Course Syllabus, Vernal Term 2026 C.E. (Last Modified 07 December 2025 C.E.)

Yavapai College

BIO182: General Biology for Majors II (4 Credit Hours)

Course Reference Number 12531

Lecture: Online Laboratory: Online

All enrolled students are required to fully read and comply with the information found herein. Further, all enrolled students are responsible for knowing and abiding by college policies included in the college catalog and the student handbook. If information in this syllabus is changed, a notification will be posted on the course website.

Course Description

Principles of plant and animal structure, function, and diversity; evolution, and ecology of populations and communities emphasizing biotic interactions. Primarily designed for biology and pre-professional majors. Prerequisite: Reading Proficiency.

Instructor Information

Ty C.M. Hoffman, Ph.D. thoffma1@yc.edu

Office Hours: By appointment via email

Course Content

- 1. Bacteria, fungi, and viri
- 2. Plant anatomy and physiology
- 3. Plant diversity
- 4. Animal anatomy and physiology
- 5. Animal diversity
- 6. Evolution and natural selection
- 7. Classification and phylogeny
- 8. Ecological principles
- 9. Population ecology
- 10. Community ecology

Learning Outcomes

- 1. Describe the classification and characteristics of bacteria, fungi and viri.
- 2. Describe plant diversity in respect to structure, function, and classification.
- 3. Describe animal diversity in respect to structure, function, and classification.
- 4. Describe and analyze processes involved in evolution and natural selection. (PBS 1-3)
- 5. Describe the characteristics of each kingdom in biological classification.
- 6. Describe and demonstrate phylogenetic relationships of plants and animals. (PBS 1)
- 7. Describe and demonstrate the principles of ecology.
- 8. Describe and demonstrate the principles of population ecology.
- 9. Describe and demonstrate the principles of community ecology.

Course Websites

As stated on Canvas, you will be using my own (non-Canvas) website (hereafter called the Hoffman site) in addition to Canvas. The URL for the Hoffman site is:

https://www.tycmhoffman.com

From that site, you can find the link to your specific section (12531). Be sure to bookmark the site, so you can access it even if Canvas is down. **You are REQUIRED to check the website daily**, even if nothing changes. The website includes (or will include) various resources to help you succeed. It is also where official announcements will be posted (whether I make those announcements in class or not). Failure to notice an announcement posted on the website will not be a valid excuse, so check the website frequently.

Supporting Materials (Be sure to also see the Textbooks page on the Hoffman site)

There is no additional expenditure required for this course. The eText used for this course is OpenStax Biology 2e. Virtually laboratory activities will involve simulations by Labster (access to which is included with your registration in BIO182).

Rules Consent Form

You will not receive any credit in the course unless you electronically submit the Rules Consent Form found on the Hoffman website. I cannot overstress how important it is to fully read and understand that form. You can easily receive a zero if you take this lightly. Believe me; it happens every term.

Scoring

Examinations 4 @ 15% each; 60% total
Labster Activities 13 @ ca. 1.54% each; 20% total
OpenStax Quizzes 18 @ ca. 1.11% each; 20.0% total

Grades

The minimum final scores for the respective letter grades are given below.

86% A 76% B 66% C 56% D

My Absolutely Rigid Policy on Missing Lecture Examinations

It's important for everyone to be aware of the policy regarding make-up lecture examinations. If you fail to complete a scheduled lecture examination by the deadline for that examination, there will be no official penalty for missing the examination. However, it is my strict policy that *multiple-choice* lecture examinations may be taken only when they are scheduled to be taken (i.e., per the most recently updated syllabus). This means that all make-up lecture examinations will consist of short-answer or essay type questions. NO MAKE-UP LECTURE EXAMINATION WILL EVER BE A MULTIPLE- CHOICE TEST. To ensure that you fully understand my policy, please re-read the previous sentence. The material treated on a make-up examination will be the same material treated on the corresponding multiple-choice version. In that sense, one can say that the make-up examinations are therefore no more difficult. But for many students in my experience, scores on short-answer tests are significantly lower than those on multiple-choice tests. This is because doing well on a short-answer test requires that you truly know what you're talking about. Guessing is much less likely to net you a correct answer. I'm telling you this, on the one hand, to make the official policy known. But even more importantly, I'm telling you this to strenuously dissuade you from missing a lecture examination for any but the most unavoidable of reasons. Doing well in this course REQUIRES that you make the course a priority. Therefore, if you'd like to receive a good grade, you would do well to save excuses for the other things that might coincide with the test dates, not vice-versa.

Laboratory

All laboratory activities are virtual and are accessed via Canvas, like other assignments. There is no face-to-face component in this course.

Student Email

Yavapai College provides enrolled students with an official username@scholar.yc.edu email address. Yavapai College requires enrolled students to utilize the YC email system for official college-related communications. Students are expected to check their Yavapai College email account as directed by their instructor. If you need assistance, go to Information Technology Services or 928.776.2168 (www.vc.edu/its).

Course Withdrawal

A student initiated withdrawal deadline is established by the College. If a student has not withdrawn from a class by the deadline, a student will receive the letter grade earned in the course at the end of the term. An instructor can choose to withdraw a student from the class after the deadline depending upon the instructor's withdrawal policy. If a student does not follow official procedures for withdrawing from a course, earned grades will be posted on the student's permanent record.

Faculty initiated withdrawals for non-attendance are in place for both the benefit of the college in assuring compliance with financial aid requirements and to benefit students. When students do not participate in classes during the first week of the semester, faculty will withdraw them from their classes unless they have been in contact with faculty member. At FTSE date, faculty should withdraw students that have not been attending..

Academic Integrity

Honesty in academic work is a central element of the learning environment. It is expected that students will submit their own work. The presentation of another individual's work as one's own or the act of seeking unfair academic advantage through cheating, plagiarism or other dishonest means are violations of the College's Student Code of Conduct.

Definitions of plagiarism, cheating, and violation of copyright and penalties for violation are available in the Yavapai College Student Code of Conduct.

Student Code of Conduct

All students need to be aware of and comply with the safety and operational protocols for COVID-19 while on Yavapai College's campuses or centers. Safety protocols can be found at https://www.vc.edu/v6/college-police/covid-19/reentry/.

Respect for the rights of others and for the College and its property are fundamental expectations for every student. The <u>Student Code of Conduct</u> outlines behavioral expectations, and explains the process for responding to allegations of student misconduct.

Students are expected to respond and write in a respectful, professional and appropriate manner in all forms of communication and when activities are assigned to create scenarios, discuss opinions, present on a selected subject, or post to the web board. Inappropriate language or objectionable material will not be tolerated and could result in disciplinary measures and/or a failing grade for the class. (www.yc.edu/codeofconduct)

Use of Technology

All examinations will require Respondus Lockdown Browser and a working webcam. **The Lockdown Browser software might not be compatible with Chromebooks.** If you do not have a compatible computer onto which you are able to install the required Lockdown Browser software, or if you do not have a working webcam, then you will be required to make appointments to take your examinations on campus.

Academic Complaint Form

A student may appeal an academic or instructional decision by faculty if s/he deems the decision to be made in error. The appeal must be made in a timely manner in accordance with established procedures. (www.yc.edu/academiccomplaints).

Acceptable Use

Yavapai College technological equipment and resources must be used in accordance with the <u>Technology Resource Standards (5.27)</u>, <u>Copyright Use (2.28)</u> and <u>Peer-to-Peer (P2P) File Sharing (5.26)</u> policies. Use of Yavapai College equipment and resources to illegally copy, download, access, print or store copyrighted material or download pornographic material is strictly prohibited. For example, file swapping of copyrighted material, such as music or movies is strictly prohibited. Users found to violate this policy will have their privileges to use Yavapai College technological equipment and resources revoked. (www.yc.edu/policies)

Mobile Devices

Yavapai College is committed to providing a quality learning environment. All cell phones and mobile devices must be placed in silent mode while in classrooms, computer labs, library, learning center, and testing areas. Cell phones must be used outside these facilities.

Smoking and Tobacco Use

Yavapai College is committed to limiting exposure to the harmful effects of primary and secondary smoke to campus students, visitors, and employees. In order to reduce the harmful effects of tobacco use and to maintain a healthful working and learning environment, the College prohibits smoking, including vaping, on all campuses except in designated smoking areas as per the Smoking.working.pdf). (www.yc.edu/v6/policies/docs/1000d/1009-smoking.pdf)

Title IX - Sexual Misconduct

Yavapai College does not deny or limit any student or employee the ability to participate in or benefit from any program offered by the institution on the basis of sex or gender. Sexual harassment, which includes acts of sexual violence such as rape, sexual assault, sexual battery, sexual coercion, unwanted touching, dating/relationship violence and stalking, are forms of gender-based discrimination prohibited by Title IX.

The college encourages students and employees to report incidents of sexual misconduct as soon as possible to the Title IX Coordinator or to a Deputy Title IX Coordinator. Contact information for Coordinators can be found at Sexual Misconduct Resources. (www.yc.edu/v6/student-services/sexualmisconduct.html)

Disability Resources

Disability Resources ensures qualified students with disabilities equal access and reasonable accommodations in all Yavapai College academic programs and activities. YC supports disability and accessibility awareness and promotes a welcoming environment to all. The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 prohibits discrimination on the basis of disability and requires Yavapai College to make reasonable accommodations for those otherwise qualified individuals with a disability who request accommodations. (www.yc.edu/disabilityresources)

Yavapai College is committed to providing educational support services to students with documented disabilities. Accommodations for a student must be arranged by the student through Disability Resources by phone 928.776.2085 or email disabilityresources@vc.edu.

Faculty Response Time

I strive to grade assignments as soon as possible after each due date. Except for extraordinary circumstances, assignments will be graded within two days. I usually respond to email within minutes of receiving each message.

Disclaimer

This syllabus is subject to change. Students will be notified of any changes to this syllabus. The student is responsible for making note of all such announcements concerning syllabus revisions.

Schedule of Lectures and Examinations (This could change before or after the term starts.)

Date	Topic for lecture		
Always available	Descent with Modification		
	Phylogeny		
	The Evolution of Populations		
	The Origin of Species		
	Broad Patterns of Evolution		
14 February Lecture Examination 1			
Always available	Early Life and the Diversification of Prokaryotes		
	The Origin and Diversification of Eukaryotes		
	The Colonization of Land by Plants		
	The Rise of Animal Diversity		
01 April	Lecture Examination 2		
	Plant Structure and Growth		
Always available	Resource Acquisition, Nutrition, and Transport in Vascular Plants		
Always available	Reproduction and Domestication of Flowering Plants		
	Plant Responses to Internal and External Signals		
23 April	Lecture Examination 3		
Always available	Population Ecology and the Distribution of Organisms		
	Species Interactions		
	Ecosystems and Energy		
	Global Ecology and Conservation Biology		
15 May	Lecture Examination 4		

Schedule of All Graded Items (This could change before or after the term starts.)

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Due Date (23:59 MST)	Assignment (Click for direct access.)	Page in Canvas (Be sure to read.)	Lateness Penalty
20 Jan	First Day Attendance	<u>Canvas</u> <u>Menu</u>	Withdrawal
22 Jan	Lockdown Practice - Requires Respondus LockDown Browser + Webcam	<u>Canvas</u> <u>Menu</u>	Examinations Locked
23 Jan	Labster - Evolution: Founding theories and principles	<u>Labster</u> <u>Activities</u>	10% Per Day
26 Jan	OpenStax Quiz: Evolution and the Origin of Species	OpenStax Quizzes	10% Per Day
29 Jan	Labster - Evolution: Are you related to a sea monster?	<u>Labster</u> <u>Activities</u>	10% Per Day
01 Feb	OpenStax Quiz: Phylogenies and the History of Life	OpenStax Quizzes	10% Per Day
04 Feb	Labster - Evolution: Journey of the canids	<u>Labster</u> <u>Activities</u>	10% Per Day
07 Feb	OpenStax Quiz: The Evolution of Populations	OpenStax Quizzes	10% Per Day
11 Feb	Labster - Evolution: Taxonomic tree of life	Labster Activities	10% Per Day
14 Feb	Examination 1	Examinations	Not Allowed
17 Feb	OpenStax Quiz: Prokaryotes: Bacteria and Archaea	<u>Labster Activities</u>	10% Per Day
20 Feb	Labster - Bacterial Cell Structures: An introduction to the bacterial cell	<u>Labster</u> <u>Activities</u>	10% Per Day
23 Feb	OpenStax Quiz: Protists	OpenStax Quizzes	10% Per Day
26 Feb	OpenStax Quiz: Fungi	OpenStax Quizzes	10% Per Day
01 Mar	<u>Labster - Earth's Atmosphere</u>	<u>Labster</u> <u>Activities</u>	10% Per Day
05 Mar	Labster - Photosynthesis: Algae pigment analysis	<u>Labster</u> <u>Activities</u>	10% Per Day
08 Mar	OpenStax Quiz: Seedless Plants	OpenStax Quizzes	10% Per Day
11 Mar	OpenStax Quiz: Seed Plants	OpenStax Quizzes	10% Per Day
14 Mar	OpenStax Quiz: Introduction to Animal Diversity	OpenStax Quizzes	10% Per Day
22 Mar	OpenStax Quiz: Invertebrates	OpenStax Quizzes	10% Per Day
25 Mar	OpenStax Quiz: Vertebrates	OpenStax Quizzes	10% Per Day
28 Mar	Labster - Evolution: Identifying a deep sea creature	<u>Labster</u> <u>Activities</u>	10% Per Day
01 Apr	Examination 2	<u>Examinations</u>	Not Allowed
04 Apr	OpenStax Quiz: Plant Form and Physiology	OpenStax Quizzes	10% Per Day
07 Apr	OpenStax Quiz: Plant Reproduction	OpenStax Quizzes	10% Per Day
10 Apr	OpenStax Quiz: Soil and Plant Nutrition	OpenStax Quizzes	10% Per Day
13 Apr	Labster - Atmospheric Circulation, Climate, and Biomes: Determine the lab's location!	<u>Labster Activities</u>	10% Per Day
16 Apr	OpenStax Quiz: Ecology and the Biosphere	OpenStax Quizzes	10% Per Day
19 Apr	OpenStax Quiz: Population and Community Ecology	OpenStax Quizzes	10% Per Day
23 Apr	Examination 3	<u>Examinations</u>	Not Allowed
26 Apr	<u>Labster - Population Growth: Lets catch some goslins!</u>	<u>Labster Activities</u>	10% Per Day
29 Apr	Labster - Biomes: Identify and create the main biomes on Earth	<u>Labster</u> <u>Activities</u>	10% Per Day
02 May	OpenStax Quiz: Ecosystems	OpenStax Quizzes	10% Per Day
05 May	Labster - Biodiversity: Assess and compare biodiversity on an exoplanet	<u>Labster Activities</u>	10% Per Day
08 May	OpenStax Quiz: Conservation Biology and Biodiversity	OpenStax Quizzes	10% Per Day
11 May	Labster - Human Impact on Climate Change: Balance human emissions and a growing population	<u>Labster Activities</u>	10% Per Day
15 May	Examination 4	<u>Examinations</u>	Not Allowed