GENERAL BIOLOGY
BIOL 101, Fall 2022
Section 02 (L1, L2, L3, and L4)

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Class Lecture and Exams: Asynchronous Online. Chapter slides and recorded lectures will be posted on Canvas. To facilitate keeping up with course material, students are strongly advised to set scheduled time(s) for viewing of course materials. Dates for the four lecture exams are set, but timing on exam days is flexible. In other words, you can take the exam at any point during the 24 hours of the assigned exam day. Please see the course schedule at the end of this document for additional details.

Textbook: Taylor MR, SJ Simon, JL Dickey, K Hogan, and JB Reece. 2018. Campbell Biology: Concepts and Connections, 9th ed. Benjamin Cummings/Pearson, Boston. Available for rent in bookstore.

Course Content and Additional Course Information: Material associated with the course will be posted on Canvas as we go through the semester. Please visit the Canvas training site for help with using Canvas, if needed: https://uwstp.instructure.com/enroll/36GKLY . We will also be using Zoom for virtual office hours and laboratory meetings, so please familiarize yourselves with Zoom as well. **Zoom Support:** https://www.uwsp.edu/infotech/Pages/Tutorials/Zoom/Zoom.aspx.

Laboratory Exercises: Will be posted on Canvas and discussed during synchronous, online meeting sessions once a week. Please see below or our Canvas course site for laboratory section Zoom link information.

Lab 02L1; Monday 2:00-4:50 p.m.:
Meeting ID: 923 2569 2961
Passcode: 274266
Link: https://wisconsin-edu.zoom.us/j/92325692961?pwd=WWpFSUMvRnlkdUVQdnduUzNWWnhlZz09

Lab 02L2; Tuesday 9:00-11:50 a.m.:
Meeting ID: 973 3589 7079
Passcode: 002918
Link: https://wisconsin-edu.zoom.us/j/97335897079?pwd=S0ZSS3l2Mi8xc3U0dnhmZWMzMXpzQT09

Lab 02L3; Tuesday 2:00-4:50 p.m.:
Meeting ID: 964 2788 8223
Passcode: 703779
Link: https://wisconsin-edu.zoom.us/j/96427888223?pwd=em5hR0E3WXoza0dhODF5YmtKWVhPUT09

Lab 02L4; Wednesday 2:00-4:50 p.m.:
Meeting ID: 922 9778 1581
Passcode: 695992
Link: https://wisconsin-edu.zoom.us/j/92297781581?pwd=Z1NqekRpVlp3Wnp3VmpjaC9hNHJidz09

Office Hours: 10:00 a.m. to 11:30 a.m. Monday and Wednesday (Zoom link below) or by appointment.
Meeting ID: 970 8375 9641
Passcode: 983215
Link: https://wisconsin-edu.zoom.us/j/97083759641?pwd=cVZmOENWSlpuZEhiRU93TG9JVkx6Zz09

Course Description: This course introduces non-major students to the basic principles of Biology and acquaints them with the diversity of life. We will explore basic cellular-level processes, genetics, reproduction, evolution, biological diversity, animal physiology, and how organisms relate to one another within their environments, with special emphasis on the applicability and relevance of biological concepts, knowledge, and technology to average citizens. This course meets natural science general education requirements by fulfilling the learning outcomes for this category of the general education program.

General Education Program Natural Science Learning Outcomes: (upon completing this requirement, students should be able to…)

1. Explain major concepts, methods, or theories in the natural sciences to investigate the physical world.
2. Interpret information, solve problems, and make decisions by applying natural science concepts, methods, and quantitative techniques.
3. Describe the relevance of aspects of the natural sciences to their lives and society.

Course Student Learning Outcomes: (upon completing this course, students should be able to…)

1. Apply the scientific method to biological questions.
2. Discuss biological principles including:
   - cellular level functions that are necessary for life
   - inheritance and evolutionary change
   - the diversity of animals and plants within an evolutionary context
   - the function of animal organ systems
   - the basic functioning of populations, communities, and ecosystems
3. Discuss the relevance of biological principles to their lives and society.

Point Breakdown:

Lecture Exams	4 @ 100 pts each
Laboratories	110 pts
Thought Questions	20 pts
Total	**530 pts**

Grade Scale (out of 100% of Total):

A ≥ 93-100	C = 73-76
A- = 90-92	C- = 70-72
B+ = 87-89	D+ = 67-69
B = 83-86	D = 60-66
B- = 80-82	F < 60.0
C+ = 77-79	

Lecture:

The lecture component of this class will be held asynchronously online. PowerPoint slides and recorded lectures covering relevant material will be posted on our Canvas course site weekly. We will be covering approximately two chapters per week, so it will be important for you to stay on top of course materials as we progress through the semester.

Laboratory:

Labs will consist of on line exercises that will help you hone your skills in scientific reasoning and data analysis. Most labs also provide an opportunity to apply concepts covered in lecture. You will complete approximately one lab per week online. Lab sections will meet synchronously via Zoom at the assigned lab

times. This meeting is intended to help clarify information from the lab, and will give you opportunity to ask questions and interact with others. The majority of your lab grade will be based on completion of post-lab assignments, which are due at 11:59 p.m. Fridays following the lab. Please see the course schedule at the end of this document for additional details.

Exams and Assignments:

There will be four lecture exams over the course of the semester. Each exam is worth 100 points and will likely consist of matching, multiple choice, definitions, fill-ins, and potentially some short answer questions. In addition, application of information provided in lecture to an unknown problem may be required. Course material will build over the semester and it will be important for you to remember and apply basic information learned early on to material covered later in the course. All exams will count towards your final grade. Points will also be awarded in the laboratory. These points will come from lab-based quizzes and/or assignments every week we are in lab. Your lowest lab score will be dropped at the end of the semester. Therefore, although there are 120 points available in the lab, your final laboratory grade will be calculated from 110 total points.

Thought Questions:

Once per unit (4 @ 5 pts each), you will be given thought questions with a typed response/answer due the following week. These questions are intended to spur your thinking on content we are considering, and there may not be a single, or even a correct, answer. For these assignments, you are encouraged to consult multiple sources and discuss your thoughts/ideas with your classmates. Although you are free to use outside sources to answer these questions, you should provide citations for any sources you use. You will be graded (individually) on the quality of your typed response.

Professionalism:

Attendance: You are expected to complete and/or attend all lectures and labs (and attendance will be taken during synchronous laboratory sessions). If you will miss a lab due to a college-sanctioned event, you must notify your instructor in advance and complete any coursework before the next scheduled lab. Exams must be taken on the assigned day and alterations to this schedule will only be made for emergencies. In such cases, evidence of some kind must be provided and you are expected to make arrangements within 48 hours of the exam to schedule a make-up. It is your responsibility to communicate questions and concerns with your instructor. If you have an unexcused absence, you will not be allowed to make up a missed assignment. Complete mutual respect and courtesy is expected and all students should come to class ready to be engaged and actively participate in the learning experience. Open, honest discussion is encouraged and will factor in to your grade.

Lecture materials and recordings for this course are protected intellectual property. Students in the course may use course materials and recordings for personal use as related to participation in this class. Students may also take notes on course material. Students may not copy or share lecture materials outside of class, including posting on internet sites or selling to commercial entities. Students are prohibited from selling personal notes or being paid for taking notes without the instructor's express written permission. Unauthorized use of copyrighted materials (lecture notes, slides, and recordings) constitutes copyright infringement under university policy, and University of Wisconsin System Chapters 14 and 17, governing student academic and non-academic misconduct.

Other Guidance:

- Please monitor your own health each day. 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.
- 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.

Course Assistance:

One-on-one tutors and walk-in tutoring are available to help students with lecture and lab material. Interested students should contact the Tutoring-Learning Center (tlctutor@uwsp.edu). Information on group tutoring to follow.

Grade Discrepancies:

Grades will be posted on Canvas throughout the semester. If there are discrepancies on any assignments, quizzes, or exams, they can be addressed with the instructor, in person, up to one week after the grade is posted. After this time, the grade will stand with whatever was originally granted.

Academic Policies:

Academic misconduct (as outlined and defined by Chapter 14 in the Academic Handbook: https://www.uwsp.edu/acadaff/Pages/handbook.aspx) will not be tolerated. Cheating or plagiarism will result in a score of zero for a give assessment and/or additional disciplinary action.

Disability Services:

Any student who feels that they may need an accommodation based on the impact of a disability should contact the Disability and Assistive Technology Center (room 609 Albertson Hall, datctr@uwsp.edu). If you have already registered with this office and would like to discuss your class accommodations for the semester, please meet with me.

Emergency Response Guidance:

- In the event of a medical emergency call 9-1-1 and guide emergency responders to victim.
- In the event of a tornado warning, proceed to lowest level interior room without windows.
- In the event of a fire alarm, evacuate building in a calm manner, meet on sidewalk to east of building, near UWSP sign. Notify instructor or emergency command personnel of any missing individuals.
- Active Shooter/Code React – Run/Escape, 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.
- See UW-Stevens Point Emergency Procedures at www.uwsp.edu/rmgt/Pages/em/procedures for details on all emergency response protocols at UW-Stevens Point.

Course Schedule:

Wk:	Important Dates:	Lecture Topic:	Chapter:	Lab Exercises:*
1	9/6 (Classes begin)	Introduction to General Biology	1	No Lab
		The Chemicals of Life	2	(First week of
		The Chemicals of Life	2	classes)
2	9/12	Biological Molecules	3	Scientific
		Biological Molecules	3	Investigation
	9/16	Cellular Structure; **Thought Question 1 Assigned**	4	
3	9/19	Cellular Structure	4	Osmosis and
		Cellular Function	5	Diffusion
	9/23	Cellular Function; **Thought Question 1 Due**	5	
4	9/26	Cellular Respiration	6	Enzymes
		Cellular Respiration	6	
	9/30	**Exam 1**		
5	10/3	Photosynthesis	7	Photosynthesis
		Photosynthesis	7	
		Cellular Reproduction	8	
6	10/10	Cellular Reproduction	8	Mitosis and Meiosis
		Patterns of Inheritance	9	
	10/14	Patterns of Inheritance; **Thought Question 2 Assigned**	9	
7	10/17	From DNA to RNA to Protein	10	Mendelian
		From DNA to RNA to Protein	10	Inheritance
	10/21	From DNA to RNA to Protein; **Thought Question 2 Due**	10	
8	10/24	How Populations Evolve	13	Central Dogma
		Speciation	14	
	10/28	**Exam 2**		
9	10/31	Microbial Diversity	16	Bacteria and Protists
		Plant and Fungal Diversity	16 & 17	
	11/4	Plant Diversity; **Thought Question 3 Assigned**	17	
10	11/7	Animal Diversity	18 & 19	Land Plants
		Animal Diversity	18 & 19	
	11/11	Animal Diversity; **Thought Question 3 Due**	18 & 19	
11	11/14	Animal Form and Function	20	Animal Diversity
		Animal Form and Function	20	
	11/18	**Exam 3**		
12	11/21	Nutrition and Digestion	21	No Lab
		Nutrition and Digestion	21	(Thanksgiving)
		Circulation and Gas Exchange	22 & 23	
13	11/28	Circulation and Gas Exchange	22 & 23	Nutrition
		Hormones and the Endocrine System	26	
	12/2	Hormones and the Endocrine System; **Thought Question 4 Assigned**	26	
14	12/5	Reproduction and Embryonic Development	27	Origami Embryo
		Reproduction and Embryonic Development	27	
	12/9	Nervous Systems; **Thought Question 4 Due**	28	
15	12/12	Nervous Systems	28	Course Wrap-
		Nervous Systems	28	Up/Review Session
		Last Day of Classes		
16	**12/22**	**Exam 4**		

*You will be allowed to drop your lowest laboratory score. In other words, although there are a total of 120 points available in the lab, your final grade will be calculated from 110 total points.