

BIOL 160: Introduction to Animal Biology (5 credits)

UWSP at Marshfield (Spring 2021)
Lecture: TTh 2-3:15 pm (T in room 514, Th via Zoom)
Lab: W 9-10:30 or 10:30-12 room 217 Leopold Building

Instructor: Dr. Laura Lee

office: 217-B Leopold Building
phone: 389-6524
email: llee@uwsp.edu
office hours: tba or by appointment

Required Texts: Biology 2nd Ed. By Clark, Choi, & Douglas - Open access (see below).
Exploring Biology in the Laboratory (3rd ed.), by Pendarvis & Crawley, Morton pub.
Optional: Photographic Atlas for the Zoology Laboratory, Morton pub.

Course Description & Objectives:

BIOL 160 is a demanding introductory biology course open to both majors and non-majors. The overall goal of this course is for students to develop an understanding of the concepts, terminology and techniques used in the field of animal biology. This will be accomplished through a combination of lectures and laboratory applications. Some of the topics to be covered include animal ecology, anatomy and physiology, animal classification, evolution, genetics and cellular biology.

GEP, AAS Designation

- GEP Designation: NSC (Investigations – Natural Science)
- AAS Designation: NW (Natural World), LS (Lab Science)

Course Objectives: Students completing this course will attain varying levels of proficiency in their ability to demonstrate:

1. an understand the relatedness of structure and function, and to differentiate and classify animal structures, body-plans, and physiologies.
2. useful laboratory and field skills, including microscope use, field measurements, and dissection techniques.
3. an ability to integrate various levels of biological organization and their emergent properties.
4. an understanding of the process of scientific inquiry, and how it is different than other intellectual endeavors.
5. a recognition of the cell theory, inheritance, evolution and developmental biology as foundations of zoology, and how they explain the change in animals over time.
6. an ability to apply principles of zoology to broader personal and societal issues, and to draw connections between various course concepts.

Books, Notes & Study Aids:

Good news: your textbook for this class is available for free online! Your book is available in web view and PDF for free (Biology 2e from OpenStax, <https://openstax.org/details/books/biology-2e>). You can also purchase on iBooks, or purchase a print version from the Open Stax website, on Amazon.com, or from the campus bookstore. You can use whichever format you want; web view is recommended -- the responsive design works seamlessly on any device. But, whichever form you get it in, make sure to use it! Every student has good intentions at the beginning of the year in terms of reading and studying. But, by the end of the semester, many textbooks remain unused. I know you'll get busy and want to blow off reading, but I expect you

to use your textbook! Do the assigned reading either before or after class. The online version of the textbook has embedded links and videos to aid in your understanding of the material.

The lab manual for this course, is unfortunately, not available free online, and you MUST have the lab manual in order to succeed in this class. It should come as a loose-leaf collection, so you can remove individual chapters and bring them to class (please bring the entire lab chapter, including the review questions). It is essential that you read the week's lab chapter(s) before coming to class so that you will have the proper knowledge to do the lab correctly

This course will be taught using Canvas as an instructional aid. You should all be provided with a Canvas login and password, and are given access to the Biology 160 Canvas site. All course material will be posted there, including lecture outlines, objectives, quizzes, practice exam questions, web links, information about assignments and supplementary lab material. It is to your advantage to access and make use of this information. In the past, students who use it tend to "get more" out of the lectures and are better prepared for exams and assignments. If you are not familiar with Canvas, please see Canvas training resources here: <https://www.uwsp.edu/canvas/Pages/default.aspx> and here: <https://uwstp.instructure.com/enroll/36GKLY>. You can log into Canvas directly from the UWSP home page.

The Tutoring-Learning Center (TLC) offers FREE virtual tutoring to support you in your biology classes. The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and biology content knowledge to help others succeed. The TLC will offer two main forms of tutoring during Spring 2021. Drop-In Tutoring: tutors are waiting in a Zoom room where students can "drop-in" for assistance. No appointment or registration is required, and attendance is flexible. The schedule and Zoom links can be found here: <http://www.uwsp.edu/tlc/Pages/dropInTutoring.aspx>. One-on-One Tutoring: tutors are available for weekly, recurring appointments. Weekly attendance is required, as this service is designed for long-term assistance. To sign up, students can submit a request form through the TLC webpage: <https://www.uwsp.edu/tlc/Pages/Mathandscischedules.aspx>. Appointments are made based upon tutor availability – we cannot guarantee that every student will be matched with a tutor. One-on-One Tutoring is FREE for all UWSP students during Spring 2021!

Communication Information:

I am available in the Zoom/Canvas chat room without an appointment during office hours. Individual meetings can be arranged through an email request, phone call, or conversation directly before or after class. I do not hold normal office hours during the following weeks: First Week of Class, Spring Break, Finals Week. I will have "virtual office hours" in Canvas in the evening before each exam.

Although you can reach me by telephone or email, email is quicker and more efficient. Remember, some faculty receive as many as 100 emails per day. Please identify yourself (first and last name), as well as the class that you are in. Your email should be clear, concise, and professional so that your issues can be responded to effectively. Include the entire thread of an ongoing email conversation so that I can recall the history of your issue without searching for other emails you have sent.

Covid Information:

This class will be held synchronously: Tuesday lectures and Wednesday labs will be held face-to-face, and Thursday lectures will be held via Zoom. You are expected to attend all class sessions in real time. Please contact me to make arrangements for any extenuating circumstances (illness, etc.). The class will be broken into two lab cohorts; one will attend the first half of lab and the other will attend the second half. Cohorts have already been established and can be found on Canvas. Please attend only during your scheduled cohort time on Wednesdays. Each week we will do part of the lab in class, and you will complete the activity on your own during the week.

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health

Service (715-346-4646). As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus. This semester, students will also be required to obtain a free on-campus Covid test on a regular basis. See your email for details. While on campus, please maintain a minimum of 6 feet of physical distance from others whenever possible. Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room. Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face. Please maintain these same healthy practices outside the classroom.

Assessment:

Course grades: Your grade in this course is based on the following:

1. *Exams:* There will be 4 unit exams during the semester, each containing both lecture and lab material. The fact that you do not have separate lab exams is **NOT** a reason to blow off the lab portion of this course! Take your time looking at slides, analyzing data, etc., because this information **WILL** show up on exams! You will have the opportunity to improve your grade on any **ONE** of the first three exams by reworking it as a homework assignment (see details in Canvas). A combination exam/final exam will be given during the assigned final exam period. All exams will be a combination of true/false, fill-in, multiple choice, short answer, essay, and lab questions.
2. *Quizzes:* Weekly quizzes will be posted on Canvas each Friday and will be due by the end of the day on Monday. Quizzes will cover information from the previous week's lectures and lab. At the end of the semester, the lowest quiz score will be dropped. **Quizzes must be completed by their due dates – once closed, a quiz will not be re-opened!**
3. *Labs/Assignments:* Each week in lab, you will be turning in some combination of a lab/lecture assignment covering the previous week's material. All assignments should be handed in on time (if you are not present on the due date, you must scan and submit via email) – points will be deducted for late assignments. **All late assignments must be turned in before the next exam!**
4. *Group Presentation Assignment:* At the end of the semester, all students will participate in a group presentation project. Each lab cohort will be a group, and all group members must participate equally. The presentation topic must be related to the interactions between animals and people (i.e. endangered species, other dangers to wildlife, conservation, management, etc). Each presentation will last 10-15 minutes (including time for questions). A more detailed assignment description and grading rubric will be distributed mid-semester.
5. *Extra credit :* extra credit points will be available during the semester (see Extra Credit instructions on Canvas). Please do not ask for additional, individual extra credit assignments.

Final Grade Distribution: The final grade distribution will be as follows:

93-100% = A	80-82.9% = B-	67-69.9% = D+
90-92.9% = A-	77-79.9% = C+	60-66.9% = D
87-89.9% = B+	73-76.9% = C	<60% = F
83-86.9% = B	70-72.9% = C-	

University-wide assessment: For the 2020-21 academic year, classes that fulfill outcomes at the Investigation Level of the UWSP [General Education Program](#) (GEP) will be assessed utilizing the GEP assessment portfolio process. The GEP Investigation Level includes courses that fulfill the Arts, Humanities, Historical Perspectives, Social Sciences and Natural Sciences [category learning outcomes](#). Because 2020-2021 assessment focuses on Arts, Humanities and Historical Perspectives, BIOL 130 will not be formally assessed for the GEP this semester.

Course Attendance Policies:

Attendance in lecture and lab will help you to perform well on exams. Therefore, you are expected to attend all class sessions (face to face and virtual). If you are ill or quarantining, please contact me to make alternate arrangements. To accommodate any future contact tracing, assigned seating and attendance documentation will occur in both the lecture and lab rooms; no points will be tied to attendance, however.

You will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility. You are responsible for notifying faculty members of such circumstances as far in advance as possible. All students are responsible for all lecture and lab material, whether or not actually in attendance. If you miss a lab for any reason, you must make it up before I will accept a submitted lab assignment. Unfortunately, you may or may occasionally not be able to make up missed lab and lecture activities, due to their nature. The consequence of poor attendance is likely to be failure in the course, because of the amounts and complexity of the material.

Exams will be given during in-class sessions, therefore, attendance at exams is required. Makeup exams will not be scheduled **unless** arrangements have been made with me personally. In general, the reasons you that you miss an exam should be the same as those for which you would miss your best friend's wedding. If you are very ill, in court, have a dental emergency, death in the family, or other documented excuse, please contact me as soon as possible.

Policy on Phones & Electronic Devices

Research supports that having visual access to a cell phone diminishes our ability to learn. Checking social media, texts, emails, and messages is unprofessional and disrespectful to our class community. Therefore, phones are not to be used during class unless I instruct you to take them out for a class-related exercise. If you must be available for work/family, please leave phones in your pocket on vibrate. Laptops, tablets and other devices may be used for the sole function of following along with lecture or other course-related activities. Foreign-language translators (but not dictionary-type electronics with internet capabilities) may be used. Violations of any electronics rules will result in these privileges being revoked.

Accommodation of Religious Beliefs & Disabilities

It is UW System policy ([UWS 22](#)) to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements. Any student who cannot be present for a scheduled exam or lab session due to a religious observance will be provided with an alternate way of fulfilling that particular course requirement, providing the student notifies me of the scheduling conflict at the beginning of the semester. In addition, UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. I am always willing to work (to the extent allowed by the nature of the course) with students who require special accommodations because of disability. If accommodations are needed, please let me know and contact the appropriate office to complete an Accommodations Request form.

Emergency Procedures:

- In the event of a **medical emergency call 9-1-1**. Offer assistance if trained and willing to do so. Guide emergency responders to victim.
- In the event of a **tornado warning, proceed to the lowest level interior room** without window exposure at [first floor Leopold hallway].
- In the event of a **fire alarm, evacuate the building** in a calm manner. Leave door nearest Student Services and meet near the Marauder statue. Notify instructor or emergency response personnel of any missing individuals.
- **Active Shooter – RUN. HIDE. FIGHT.** If trapped, hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders.

Care Team

The University of Wisconsin-Stevens Point is committed to the safety and success of all students. The Office of the Dean of Students supports the campus community by reaching out and providing resources in areas where a student may be struggling or experiencing barriers to their success. Faculty and staff are asked to be proactive, supportive, and involved in facilitating the success of our students through early detection, reporting, and intervention. As your instructor, I may contact the Office of the Dean of Students if I sense you are in need of additional support which individually I may not be able to provide. You may also share a concern

if you or another member of our campus community needs support, is distressed, or exhibits concerning behavior that is interfering with the academic or personal success or the safety of others.

Academic Misconduct:

Integrity is an expectation of each UW-Stevens Point student. Campus community members are responsible for fostering and upholding an environment in which student learning is fair, just, and honest. Through your studies as a student, it is essential to exhibit the highest level of personal honesty and respect for the intellectual property of others. Academic misconduct is unacceptable. It compromises and disrespects the integrity of our university and those who study here. UWS 14 defines academic misconduct as any "action which a student: 1) seeks to claim credit for the work or efforts of another without authorization or citation; 2) uses unauthorized materials or fabricated data in any academic exercise; 3) forges or falsifies academic documents or records; 4) intentionally impedes or damages the academic work of others; 5) engages in conduct aimed at making false representation of a student's academic performance; 6) assists other students in any of these acts." UWS 14 allows for disciplinary sanctions that range from an oral reprimand to suspension or expulsion from the University. You can obtain a copy of the full academic misconduct policy through the Student Services office. If I observe academic misconduct, or if suspicions of cheating are reported to me, I will request that the identified parties come to my office to discuss the situation, and the procedures set out in UWS 14 will be followed. I recognize that the rules regarding academic misconduct can sometimes be confusing for students with respect to specific assignments or course work. For example, I encourage students to work together on assignments, but I require each student submit the work in his/her own words – no copying from your friends, and no all submitting the same word-for word assignment! If you have questions, I encourage you to come and see me before the assignment is submitted. Ignorance or misunderstanding of the UW System policy will not serve as a valid excuse for academic misconduct.

Problems? Questions?

I hope that you will see me early on if you have any problems or questions. It is much more useful to deal with problems early in the semester, rather than wait until a few days short of the final and expect me to work miracles (my pet peeve). Please feel free to contact me as much or as often as you would like. Although I have office hours (where you are my first priority), I am usually available at any non-class time to meet with students – please take advantage of this. My main purpose for being here is to help you learn about biology!!

TENTATIVE ZOOLOGY SCHEDULE OF EVENTS

WEEK	T Lecture	W Lab	Th Lecture
1	Intro to Zoology 1, 27	Scientific Method	Chemistry of Life (2)
2	Biological Macromolecules (3)	Microscopy Cell Structure	Cell Structure (4)
3	Membranes & Transport (5)	Osmosis & Diffusion	Enzymes & Metabolism (6)
4	Enzymes & Metabolism (7)	DNA & Cell Division	Cell Division (10, 11)
5	EXAM 1 (weeks 1-4)	Taxonomy	Taxonomy (20)
6	Evolution (18)	Evolution	Evolution (19)
7	Genetics (12)	Genetics	Genetics/DNA (14)
8	The Central Dogma (15)	Animal Tissues & Bodies	Intro to Inverts (28)
	SPRING BREAK!!!!		
9	EXAM 2 (weeks 5-8)	Inverts 1	Animal Integuments
10	Skeleto-Muscular Systems (38)	Inverts 2	Animal Digestion (34)
11	Cardiovascular Systems (40)	Inverts 3	Respiratory Systems (39)
12	Intro to Chordates (29)	Deuterostomes/Chordates 1	Osmoregulation (41)
13	EXAM 3 (weeks 9-12)	Chordates 2	Nervous Systems (35)
14	Animal Reproduction (43)	Chordates 3	Embryonic Development (43)
15	Group Presentations	Ecology	Ecology
16	Exam 4 (weeks 13-15) /Final Exam	Tuesday, May 18 12:30-2:30 am	

* See objectives for more detailed reading assignments.