



Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring

Course Prefix: BIOL

Course Title: General Biology

Year: 2025

Course and Section #: 1010-X04

Credits: 3

Course Description

Introduces major themes and concepts of biology including cell and molecular biology, genetics, diversity, evolution, and ecology. Provides students with necessary information and skills to critically evaluate what they hear, read, and see in the living world; communicate clearly; and apply methods to interpret data for making informed decisions concerning the role of biology in a world of which they are a part. May be delivered online.

Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Jessica Wagner

Student Learning Outcomes

1. Differentiate science as a way of knowing about the world and other forms of knowing.
 2. Be able to make decisions based on evidence. Evaluate evidence and solve problems by using scientific thinking skills.
 3. Apply your understanding of scientific literacy and citizenship to issues of today, such as evolution, human population growth, genomic medicine, climate change, GMOs, vaccination and disease, ecosystem health and conservation, among others.
 4. Demonstrate why evolution is the cornerstone of modern biology, uniting the main topics of cell, molecular biology, genetics, organismal biology, and ecology.
 5. Apply your knowledge of the interconnectedness of all life and the environment to your personal attitudes and actions concerning the health of this planet.
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Course Materials and Texts

- **No textbook required**, “Concepts in Biology” available free from <https://openstax.org/details/concepts-biology>[Links to an external site.](#) (keep in mind that this text is designed to be supportive of what we learn in class and is ***NOT*** a substitute for in-class learning)
 - **Access to a computer and reliable internet connection**- Some of this course involves online learning so having consistent access to canvas and the internet is important. You can always access these through the campus computer labs if needed.
 - **Learning Objectives and Main Points**- Learning Objectives and Main Points for each lesson will be provided in Canvas following the completion of each lesson. These will be the roadmap of content for the course and your understanding of them is critical to course success. Keep in mind that you will have to both explain and use the information (not just have it memorized) for mastery (an A grade) achievement in the course.
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Course Requirements

Grading Scale:

The following grading standards will be used in this class:

Grade	Percent
A	94-100
A-	90-93
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
E	0-59

Assignment Categories

Assignments (number)	Points/ % Grade	Short Description
Asynchronous Modules (12)	240/ ~27%	Includes videos, quizzes, and other assignments designed to help you learn key science concepts. These are to be completed individually, but you can certainly study with other students for them.
Additional Class assignments	83/ ~10%	Includes Getting to Know You Survey (1), Study Reflections (2), Teamwork Evaluations (2), Disposition Surveys (2), and others
Participation and MiniQuizzes (11)	110/ ~12%	These are points being derived from discussion boards and mini-quizzes associated with case studies.
Check Your Understandings (CYUs, 7)	305/ ~34%	Individual bi-weekly assessments that will give you feedback on your understanding of course material. There are 7 total, but only your top 6 count towards your grade (lowest is dropped!). These can have a cumulative component.
Final Exam -Final Exam 150 pts	150/ ~17%	The final exam will be cumulative and include material from the entire semester.

Late Work Statement:

The best way to be successful in this course is to submit all assignments by their due date. However, sometimes you may need to put other priorities first. Life happens, I get it. My late policy aims to give you the freedom to make your own decisions about how you prioritize your time while still maintaining accountability and fairness. Everyone will start the semester with 2 "Life Happens" passes, which give you the flexibility to make-up a missed assignment. To use a pass, you will need to contact me within a week of the original due date to arrange for an extension. You will need to submit the assignment within a week of the original due date. You may not wait until the end of the semester to make up work. If you have not contacted me or submitted the assignment within a week of the original deadline you will no longer be able to make it up. After using your two passes you will receive a zero for any additional late work. These passes are NOT allowed to be used for exams. For exams, you should plan ahead so you can complete the exam when it is available. Makeup exams will only be

allowed in the case of **unavoidable** obligations or medical/family emergencies. You are responsible for communicating with me and making arrangements for a makeup exam **BEFORE** the exam closing date. **If you miss an exam and have not made prior arrangements you will receive a zero.**

If you are dealing with ongoing health or personal circumstances that are making it difficult for you to log in to class, turn work in on time, or complete an assessment please reach out so we can make a plan and minimize any impact this could have on your success at UVU. I know everyone is trying their best and I am here to help!

Assignment and Assessment Descriptions

Modules- There are 13 topics/modules covered in this course. Each includes associated assignments that will test your knowledge of, and ability to apply, the concepts taught in class.

<u>Module Design</u>	
Each Module will include the following four sections to help you optimize your course learning.	
Pre-assessment Section	Serves to activate your prior knowledge of a topic. Research shows that connecting with prior knowledge during learning is a core component of how we learn. This is graded on participation.
Lecture Engagement Section	There is no such thing as passive learning that is effective. Thus when in lecture you will ALWAYS be expected to be engaged and thinking about ideas. To assist you with this process I will structure in questions and activities to encourage your cognitive engagement. You may complete these as many times as you wish to earn full points.
Recall Section	Following lecture, you will have to practice remembering key pieces of information. This will serve as the first of several rounds of recall practice that are built into the course for key ideas. Recall practice is when you have to remember an idea based solely on memory. I encourage everyone to try to answer this the first time based on memory as you have three attempts and your final grade is the highest score you receive.
Application and your Extension Section	The final section of each module will really test your understanding and ability to apply the concepts from lecture. It will also push you to extend your knowledge through graph and data integration. I would make sure to have taken some notes on important concepts and make sure you have a decent grasp of the material before completing the mastery section. You will only have two attempts at completing this part of each module and your final grade is the highest score you receive.

Additional class assignments may include any or all of the following- Getting to Know You Survey (1), Study Reflections (2), Teamwork Evaluations (2), Disposition Surveys (2), and others.

Discussion Board Assignments and Mini-Quizzes- These are points derived solely from discussion board assignments that serve as a replacement for the classroom. Mini-quizzes are an extension of the case studies that accompany each topic.

Check Your Understandings (CYUs)- Bi-weekly assessments that will give you feedback on your understanding of course material. These are completed every other week and replace what would typically be “exams” in the course. You have 1 hour to complete the CYU once it has started. These are completed **TWICE** and your grade is the **AVERAGE** grade for both attempts.

There are 7 total CYUs, but only your top 6 count towards your grade (lowest is dropped!). These will also have a cumulative component but will be mostly focused on the material from the prior 2 weeks

Final Exam- The final exam will be cumulative and can include questions covering any learning objective in the course. You may work with a team to complete this exam if you choose (though each student must submit their own exam to receive credit) .

Required or Recommended Reading Assignments

Learning Objectives and Main Points- Learning Objectives and Main Points for each lesson will be provided in Canvas following the completion of each lesson. These will be the roadmap of content for the course and your understanding of them is critical to course success. Keep in mind that you will have to both explain and use the information (not just have it memorized) for mastery (an A grade) achievement in the course.

General Description of the Subject Matter of Each Lecture or Discussion

SUGGESTED COURSE SCHEDULE AND OUTLINE

WEEK	DATES	TOPIC
1	Week of Jan 6	Class Orientation/Introduction Intro to Biology
2	Week of Jan 13	Using Science to Understand Effective Learning
3	Week of Jan 20 Jan 24-25	Water, Membranes, and Me! CYU #1 Fri - Sat

4	Week of Jan 27	Information Flow in Cells and Beyond
5	Week of Feb 3 Feb 7-8	It's ALIVE! CYU #2 Fri - Sat
6	Week of Feb 10	Body Systems Intro
7	Week of Feb 17 Feb 21-22	Nervous System CYU #3 Fri - Sat
8	Week of Feb 24	Immune System
9	Week of Mar 3 Mar 7-8	Cellular Reproduction CYU #4 Fri - Sat
10	Week of Mar 10	SPRING BREAK
11	Week of Mar 17	Organismal Reproduction
12	Week of Mar 24 Mar 28-29	Biology of Death CYU #5 Fri - Sat
13	Week of Mar 31	Evolution
14	Week of Apr 7 Apr 11-12	Natural Environments CYU #6 Fri - Sat
15	Week of Apr 14 Apr 18-19	Human Impacts CYU #7 Fri - Sat

16	Week of Apr 21 APR 24-30	Semester wrap up, Final Exam Practice, and Final Exam (see exam schedule)
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Required Course Syllabus Statements

Generative AI

AI programs are not a replacement for your human creativity, originality, and critical thinking. Writing, thinking, and researching are crafts that you must develop over time to develop your own individual voice. At the same time, you should learn how to use AI and in what instances AI can be helpful to you.

The use of generative AI tools (e.g. ChatGPT, Google Gemini, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Finding information on your topic;
- Drafting an outline to organize your thoughts; and
- Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat.
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

Please, preserve your integrity and do not cheat, and also prevent any temptation of cheating.

Using Remote Testing Software

This course does not use remote testing software.

☒ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-8638747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.