

Biology 160: Animal Biology, Spring 2019,

Lecture Days and Times: MTR 4-5pm (D101 SCI)

Lab Times: M: 9-12, M: 1-3, T: 1-3 (CBB 166)

Instructor: Prof. Justin Sipiorski

TNR Room 437

jsipiors@uwsp.edu

715-346-2275 (not reliable, **please e-mail!**)

OFFICE HOURS: **T 9am-1pm (TNR 437, 401, 412, 414--Check all these rooms!)**

W 9-10am

3rd hour of labs! (M 11am, M 3pm, T 3pm) CBB 166

Text: Integrated Principles of Zoology, 15th Ed. 2008. Hickman, C.P., L.S. Roberts, S. L. Keen, D. J. Eisenhour, A. Larson, and H. l'Anson. McGraw Hill. Boston, Massachusetts.

Lab Manuals: Available at book store.

Laboratory Schedule: (handed out in lab).

Lecture Format: Lectures will be in the form of PowerPoint presentations and notes on the board. Presentations will be posted to the D2L site for the course at least 24 hours prior to lecture. It is strongly recommended that you print off a copy of the PowerPoint slides or the note outline for each lecture prior to attending. You will have more time to focus on lecture material if you are simply jotting down side notes on your printed copy of the lecture rather than having to write down all the information on each slide. As the lecture material will follow the text closely, it is also strongly recommended that you read the assigned text material **prior** to coming to the corresponding lecture. The lecture schedule above will be adhered to as strictly as possible although, from time to time, it is possible that we might finish a lecture topic early or one topic might need to be extended into a subsequent lecture. Each lecture will be followed by the posting of a lecture review sheet that can be used as an outline for exam studying.

Examinations & Grades: Lecture exams (**4 of them, 100 points each**) will be short essay. ALL of the questions on lecture exams will be directly associated with a question or statement on one or more of the lecture/chapter review items (mentioned above). There will be a **50-point** fact-finding assignment handed out about week five, regarding the animal phyla that we will be discussing in lab and lecture in the third quarter of the semester. There will be **50 points** in scientific literacy assignments due week-by-week in 10, 5-point segments. In lab, there are a total of **135 points possible from quizzes, activities, attendance and practicals**. There are bonus points/extra credit scattered throughout the semester (usually about 15-20 points worth, 2-3% of your total points). Final grades are based on the percentage of total points (**out of 635**) earned in both lecture and laboratory components. Approximate grade ranges are as follows (from UWSP course catalog):

A = 93.4 - 100%	A- = 90 - 93.3 %	
B + = 86.7 - 89.9%	B = 83.4 - 86.6%	B - = 80 - 83.3%
C + = 76.7 - 79.9%	C = 73.4 - 76.6%	C - = 70 - 73.3%
D + = 66.7 - 69.9%	D = 60.0 - 66.6%	
F = < 60%		

If need be, I will reserve the right to invoke a grading curve to more evenly distribute final grades. However, I will never "curve up," (i.e., raise the grading thresholds shown above).

Make-up laboratory quizzes, practicals and lecture exams may be scheduled **in advance** for students with university-approved absences (see UWSP online catalog). If need be, students can also arrange to attend lab in another section as a make-up. This includes practicals as well. **BUT, always** acquire permission to sit in another lab section or attend another practical with me **prior to** attending. Make-up labs and exams will not be identical in format or content to regularly scheduled labs and exams. **NO** make-ups will be scheduled without prior arrangements!

Old exams, lecture notes, and other course materials from prior Biology 160 courses may be available from fellow students but should **NOT** be used as study guides for this course. The primary sources of information for exams are: (a) lecture and laboratory texts, (b) lecture and laboratory notes—particularly review materials, and (c) laboratory specimens and dissections.

Office hours: **I will be available for you to stop by and discuss course matters Monday through Wednesday during my office hours. Otherwise we can make an appointment. My office is room 437 TNR.** If I am not in the room, I will

post a sign on the door as to my exact whereabouts and time of return (almost always the nearby rooms 400, 401, 410, 412, 414). In any case, do not immediately leave if I am not in my office when you stop by—wait a little bit as I will certainly be back shortly. I will also be available to meet with you by appointment. **E-mail** me to set up an appointment to meet in times other than my official office hours. My personal schedule is exceedingly tight. Do not expect me to be in my office beyond my office hours if we have not made prior arrangements to meet.

Strategies to help you do well in the course:

- Attend all labs and lectures—Obviously!
- Download and/or print outlines/powerpoint presentations before attending lectures.
- Ask questions—in lecture, after/before lecture, e-mail me, come to my office hours.
- Get the texts.
- Read the appropriate sections of your text prior to class (or at least prior to the exam)—**DO NOT IGNORE YOUR TEXTS!**
- Review and study all lecture notes, assigned readings, and review materials prior to an exam/practical. Form a study group that meets regularly if that helps.
- Keep up with course materials—**DO NOT TRY TO CRAM IN THIS COURSE!**
- Do not underestimate the explanatory power of a figure in your text.
- Tutoring services are great! Take advantage of them!
- Take advantage of the 135 total points you can earn in laboratory. Your entire laboratory manual is merely 100-or-so pages long! On any given week your quiz or activity may be derived from 5-8 pages of material! And, all the laboratory material will overlap with lecture materials!

**Biology 160 Lecture Schedule, Spring 2019:
Prof. J.T. Sipiorski**

Week 1 (2 Lectures)

- Chapter 1: Life & the Science of Zoology
- Chapter 2: Biochemistry
- Lab: NO LABS

Week 2 (3 Lectures) Sci. Liter. Assign. 1 due THURS JAN 31 (worth 0 pts by Thurs Feb.7)

- Chapter 2: Biochemistry
- Lab: Microscopy & Cells

Week 3 (3 lectures) Sci. Liter. Assign. 2 due THURS FEB 7 (worth 0 pts by Thurs Feb.14)

- Chapter 5 in part: Nucleic Acids
- Chapter 3: Cells
- Lab: Membranes, Diffusion & Osmosis

Week 4 (3 lectures) Sci. Liter. Assign. 3 due THURS FEB 14 (worth 0 pts by Thurs Feb.21)

- Chapter 3: Cells, Mitosis
- Chapter 4: Cellular Respiration
- Lab: Properties of Enzymes

Week 5 (2 lectures)

- Chapter 5 in part: Meiosis
- Chapter 5 in part: Mendelian Genetics
- **LECTURE EXAM 1, THURS FEB. 21**
- Lab: Metabolism

Week 6 (3 lectures) Sci. Liter. Assign. 4 due THURS FEB 28 (worth 0 pts by Thurs Mar.7)

- Chapter 5 in part: Gene Expression
- Chapter 37: Biomes, Biogeography
- Lab: Mitosis & Meiosis

Week 7 (3 lectures) Sci. Liter. Assign. 5 due THURS MAR 7 (worth 0 pts by Thurs Mar.14)

- Chapter 38: General Ecology
- Lab: Phylogeny & Classification

Week 8 (3 lectures) Sci. Liter. Assign. 6 due THURS MAR 14 (worth 0 pts by Thurs Mar.28)

- Chapter 6: Evolution
- Chapter 10: Classification & Systematics
- Lab: Deuterostomes I (Echinoderms, Fishes, Amphibians)

SPRING BREAK: March 18-22

Week 9 (2 lectures)

- Chapter 8: Animal Development
- **LECTURE EXAM 2, THURS MAR. 28**
- Lab: Deuterostomes II (Birds, Reptiles, Mammals)

Week 10 (3 lectures) Sci. Liter. Assign. 7 due THURS APR 4 (worth 0 pts by Thurs Apr.11)

- Chapter 8: Animal Development
- Chapter 7: Animal Reproduction
- Chapter 9: Animal Body Plans
- Lab: **PRACTICAL 1 on COMMON ANIMALS** Invertebrates I (Porifera, Cnidaria, Ctenophora, Platyhelminthes, Nematoda)

Week 11 (3 lectures) Sci. Liter. Assign. 8 due THURS APR 11 (worth 0 pts by Thurs Apr.18)

- Chapters 11-29: Phylogeny of Animals
- Lab: Invertebrates II (Molluska, Annelida, Rotifera)

Week 12 (2 lectures)

- Chapter 29: Support, Protection & Movement
- Chapter 30: Homeostasis I: Osmotic, Excretory & Temperature Regulation
- **LECTURE EXAM 3, THUR APR. 18**
- Lab: Invertebrates III (Tardigrada, Arthropoda)

Week 13 (3 lectures) Sci. Liter. Assign. 9 due THURS APR 25 (worth 0 pts by Thurs May2)

- Chapter 31: Homeostasis II: Internal Fluids & Respiration
- Chapter 32: Digestion and Nutrition
- Lab: **PRACTICAL 2 on INVERTEBRATES**, Rat Dissection I & II, Mammalian Histology

Week 14 (3 lectures) Sci. Liter. Assign. 10 due THURS MAY 2 (worth 0 pts by Thurs May9)

- Chapter 33: Nervous Coordination: Nervous System and Sense Organs
- Chapter 34: Chemical Coordination: Endocrine System
- Lab: Rat Dissection II & III

Week 15 (3 lectures)

- Chapter 35: Immunity
- Chapter 36: Animal Behavior
- Lab: **PRACTICAL 3 on RAT DISSECTION**, Schmeckle Field Trip

Week 16

- **FINAL EXAM: TUES MAY 14, 5-7pm (BONUS comprehensive section)**
- Lab: NO LABS

Academic Integrity. Any misrepresentation of your work, including plagiarism, or cheating on exams will result in a zero (0) being recorded for that activity. Students are encouraged to become familiar with the UWS/UWSP Student Academic Standards and Disciplinary Procedures governing student academic conduct. This is available for download at:

<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf>

- Copying whole passages written by someone else is plagiarism. Even if you right-click in Word to use the thesaurus and replace some words.
- Cobbling together sentences from various sources and presenting them as your own is plagiarism.
- Quoting passages is not appropriate in this class. Use your own words.

Classroom Conduct. It is disruptive to come late to class, read extra-curricular media in class, or use cell phones (and other electronic devices) during class time. The expectation is that you come to each session ready to participate through discussion, asking questions, and offering helpful feedback to your peers.

Disabilities. Students with disabilities are welcome and encouraged in this class. Students with disabilities should contact the Disability and Assistive Technology Center during the first two weeks of the semester if they wish to request specific accommodations.

<http://www.uwsp.edu/disability/Pages/default.aspx>