Biology 101: General Biology Fall 2021 Course Syllabus

Course and Instructor Information

Meeting times: Lecture (both sections): M, W, F 11:00-11:50 AM CBB 165

Lab section 02L1: Tuesday 1:00-3:50 PM CBB 136 Lab section 02L2: Thursday 1:00-3:50 PM CBB 136

Final Exam: Thursday, December 16, 2021, 2:45-4:45 PM CBB 165

Instructor: W. Konieczki Office hours: M, W, F 10:00-11:00 AM

Office: CBB 218 Other times by appointment Email: bkoniecz@uwsp.edu You can email me anytime!

Phone: None (the university cut my line to save \$!)

Lab Instructor: Dr. P. Zani Office: 444 TNR Building Email: pzani@uwsp.edu

Course Purpose:

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.

Student Learning Objectives:

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.

Required Texts:

Textbook: Taylor, M. R., E. J. Simon, J. L. Dickey, K. Hogan, and J. B. Reece. 2018. Campbell *Biology Concepts and Connections*, (9th Edition). Available from text rental.

Lab Manual: Biology 101 Laboratory Manual, available for purchase from the bookstore for about \$40.

Email: UWSP students are encouraged to check their email regularly (at <u>least</u> once per day!) for information from the university and/or your instructors.

Grading:

Your grade will be determined by the percent of points received out of the total number of points possible.

Lecture assignments and quizzes – 20 pts. Quizzes may be unannounced.

Lab work is approximately one-third (33%) of your total score.

Pre-Lab Quizzes – 5 pts each (**55 points total**): Quizzes will be based on the pre-lab videos and information provided about the lab activity in the lab manual. To be successful with these quizzes, you will need to read the lab manual activity and watch the pre-lab videos. These quizzes will be available in Canvas and must be completed and submitted **before** your scheduled lab period. The lowest two pre-lab quiz scores will be dropped.

Professionalism Points – About 4 pts per lab (**45 points total**): These points are assigned for attendance, attentiveness, and participation in lab activities each week.

Post-Lab Questions/Lab Reports – 10 pts each (**110 points total**): Due at the beginning of each class period the week following the lab activity. The lowest two lab report scores will be dropped.

Exams (400 points) – Exams will cover lecture and lab material.

Exam 1 – 100 pts
Exam 2 – 100 pts
October 22, CBB 165
Exam 3 – 100 pts
November 22, CBB 165
November 22, CBB 165

Comprehensive Final Exam – 100 pts December 16, 2021 CBB 165

The comprehensive final exam covers topics throughout the semester. If your final exam grade is higher than one of your first three exam grades, that final exam grade will replace the lowest exam grade. For example, if you score a 78, 83, and 82 on exams 1, 2, and 3, respectively, and you score 89 on the final, the final grade (89) will replace the score of your first exam (78). Your four exam grades will then be 89, 83, 82, and 89. If your final exam grade is lower than all other exams, it will still count towards your final grade but will not replace any of the other exam grades.

Total Course Points: 630 points

Grades will be assigned based on the percentage of points earned, which is calculated by dividing the total points received by the total points possible (615) and multiplied by 100. The following scale will be used to assign a final grade based on the percentage of points earned.

Percentage	Letter	Percentage	Letter
92.50 to 100%	A	72.50 to 76.49%	С
89.50 to 92.49%	A-	69.50 to 72.49%	C-
86.50 to 89.49%	$\mathbf{B}+$	66.50 to 69.49%	D+
82.50 to 86.49%	В	60.0 to 66.49%	D
79.50 to 82.49%	B-	≤ 59.99%	F
76.50 to 79.49%	C+		

How to be successful in this class

- Show up for all scheduled lectures and labs.
- Look over the material that will be covered in class *before* you arrive for class.
- Develop good note-taking skills. Do not try to write down everything that is said in lecture. Sort through the information and make note of the important ideas and concepts being discussed. Learn to take notes with abbreviations so that you can spend enough time listening in addition to writing. Leave space in your notes so that you can go back and fill in more details later.
- Study frequently. Repetition is the key to learning *any* topic. Studying for 30 hours over the span of four weeks will be much more beneficial than studying for 30 hours the weekend before the exam.
- After you have studied and know some or most of the material, meet with other students in the class and actively *discuss* the information. Explain mechanisms, theories, concepts, etc to other students. The other students can help you fill in areas where you are deficient. You will find that explaining these things to

someone else is one of the best ways to ensure you know and understand the information. Then have another student explain a different idea or concept and help them identify areas in which they are deficient.

- Study your notes beginning with "big picture" ideas. Find the bigger concepts and make sure you have a basic understanding of those ideas. Once those bigger concepts are understood, add additional details relating to those ideas. By doing this, you construct "compartments" in your mind to store the details rather than simply trying to absorb all the details and hoping that they arrange themselves into a coherent idea in your mind.
- Complete all assignments to the best of your ability. Ensure that low point-value assignments are completed and all points are earned on those assignments can make up for exams grades that are a little lower than desired.
- Exams make up over 60% of your grade and ultimately strongly influence your overall grade. Be sure to prepare for those exams accordingly (study early, study often, and ask questions about material that does not make sense).
- Look over past assignments, see what mistakes you made, and correct those mistakes. Learn from your mistakes, and do not make those mistakes again (you may see that information again on the cumulative final exam).
- When you do not understand something, LOOK IN THE TEXTBOOK! The book can give more detailed explanations and images that may help you better understand the material.
- When your notes do not make sense and the book does not help, schedule an appointment with the instructor. I am here to help you learn. I understand that much of this material is new to you, and one or two lectures may not be enough for you to fully grasp the concepts. Ask for help early or you risk falling behind.

Cell Phone Usage

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. Please turn off or silence your phone during class unless explicitly advised otherwise; I will do so as well. Thank you for following these guidelines as they help create a positive learning community.

GENERAL COURSE POLICIES

Attendance

I expect students to attend all lectures and all labs. Makeup exams or other makeup assignments will only be administered in the event of illness, emergency, university-sponsored event, etc., which will require documentation (an **excused** absence) before a makeup date is agreed upon. If you are aware ahead of time of a conflict with an exam period or other assignment, a meeting with the instructor is required to discuss the situation **at least 1 week before the absence**, and rescheduling may occur at the instructor's discretion.

Post-Lab Questions/Lab Reports are due at the beginning of each lab and cover the activities performed in the previous lab. Reports will not be accepted if you do not attend the lab. If you have an excused absence, see the instructor to discuss the options for turning in lab reports or any other graded activities that were missed. Attendance at in-class discussions is required to receive the points associated with the discussion summary (see assignment description below). An alternative assignment will be assigned for **excused** absences that occur during an in-class discussion.

It is the student's responsibility to get any missed lecture or lab material from another classmate. I am not able to re-teach the material to individual students, lecture and lab sessions are not being recorded, and full PowerPoint slides will not be given to students that miss lecture or lab material for any reason. To be exposed to all content provided in each session, each student must be present during the scheduled lecture and lab periods.

Attending class will likely be the single most important factor in determining your performance and grade in the course, so plan to attend every class. In most class meetings you will have at least one project, exercise, test,

and/or discussion that will impact your grade. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. *I am not able to re-teach the material to you in the event that you are absent, but you can ask a classmate to share notes.* Any exceptions to the attendance policy should be confirmed in writing.

Please refer to the "Absences due to Military Service" and "Religious Beliefs Accommodation" below. Additionally, below are attendance guidelines as outlined by the <u>UWSP registrar</u>:

Attend all your classes regularly. If you decide to drop a class, please do so using myPoint or visit the Enrollment Services Center. Changes in class enrollment will impact your tuition and fee balance, financial aid award and veteran's educational benefit.

During the first eight days of the regular 16 week term, your instructor will take attendance. If you are not in attendance, 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 your instructor prior to the class you will miss. If you cannot reach your instructor(s) 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.
- 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.

Emergency Procedures

- In the event of a medical emergency call 9-1-1 or use campus phone found between CBB 101 and 105 (during lecture in CBB 101) or across from CBB 130 (during lab in CBB 136). 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, such as the restrooms near CBB 101 or in the hallway outside CBB 136. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).
- In the event of a fire alarm, evacuate the building in a calm manner. Exit CBB 101 to the hallway and out the main doors to the right or out the exit door at the front of the room. Exit CBB 136 doors to the right, turn right down the hallway and exit the building at the east end of the building (towards Stanley Street and St. Michael's Hospital). Gather with classmates at least 200 yards from the building. 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. See UWStevens Point Emergency Procedures at www.uwsp.edu/rmgt/Pages/em/procedures for details on all
emergency response at UW-Stevens Point.

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.

Inclusivity Statement

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent 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.

Religious Beliefs Accommodation

It is UW System policy (<u>UWS 22</u>) 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 <u>Disability and Assistive Technology Center</u> 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	Academic and Career	Dean of Students Office,	Counseling Center, Delzell
Center helps with Study Skills, Writing, Technology, Math, & Science. 018 Albertson Hall, Ext. 3568	Advising Center, 320 Albertson Hall Ext. 3226	212 Old Main, Ext. 2611	Hall, Ext. 3553. Health Care, Delzell Hall, Ext. 4646

<u>Click here</u> to flag a policy or practice that disproportionately affects marginalized students.

UWSP Service Desk (1st Floor, Albertson Hall)

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 <u>link for more information</u>.

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:
 - Cheating on an examination
 - Collaborating with others in work to be presented, contrary to the stated rules of the course
 - 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
 - Submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas
 - Stealing examinations or course materials
 - Submitting, if contrary to the rules of a course, work previously presented in another course
 - Tampering with the laboratory experiment or computer program of another student
 - 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 <u>University System Administrative Code</u>, <u>Chapter 14</u>.

Other Campus Policies

FERPA

The <u>Family Educational Rights and Privacy Act</u> (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 to 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. If 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 <u>Title IX page</u> for more information for guidance on making confidential reports of misconduct or interpersonal violence, as well as campus and community resources available to students.

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 <u>Annual Security Report</u>. 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 <u>Jeanne Clery Act</u> 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.

NOTE: This is a tentative syllabus. The instructor reserves the right to make amendments to this document as circumstances and University policies change.

Semester Schedules

Week	Lecture Topics	Textbook	Lab	Lab Manual
	and Activities	Chapters	Activity	Page
1	Syllabus and The Scientific Study of Life	Chapter 1	No Lab	-
2	The Chemical Basis of Life	Chapter 2	Scientific Investigation	3
	Biological Molecules	Chapter 3		
3	Cellular Structure	Chapter 4	Microscopes and Cells	20
	How Cells Work	Chapter 5		
4	Chemical Energy in the Cell	Chapter 6	Diffusion and Osmosis	49
	Photosynthesis	Chapter 7		
5	Cancer	Chapter 8	Enzymes	72
	Exam 1 (Chapters 1-7 and Weeks 2-4 Labs)			
6	Cellular Reproduction	Chapter 8	Plant Pigments and Photosynthesis	88
	Inheritance	Chapter 9		
7	Molecular Biology of the Gene	Chapter 10	Mitosis	101
	The Road to Darwin	Chapter 13		
8	Exam 2		Meiosis and Mendelian Inheritance	115
	Microbes, Protists, and Fungi	Chapters 16/17		
9	Plants	Chapter 17	Natural Selection	136
	Invertebrate Animals	Chapter 18		
10	Chordates	Chapter 19	Bacteria and Fungi	151
	The Immune System	Chapter 24		
11	Hormones and Endocrine System	Chapter 26	Land Plants	158
	Gas Exchange	Chapter 22		
12	Exam 3	Chapter 23	Animal Diversity	174
13	The Biosphere and Population Ecology	Chapters 34/36	Thanksgiving Break – No Lab	
	Thanksgiving Break			
14	Communities and Ecosystems	Chapter 37	Circulation and Gas Exchange	185
	Ecosystems and Conservation Biology	Chapter 38		
15			Population Size Estimation	201
	Animal Interactions, Review		(or Food Webs)	(or 208)
Finals	Comprehensive Final Exam		N. I.I.	
Week	Thursday, December 16, 2:45-4:45 pm		No Lab	