

Biology 101: General Biology, 5 credits

Syllabus and Schedule

Spring 2021

Lecture: T-Th 2-3:15

Lecture Instructor: Nancy Shefferly, M.S.

Email: nsheffer@uwsp.edu

Office: 145 CBB

Office hours: Monday-Friday 11-12 via zoom, and by appointment.

Lab Instructor: Dr. Jamee Hubbard

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 and 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.

Course Learning Outcomes

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

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

Evaluation/Course Requirements

My philosophy of grading is that **student learning is paramount**, and should be rewarded even if it does not occur according to *my* schedule. Therefore, this course is designed to allow you to improve your grade when possible. Your grade in this course will be based on the following:

1. **Exams.** Exams will test student's achievement of module learning outcomes from the lecture videos and reading. Questions will be a combination of multiple choice and short answer. Exams I-III, each of which will cover 1/3 of the course, will be worth 100 points. Each exam will be timed, for completion in 90 minutes. There will also be a comprehensive final exam that will be worth 100 points. The final exam will be timed, for completion in 2 hours minutes. Exams will be provided through Canvas, using the Honorlock Browser guard. Consult the course schedules for the exact dates of each exam. Students are expected to complete the exam within the dates and times set aside for the exam.

Exams 1 will cover modules 1-8. Exam 2 covers modules 9-17. Exam 3 covers modules 18-25. The final exam covers all content from the course.

2. **Exam Improvement Bonus:** The key to improving performance is to recognize your errors early and make changes to your studying behavior. Doing the same thing over and over rarely leads to a different result. I wish to reward students who make a positive change. If you score Better on Exam I than on Exam II; and if you score better on Exam III than on Exam II, I will give you 2 bonus points. If you score MORE THAN 5% higher, I will give you bonus points equaling the $\frac{1}{2}$ the amount of your improvement. (So if you score 62% on Exam I and 80% on exam II, you will get 2 points for scoring higher, then an additional 9 points for the 18% improvement.)
3. **Participation.** Keeping up with course material is essential to your success in this course. This course will run as a “flipped” classroom. The expectation is that you will “attend class” by watching the videos provided in each lesson module of the course prior to your lab meeting time, so that you will have familiarity with topics covered and be able to fully participate in the synchronous zoom. Accessing the lecture videos through the Canvas Browser provides a time stamp on the video hosting platform that is linked directly to your user information. Students verifiably completing the videos **before the indicated completion date** and time will receive 1 point for each video completed. No points will be given for late completion of videos. In order to provide flexibility, so that missing some videos will not harm your score, only 60 points will count toward your score in this class. After reaching a score of 60 points for this aspect of the course, you will receive no additional points for viewing the videos.
4. **Module Worksheets.** A student’s goal in an introductory course should be to gain a broad understanding of the discipline in question. This is best accomplished by reading all assigned chapters in the text. My expectation is that you will read the assigned chapter BEFORE completing the rest of the learning module associated with the chapter. This will prepare you to understand lecture material more completely. You will be familiar with the topic, and you will have some recollection of where further details regarding any particular topic are located in the text, so that you may be able to clarify aspects of the lectures you have difficulty with. When reading, you should be actively engaged, and working to understand the material.

During synchronous zoom meetings, students will work in breakout groups to answer specific questions, drawn from the reading and the lecture videos. The synchronous zoom is an opportunity to review the topics covered in lecture videos to be sure that you understand them. It is also a great time to ask questions. Students will submit the answers to these questions, which will form the basis of a study guide for exams, via Canvas. Each will be worth up to 5 points.

These will be due within 24 hours of the close of the scheduled zoom meeting. Late assignments will be accepted until the end of the week, but will receive a 20 % penalty unless advance arrangements are made. There are 22 new-content modules in the course. To provide flexibility, the lowest 10 module worksheet scores will be dropped. However, students completing additional worksheets will be eligible for a bonus of up to 15 points.

5. **Lab:** Your lab sections are being taught by Dr. Hubbard. She will relay your lab score to me. This will count as 25% of your total score in the course.

Grading Breakdown

| | | |
|-------------------|----------------------------|-------------------|
| Exams | 4 @ 100 points | 400 points |
| Participation | 1 pt/video up to 60 points | 60 points |
| Module Worksheets | @ 5 points each up to | 60 points |
| Lab | 25% of total grade | 180 points |
| Total | | 700 points |

Required Course Materials

Taylor MR, SJ Simon, JL Dickey, K Hogan, and JB Reece. 2018. **Campbell Biology: Concepts and Connections, 9th ed.** Benjamin Cummings/Pearson, Boston.

Technology Guidelines

The expectation of this course is that you have a computer with which to access online content. You are expected to have Google Chrome, which interacts most reliably with Canvas, the learning system used on our campus. It is expected that you will have ready access to a stable wifi connection.

This course will use the Honorlock browser guard for exams for which you will need Google Chrome and the Honorlock extension.

Inclusivity Statement

It is my intent to structure this course to serve students from diverse backgrounds and perspectives, and to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

If you have experienced a bias incident (an act of conduct, speech, or expression to which a bias motive is evident as a contributing factor regardless of whether the act is criminal) at UWSP, you have the right to report it using this [link](#). You may also contact the Dean of Students office directly at dos@uwsp.edu.

Grading Scale

| | | | | | |
|-----------------|-----------------|-----------------|----------------|----------|--|
| A = 93-100% | B+ = 87.0-89.9% | C+ = 77.0-79.9% | D+ = 67.0-69% | | |
| A- = 90.0-92.9% | B = 83.0-86.9% | C = 73.0-76.9% | D = 60.0-66.9% | F = <60% | |
| | B- = 80.0-82.9% | C- = 70.0-72.9% | | | |

Communicating with your Instructor



Email is the quickest way to reach me at: nsheffer@uwsp.edu



Zoom conferences also available by request. My office hours are M-F 11-12 pm.

Communicate Clearly

Remember some faculty receive as many as 100 emails per day. Yours should be clear, concise, and professional so that I can respond to your issues effectively. Include the course number and the general nature of your concern in the subject line of your email. Also 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. Sign off with your first and last name.

Attendance

Attending class is likely to be the single most important factor in determining your performance and grade in the course, so plan to complete all lectures and labs. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. Completion of module videos will count as participation points toward your grade.

Please refer to the “Absences due to Military Service” and “Religious Beliefs Accommodation” below. Additional guidelines:

If you decide to drop a class, please do so using AccessPoint or visit the Enrollment Services Center. Changes in class enrollment will impact your tuition and fee balance, financial aid award, and veterans educational benefit.

During the first eight days of the regular 16-week term, I will take attendance. Attendance will be determined by completion of module videos and labs. If you are not engaging with course material regularly, you will be marked as not attending, and you may be dropped from the class. You are responsible for dropping any of your enrolled classes.

- If you must be absent during the term, tell me prior to the class you will miss. If you cannot reach your instructor in an emergency, contact the Dean of Students Office at 715-346-2611 or DOS@uwsp.edu .
- If you are dropped from a class due to non-attendance, you may only be reinstated to the class section using the class add process. Reinstatement to the same section or course is not guaranteed. Your instructors will explain their specific attendance policies to be followed at the beginning of each course.
- If you take part in an off-campus trip by an authorized university group such as an athletic team, musical or dramatic organization, or a class, make appropriate arrangements in advance with the instructor of each class you will miss. If you are absent from classes because of emergencies, off-campus trips, illness, or the like, your instructors will give you a reasonable amount of help in making up the work you have missed. However, you **MUST** inform your instructor of your situation.
- If you enroll in a course and cannot begin attending until after classes have already started, you must first get permission from the department offering the course. Otherwise, you may be required to drop the course.

- If you do not make satisfactory arrangements with your instructors regarding excessive absences, you may be dismissed. If you are dismissed from a class, you will receive an F in that course. If you are dismissed from the University, you will receive an F in all enrolled courses.

Late Work

All graded assignments have specific due dates. For module worksheets, there always a grace period after the due date during which assignments will be accepted, however there is a firm cut-off date for all graded assignments. Because the “trickling in” of assignments affects grading consistency and efficiency, students are encouraged to submit materials by the due date. Late assignments will receive an automatic 25% deduction from the base score, unless arrangements are made in advance.

Exams and Participation do not have a grace period, and must be completed by the due date, unless arrangements are made in advance.

Because of the ongoing pandemic, students may find themselves ill and unable to submit work by the indicated deadlines. Please inform the instructor if you require extensions. In general, illness is a reason to ask for an extension. Quarantine is not.

Absences due to Military Service

As stated in the UWSP Catalog, you will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, [not to exceed two \(2\) weeks](#) unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to the [Military Call-Up Instructions for Students](#).

Religious Beliefs Accommodation

It is UW System policy ([UWS 22](#)) to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements.

You will be permitted to make up an exam or other academic requirement at another time or by an alternative method, without any prejudicial effect, if:

- There is a scheduling conflict between your sincerely held religious beliefs and taking the exam or meeting the academic requirements; and
- You have notified your instructor within the first three weeks of the beginning of classes (first week of summer or interim courses) of the specific days or dates that you will request relief from an examination or academic requirement.
- Your instructor will accept the sincerity of your religious beliefs at face value and keep your request confidential.
- Your instructor will schedule a make-up exam or requirement before or after the regularly scheduled exam or requirement.
- You may file any complaints regarding compliance with this policy in the Equity and Affirmative Action Office.

Equal Access for Students with Disabilities

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the [Disability and Assistive Technology Center](#) to complete an Accommodations Request form. Phone: 346-3365 or Room 609 Albertson Hall.

Help Resources

| Tutoring | Advising | Safety and General Support | Health |
|--|---|--|--|
| Tutoring and Learning Center helps with Study Skills, Writing, Technology, Math, & Science. 018 Albertson Hall, ext 3568 | Academic and Career Advising Center, 320 Albertson Hall, ext 3226 | Dean of Students Office, 212 Old Main, ext. 2611 | Counseling Center, Delzell Hall, ext. 3553. Health Care, Delzell Hall, ext. 4646 |

UWSP Service Desk

The Office of Information Technology (IT) provides a Service Desk to assist students with connecting to the Campus Network, virus and spyware removal, file recovery, equipment loan, and computer repair. You can contact the Service Desk via email at techhelp@uwsp.edu or at (715) 346-4357 (HELP) or visit this [link for more information](#).

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, by reporting [here](#).

Academic Honesty

Academic 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. To maintain academic integrity, a student must only claim work which is the authentic work solely of their own, providing correct citations and credit to others as needed. Cheating, fabrication, plagiarism, unauthorized collaboration, and/or helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. Failure to understand what constitutes academic misconduct does not exempt responsibility from engaging in it.

UWSP 14.03 Academic misconduct subject to disciplinary action.

- (1) Academic misconduct is an act in which a student:
 - a. Seeks to claim credit for the work or efforts of another without authorization or citation;
 - b. Uses unauthorized materials or fabricated data in any academic exercise;
 - c. Forges or falsifies academic documents or records;
 - d. Intentionally impedes or damages the academic work of others;
 - e. Engages in conduct aimed at making false representation of a student's academic performance; or
 - f. Assists other students in any of these acts.

- (2) Examples of academic misconduct include, but are not limited to:
 - a. Cheating on an examination
 - b. Collaborating with others in work to be presented, contrary to the stated rules of the course
 - c. Submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another
 - d. Submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas
 - e. Stealing examinations or course materials
 - f. Submitting, if contrary to the rules of a course, work previously presented in another course
 - g. Tampering with the laboratory experiment or computer program of another student
 - h. Knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Students suspected of academic misconduct will be asked to meet with the instructor to discuss the concerns. If academic misconduct is evident, procedures for determining disciplinary sanctions will be followed as outlined in the [University System Administrative Code, Chapter 14](#).

Other Campus Policies

FERPA

The [Family Educational Rights and Privacy Act](#) (FERPA) provides students with a right to protect, review, and correct their student records. Staff of the university with a clear *educational need to know* may also have access to certain student records. Exceptions to the law include parental notification in cases of alcohol or drug use, and in case of a health or safety concern. FERPA also permits a school to disclose personally identifiable information from a student's

education records, without consent, to another school in which the student seeks or intends to enroll.

Title IX

UW-Stevens Point is committed to fostering a safe, productive learning environment. Title IX and institutional policy prohibit discrimination on the basis of sex, which includes harassment, domestic and dating violence, sexual assault, and stalking. In the event that you choose to disclose information about having survived sexual violence, including harassment, rape, sexual assault, dating violence, domestic violence, or stalking, and specify that this violence occurred while a student at UWSP, federal and state laws mandate that I, as your instructor, notify the Title IX Coordinator/Office of the Dean of Students.

Please see the information on the [Dean of Students webpage](#) for information on making confidential reports of misconduct or interpersonal violence, as well as campus and community resources available to students. For more information see the [Title IX page](#).

Clery Act

The US Department of Education requires universities to disclose and publish campus crime statistics, security information, and fire safety information annually. Statistics for the three previous calendar years and policy statements are released on or before October 1st in our [Annual Security Report](#). Another requirement of the Clery Act, is that the campus community must be given timely warnings of ongoing safety threats and immediate/emergency notifications. For more information about when and how these notices will be sent out, please see our [Jeanne Clery Act](#) page.

Drug Free Schools and Communities Act

The Drug Free Schools and Communities Act (DFSCA) requires institutions of higher education to establish policies that address unlawful possession, use, or distribution of alcohol and illicit drugs. The DFSCA also requires the establishment of a drug and alcohol prevention program. The Center for Prevention lists information about alcohol and drugs, their effects, and the legal consequences if found in possession of these substances. [Center for Prevention – DFSCA](#)

Copyright infringement

This is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act. Each year students violate these laws and campus policies, putting themselves at risk of federal prosecution. For more information about what to expect if you are caught, or to take preventive measures to keep your computing device clean, visit our [copyright page](#).

Lecture Module Schedule

| Week | Expected Completion Date | Canvas Assignment | Reading |
|------------------------------------|--|--|--|
| Week 1 Jan 25-29 | Tue Jan 26 Tue Jan 26 Wed Jan 27 Thu Jan 28 Fri Jan 29 | Module 0. Getting Started Module 1. The Scientific Study of Life Module 1 Worksheet due Module 1 Practice 1 Module 2. The Chemicals of Life Module 2 Worksheet due Module 2 Practice Quiz | Syllabus Chapter 1 Chapter 2 |
| Week 2 Feb 1-5 | Tue Feb 2 Wed Feb 3 Thu Feb 4 Fri Feb 5 | Module 3. The Chemicals of Life Module 3 Worksheet due Module 3 Practice Quiz Module 4. Cellular Structure Module 4 Worksheet due Module 4 Practice Quiz | Chapter 3 Chapter 4 |
| Week 3 Feb 8-12 | Tue Feb 9 Wed Feb 10 Thu Feb 11 Fri Feb 12 | Module 5. How Cells Work Module 5 Worksheet due Module 5 Practice Quiz Module 6. Chemical Energy in the Cell Module 6 Worksheet Module 6 Practice Quiz | Chapter 5 Chapter 6 |
| Week 4 Feb 15-19 | Tue Feb 16 Wed Feb 17 Thu Feb 19 | Module 7. Photosynthesis Module 7 Worksheet due Module 7 Practice Quiz Module 8. Review | Chapter 7 |
| Week 5 Feb 22-26 | Tues Feb 23 Thu Feb 25 | EXAM I Open 1 pm- 4 pm; 90 minute limit Extra Credit I due Day of rest | |
| Week 6 Mar 1-5 | Tue Mar 2 Wed Mar 3 Thu Mar 4 Fri Mar 5 | Module 9. Cellular Reproduction Module 9 Worksheet due Module 9 Practice Quiz Module 10. Inheritance Module 10 Worksheet due Module 10 Practice Quiz | Chapter 8 Chapter 9 |
| Week 7 Mar 8-12 | Tue Mar 9 Wed Mar 10 Thu Mar 11 Fri Mar 12 | Module 11. Molecular Biology of the Gene Module 11 Worksheet due Module 11 Practice Quiz Module 12. Road to Darwin Module 12 Worksheet due Module 12 Practice Quiz | Chapter 10 Chapter 13 |
| Week 8 Mar 15-19 | Tue Mar 16 Wed Mar 17 Thu Mar 18 Fri Mar 19 | Module 13. Speciation and Evolutionary History Module 13 Worksheet due Module 13 Practice Quiz Module 14. Microbes, Protists, and Fungi Module 14 Worksheet due Module 14 Practice Quiz | Chapters 14-15 Chapters 16-17 |
| Week of Mar 22-26 | | SPRING BREAK | |

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|--------------------------------------|--|--|----------------------------------|
| Week 9 Mar 29-Apr 2 | Tue Mar 30 Wed Mar 31 Thu Apr 1 | Module 15. Plants Module 15 Worksheet due Module 15 Practice Quiz Review | Chapter 17 |
| Week 10 Apr 5-9 | Tue Apr 6 Thu Apr 8 Fri Apr 9 | Exam II Open 1 pm- 4 pm; 90 minute limit Extra Credit 2 due Module 16. Invertebrate Animals Module 16 Worksheet due Module 16 Practice Quiz | Chapter 18 |
| Week 11 Apr 12-16 | Tue Apr 13 Wed Apr 14 Thu Apr 15 Fri Apr 16 | Module 17. Chordates Module 17 Worksheet due Module 17 Practice Quiz Module 18. Gas Exchange and Circulation Module 18 Worksheet due Module 18 Practice Quiz | Chapter 19 Chapters 22-23 |
| Week 12 Apr 19-23 | Tue Apr 20 Wed Apr 21 Thu Apr 22 Fri Apr 23 | Module 19. Immune System Module 19 Worksheet due Module 19 Practice Quiz Module 20. The Biosphere Module 20 Worksheet due Module 20 Practice Quiz | Chapter 24 Chapter 34 |
| Week 13 Apr 26-30 | Tue Apr 27 Wed Apr 28 Thu Apr 29 Fri Apr 30 | Module 21. Population Ecology Module 21 Worksheet due Module 21 Practice Quiz Module 22. Communities and Ecosystems Module 22 Worksheet due Module 22 Practice Quiz | Chapter 36 Chapter 37 |
| Week 14 May 3-7 | Tue May 4 Wed May 5 Thu May 6 | Module 23. Ecosystems and Conservation Biology Module 23 Worksheet due Module 23 Practice Quiz Review | Chapters 37-38 |
| Week 15 May 10-14 | Tue May 11 Fri May 14 | EXAM III Open 1 pm- 4 pm; 90 minute limit Extra Credit III due Day of rest | Krieger Chapter 17 |
| | Tue May 18 12:30-2:30 pm | Final Exam | |