College Biology II

BIOL - 1620 001

Course Description

Course Description: For Biology/Science Majors. This course introduces evolutionary biology, organismal

biology, and ecology. It covers the vast diversity of life including viruses, bacteria, archaea, protists, plants,

fungi and animals, the origin and evolution of life on Earth, natural selection, the construction and

interpretation of phylogenies, and ecological relationships. Three hours of lecture per week.

Pre-Requisite(s): BIOL 1610 (with C or better) and BIOL 1625 w/C or better or with concurrency.

Semester(s) Taught: All

Course Presentation

In Person Lectures. AAB118 - Redwood Campus. Course materials and assignments are available in Canvas.

Course Prerequisites

Prerequisite: BIOL 1610 w/C grade or better

Required Textbook or Materials

Title: Biology 2e



Authors: Mary Ann Clark, Matthew Douglas, Jung Choi

Publication Date: 2020-03-27



Title: Concepts of Biology

Authors: Samantha Fowler, Rebecca Roush, James Wise

Publication Date: 2024-09-10

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Description of Assignments/Exams

Requests for special treatment or extra points or a grade you did not earn in order to graduate in a certain timeframe or keep a scholarship are highly inappropriate and WILL be rejected.

Methods of Evaluation / Assessment

Course total: 650 pts

Assessment	Weighted grade
Midterm Exams (3 exams x 50 pts each)	35%
Final Exam – Part 1, Ecology (20 pts)	4%
Final Exam – Part 2, Comprehensive (100 pts)	15%
Chapter worksheets: 16 x 10 pts each (drop two lowest)	20%
Chapter quizzes: 17 x 5pts each (drop two lowest)	10%
In class activities, participation & attendance (70 pts)	8%
Exam Reviews (3 x 15 pts each)	2%
Open topic student's presentations (50 pts)	6%
Total %	100%

Lecture Exams: There will be a total of 3 midterm exams (50 pts each) and a two-part Final Exam. Part I will only include Ecology modules (20 pts) & Part II (100 pts) are comprehensive questions. The exams will be composed of objective (e.g., multiple choice, T/F, fill-in-the-blank) and subjective (e.g., short essays) questions. You will have an opportunity to review your graded exams during office hours or other appointment times. **There will be no make-up exams. I will NOT eliminate the exam that you missed. Please note that routine illnesses, plane reservations, court appearances, parties, weddings, etc. are NOT considered emergencies. Talk to me ASAP if you have any questions or concerns.**

Examinations and assignments:

You are expected to take all scheduled exams. All exams will be taken in class. The final comprehensive exam is scheduled according to the finals schedule published by SLCC. There is NO EXCUSE after the fact for missing a test except in the case of excused academic absences or medical emergencies and you will be REQUIRED to provide written documentation. It is YOUR RESPONSIBILTY to arrange a possible makeup exam before the deadline of the scheduled exam. If you know ahead of time that there will be a conflict, contact me and we may be able to work around that. If, on the other hand, you miss a test or assignment without having contacted me before hand, you will need documentation of your medical or academic excuse. Without it, you will not be allowed to make up the test or assignment. Late work (WORKSHEETS AND QUIZZES) will be penalized at 10% per day, up to 2 days after the due date. No late assignments will be accepted if they are more than 2 days late.

In class activities & Attendance: There are 70 points for the in-class participation and conduct grades. This includes coming prepared and ready to participate in both lecture & discussions and conducting yourself appropriately. Phone use, continual tardiness, disruptive behavior, and not being active/participating from lectures, and not engaging in discussions will result in lose points.

Engagement Plan

I will respond to email within 2 business days (Monday to Friday). I will offer feedback on major assignments within one week after assignments deadline. The best way to contact

me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

In this course I will be posting interactive announcements per week.

Attend class and engage with instructor and classmates.

Grading Scale

93% - 100% = A

90% - 92% = A-

87% - 89% = B+

83% - 86% = B

80% - 82% = B-

77% - 79% = C+

73% - 76% = C

70% - 72% = C-

67% - 69% = D+

63% - 66% = D

60% - 62% = D

59% and less = F

General Course Policies

Attendance: Attendance at one of the first two class meetings is MANDATORY! If you do NOT attend at least one of the first two lectures, YOU RISK BEING DROPPED from the course by the end of the Tuesday, September 2nd. **Attendance is required**, and no absences will be excused without prior notification. Attendance is calculated into your grade, and I will be taking attendance.

Importante dates:

Last Day to Add Classes (Waitlist Ends) is September 4th.

The last day to drop the class with 100% refund September 16th.

The last day to withdraw from the class with no refund is October 28th.

Incomplete Grade and Withdraw from Class: A grade of "I" (Incomplete) is the instructor's option and is not given except only in the most extenuating of circumstances for which there is verifiable written documentation. In order to receive an Incomplete, nearly all course work must have been completed (e.g., ~75%) with a passing grade.

Electronic Devices: Cell Phones are to be turned off during class. Computers can be used for notetaking and course-related purposes ONLY but should not be used during class for working on other tasks (e.g., answer emails, Facebook, other classes etc.). You will be asked to leave if your electronic device disrupts the class in anyway. Cell phones MUST be turned completely OFF during exams.

Classroom recordings: Students may NOT record or publish information from the class without written authorization from the instructor. If used without authorization, you have violated Privacy/Intellectual Property Rights.

Course Student Learning Outcomes

- Students will be able to describe and apply the principles of evolution, including the mechanisms that change the gene pool of populations, and explain how these factors have resulted in the diversity of life on Earth. Students will be able to describe how new species arise.
- Students will be able to interpret, evaluate, and construct phylogenetic trees. Students will be able to describe how organisms are classified and explain the relationship between phylogeny and taxonomy.
- Students will be able to describe key evolutionary innovations including multicellularity, endosymbiosis, sex, and morphological and ecological changes that have changed the course of the history of life on Earth.
- Students will be able to describe the major groups of organisms, their characteristics, and representative examples of each group.

- Students will be able to describe major events in the history of life and hypotheses regarding the origin of life. Students will be able to describe hypotheses regarding the origin of life and identify traits that all life shares due to common ancestry.
- Students will be able to describe ecological interactions within populations, communities, and ecosystems. Students will be able to describe how abiotic factors influence biogeography.
- Students will be able to describe ecological concepts such as niche, energy budget, and life history, and explain the relationship between them.
- Students will be able to evaluate how biology relates to society, including interactions between humans and other organisms. Students will be able to identify factors influencing the current Anthropocene extinction event, including global climate change and its effects on diversity and biogeography.
- Students will be able to read and interpret scientific literature, graphs, and data. Students will be able to communicate scientific findings through individual and group activities.

College Wide Student Learning Outcomes

SLCC has identified nine essential capacities all students should strengthen, regardless of academic major or career plans, that will serve students in all aspects of life.

- Acquire substantive knowledge in the intended major and throughout General Education
- Communicate effectively
- Develop quantitative literacies necessary for the chosen field of study
- Think critically
- Express themselves creatively
- Develop civic literacy and the capacity to be community-engaged learners who act in mutually beneficial ways with community partners

- Develop the knowledge and skills to work with others in a professional and constructive manner
- Develop information literacy
- Develop computer literacy

Course Learning Environment

My hope is that all of us together will create a learning environment that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- No discrimination is tolerated based on anyone's race, gender, sexuality, religion, abilities, English language proficiency or socio-economic circumstances. Please always choose kindness and patience in our class communications, there is space for all of us here.
- If you have a name and/or set of pronouns that differ from those that appear in your Canvas handle, please let me know so I can address everyone in a way that makes them feel comfortable and safe.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in any of the class materials and discussions (by anyone) that made you feel uncomfortable, please talk to me about it. You can email me directly. I will keep it confidential and strive to correct the situation.
- If you feel like your performance in the class is being affected by an emergency or any other situation outside of class, please let me know so that we can discuss the best course of action. I will not be disappointed in you if you can't complete everything on time, or don't perform to your full potential. I know everyone has a lot going on, and I understand that sometimes coursework is one of many priorities in your life. But I can't help you unless you communicate with me!

Keys to Success

It is your responsibility to read ahead in the textbook and be prepared for class. This means that prior to class you should read the relevant chapters being discussed that day and be prepared to ask questions concerning what you do not understand. Lecture will often follow the book, but sometimes only portions of the chapters will be discussed. In other cases, I may add outside material, examples, and ideas that expand on the topics in the book. Therefore, you should use the book as a reference and study tool but use your notes as a study guide. The notes are what I use to build a test so TAKE GOOD NOTES! The syllabus is my expected schedule for the course, but the exact times when we cover material during the semester may vary, as may the material itself depending on time constraints. You must attend class to keep abreast of the material being covered.

Free STEM Tutoring

STEM Learning provides free tutoring services and textbook checkout to students enrolled in various courses offered by the School or Science, Math, and Engineering.

Tutoring is provided as a drop-in service only, except in certain circumstances.

Please visit https://www.slcc.edu/stem/tutoring/index.aspx for more information!

Academic Integrity

Academic Dishonesty: Academic Dishonesty is absolutely NOT tolerated & includes all forms of cheating and plagiarism as outlined in the Code of Student Rights and Responsibilities and outlined here. There is NO tolerance for dishonesty. Academic dishonesty includes but is not limited to claiming another person's work or words as one's own, accessing answers to lab reports, quizzes, and exams from the Internet, completing quizzes or exams with other individuals. Students must write all answers in their own words. Exams are to be completed individually by the student.

Generative artificial intelligence (AI) software is a rapidly emerging tool that students may be interested in using. If doing so, SLCC students are expected to adhere to the same standards as the Code of Student Rights and Responsibilities statement on plagiarism. Presenting generative AI software content as your own is a violation of academic integrity. If you use generative AI in your work, you must indicate that you have done so."

Penalty for first offense will result in grade of "0" on the assignment or exam & second offense may result in an "E" for the course.

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the <u>Institutional Syllabus</u> page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the <u>Institutional Syllabus</u> page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To

learn more about those dates, navigate to the Student Academic Calendar below: <u>SLCC</u> <u>Student Academic Calendar</u>

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Animal Diversity Q&A	Discussion	0
	Course Discussion Board	Discussion	0
	Ecology and the Biosphere Q&A	Discussion	0
	Ecosystems & Conservation Biology Q&A	Discussion	0
	Evolution & the Origin of Species Q&A	Discussion	0
	Exam 1 (PLO-BIOL-01)	Assignment	50
	Exam 2 (PLO-BIOL-05)	Assignment	50
	Exam 3 (PLO-BIOL-05)	Assignment	50
	Final Exam - PART 1 of 2	Assignment	30

Due Date	Assignment Name	Assignment Type	Points
	Final Exam - PART 2 of 2 (PLO-BIOL-06)	Assignment	20
	Fungi Q&A	Discussion	0
	Invertebrates Q&A	Discussion	0
	Lecture Participation and Attendance	Assignment	0
	Peer Grading	Assignment	5
	Phylogenies and the History of Life Q&A	Discussion	0
	Plant Reproduction & Pollination Q&A	Discussion	0
	Population and Community Ecology Q&A	Discussion	0
	Presentations of your selected Biology topic	Assignment	45
	Prokaryotes: Bacteria and Archaea Q&A	Discussion	0
	Protists Q&A	Discussion	0
	Seed Plants Q&A	Discussion	0
	Seedless Plants Q&A	Discussion	0
	The Evolution of Populations Q&A	Discussion	0
	<u>Vertebrates Q&A</u>	Discussion	0
9/2/25	Introduce Yourself	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
9/2/25	Orientation Quiz	Quiz	5
9/5/25	Evolution & the Origin of Species Worksheet	Assignment	10
9/5/25	Evolution & the Origin of Species Quiz	Quiz	5
9/11/25	The Evolution of Populations Quiz	Quiz	5
9/11/25	The Evolution of Populations Worksheet	Assignment	10
9/18/25	Phylogenies and the History of Life Quiz	Quiz	5
9/18/25	Phylogenies and the History of Life Worksheet	Assignment	10
9/23/25	Review Exam1	Assignment	5
9/30/25	Prokaryotes: Bacteria and Archaea Quiz	Quiz	5
9/30/25	Prokaryotes: Bacteria and Archaea Worksheet	Assignment	10
10/9/25	Protists Quiz	Quiz	5
10/9/25	Protists Worksheet	Assignment	10
10/14/25	Seedless Plants Quiz	Quiz	5
10/14/25	Seedless Plants Worksheet	Assignment	10
9/18/25 9/18/25 9/23/25 9/30/25 10/9/25 10/9/25 10/14/25	Phylogenies and the History of Life Quiz Phylogenies and the History of Life Worksheet Review Exam 1 Prokaryotes: Bacteria and Archaea Quiz Prokaryotes: Bacteria and Archaea Worksheet Protists Quiz Protists Quiz Protists Worksheet Seedless Plants Quiz	Quiz Assignment Quiz Assignment Quiz Assignment Quiz Assignment Quiz	5 10 5 10 5 10 5 10 5

Due Date	Assignment Name	Assignment Type	Points
10/21/25	Seed Plants Quiz	Quiz	5
10/21/25	Seed Plants Worksheet	Assignment	10
10/23/25	Review Exam 2	Assignment	5
10/30/25	Plant Reproduction & Pollination Quiz	Quiz	5
10/30/25	Plant Reproduction & Pollination Worksheet	Assignment	10
11/6/25	<u>Fungi Quiz</u>	Quiz	5
11/6/25	<u>Fungi Worksheet</u>	Assignment	10
11/13/25	Animal Diversity Quiz	Quiz	5
11/13/25	Animal Diversity Worksheet	Assignment	10
11/20/25	Invertebrates Quiz	Quiz	5
11/20/25	<u>Invertebrates</u> <u>Worksheet</u>	Assignment	10
11/20/25	Review Exam 3	Assignment	5
11/25/25	<u>Vertebrates Quiz</u>	Quiz	5
11/25/25	<u>Vertebrates</u> <u>Worksheet</u>	Assignment	10
12/5/25	Ecology and the Biosphere Quiz	Quiz	5
12/5/25	Ecology and the Biosphere Worksheet	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
12/12/25	Ecosystems & Conservation Biology Quiz	Quiz	5
12/12/25	Ecosystems & Conservation Biology Worksheet	Assignment	10
12/12/25	Population & Community Ecology Quiz	Quiz	5
12/12/25	Population & Community Ecology Worksheet	Assignment	10