (unless I have been notified), and lack of participation in group exercises. *If a cell phone goes off in my class, or I catch someone texting, I might just give the whole class a pop quiz!*

Devices allowed/ NOT ALLOWED in class: Cell phones should be left in backpacks or under seats, away from your body, so you are not distracted by text messages and phone calls. **Laptops are not allowed** in class, unless you have permission through Disability Services or have spoken to me ahead of time about your needs. Audio recording devices (not cell phones) may be used to record lectures. Simple calculators that do not store text are allowed on exams. If English is not your native language and you need a dictionary for the exam, you may use an electronic word-to-word language translator or paperback translator; however, if the device gives definitions, you will not be allowed to use it on the exam.

Tentative Lecture Schedule

Pages in Raven et al.

The Basics of the Cell:

Chemistry & origin of Life	25-30, 33-57, 504-507 (molecules/bonds: 17-24)
Cell structure & function	59-84, 85-104, 165-184
Cell Cycle	188-204 (cycle & division), 255-276 (DNA replication)
Gamete production	1067-1086, 205-235 (meiosis), 1073-1080
RNA, protein synthesis	277-284, 286-302

Individual and Population Genetics:

Inheritance	219-236
Evolution & Speciation	415-452, Film: <i>Evolution: Great Transformations</i>
Biology & evolution shaping behavior	Film: <i>The Eternal Arms Race</i>

Systems

Digestion and nutrition	963-982
Cellular respiration (energy from food)	105-107, 109-115, 119- 141
Circulation & Respiration	983-1016
Nervous Systems & Sense Organs	869-918
Endocrine Systems	919-942
Temperature & Water Regulation	

Lab Assignment 1: Color Arteries/Veins (12 Points), due in lab during week of Sep. 17

The purpose of this assignment: to help you determine the differences between arteries and veins on the diagrams and make it easier to compare the vessels in your diagrams to the vessels in your rat. Any vessel carrying blood from the heart to the target tissue is called an artery and should be colored red or pink. You can tell it is an artery because it originates from the aorta or other vessels that originate from the aorta. Any vessel carrying blood from the tissues to the heart is called a vein and should be colored blue. You know it is a vein if it leads to the cranial or caudal vena cava or other vessels that lead to the cranial or caudal vena cava. Make a copy of the pages beforehand if you wish to use uncolored diagrams to help you study.

Pages that should be colored are 2-56, 2-57, and 2-58.

Lab Assignment 2: Label Pork Heart/Circulation (6 Points) , due in lab during week of Sep. 17

The purpose of this assignment: to make it easier to compare the components of the heart on your diagram with the pork hearts you are seeing in lab. The diagram on page 2-53 shows the flow of blood through the heart. The diagrams on 2-54 and 55 show the various components of the pork heart. The numbers on all three of those pages *correspond to the numbers in the text on pages 2-48 and 2-49*, so you can use the text to figure out what component is represented by the number on the diagram. Make a copy of the pages beforehand if you wish to use unlabeled diagrams to help you study. **Pages that should be labeled are 2-53, 2-54, and 2-55.**

*You will automatically lose 50% if the **above** assignments are late. You will receive 0 points if more than one week late.*