College Biology II Laboratory

BIOL1625 [redacted]

Instructor Information

Course Description

For Biology/Science Majors. Laboratory observation and experimentation to enhance understanding of evolution, diversity, and ecology, including basic microscopy, sample preparation, molecular techniques, and observation of organisms from the major groups of life. Students will apply the scientific method to the course concepts by conducting a research project and presenting their findings.

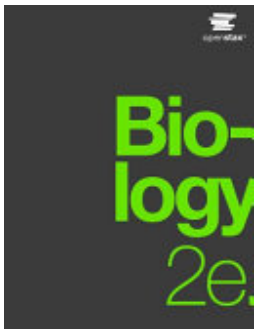
Course Presentation

This course is an in-person course and attendance is required. We will be meeting every Wednesday.

Course Prerequisites

Corequisite: BIOL 1620 (may be taken previously w/C or better)

Required Textbook or Materials



Title: Biology 2e
ISBN: 9781947172951
Authors: Mary Ann Clark, Jung Ho Choi, Matthew M. Douglas
Publication Date: 2018-03-28

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

Description of Assignments/Exams

Lab Assignments - 40%

These will be completed in lab. You will bring the lab handout (available on Canvas) and arrive ready to work.

Pre-Lab Quizzes - 15%

These must be completed prior to lab. No makeups or late quizzes are allowed.

Practical exams - 20%
There will be two practical lab exams. They will be closed book.

Research Project - 25%
You will complete an independent research project.

Communication Plan

The best way to contact me is via the Canvas Inbox. I reply to messages within two business days. If you do not receive a response within this time, please message me again.

Grading Scale

A…… 93-100%
A-…….. 90-93%
B+…….. 87-90%
B…… 83-87%
B-…….. 80-83%
C+…… 77-80%
C…… 73-77%
C-…….. 70-73%
D+…… 67-70%
D ……... 63-67%
D-…….. 60-63%
E…….. <60%

General Course Policies

Attendance: Attendance is required.

Academic Integrity: Cheating on an exam or plagiarizing (including AI; see below) will result in a zero for the exam/assignment for the first infraction. A second infraction will result in an E for the course.

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.

Due Dates and Late Work Policy: Please know and follow the due dates for the course. Late pre-class quizzes will not be accepted; however, the lowest score will be dropped. Lab assignments generally cannot be made up because there is significant set-up and take-down associated with the lab. One lab assignment will be dropped.

Drop, Withdraw or Incomplete Grade: Last day to drop from class with refund is September 10th, withdraw without refund is October 22nd. A grade of “I” (Incomplete) is at the instructor’s discretion and can be given if a student is facing extenuating circumstances preventing them from finishing the semester. In order to receive an

incomplete, most of the course work must be completed (e.g. ~70%) with a passing grade.

SLCC Academic Policies: SLCC academic policies may be found in the SLCC 2024-2025 Catalog, and the Code of Student Rights and Responsibilities.

Course Student Learning Outcomes

- Use a microscope to observe, measure, and image biological specimens.
- Demonstrate proficiency in basic laboratory skills, including techniques used to identify and study organisms.
- Use morphological and molecular data to construct phylogenetic trees.
- Describe the major groups of organisms, their characteristics, and representative examples of each group.
- Generate and/or evaluate hypotheses and make predictions.
- Design experiments to test a hypothesis.
- Analyze data and draw appropriate conclusions.
- Construct a scientific figure.
- Report their findings in a discipline-appropriate format, such as an oral presentation or poster presentation.

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

By enrolling in BIOL 1625, you are agreeing to:

- attend all class sessions to the best of your ability.
- be familiar with and adhere to all of the course policies, due dates, and grading criteria presented in the course syllabus.
- follow the SLCC student code of conduct.
- come to class prepared with the required readings and assignments.
- fully participate in in-class group activities, discussions, and lectures.
- complete all exams and assignments during the scheduled times and/or by the due dates.
- treat your fellow students and instructors with respect and kindness. Your comments to others should be factual, constructive, and free from harassing statements.
- contribute to a classroom environment that is welcoming to every individual, regardless of race, ethnicity, sexuality, gender identity, disability, age, nationality, citizenship status, religion, culture, socioeconomic status, etc.
- use your phone/device/laptop for course work only during class time.

- please communicate with me ASAP if you have an emergency/situation that would prevent you from completing assignments, taking an exam at the scheduled time, etc. (I cannot help you if you do not communicate with me!).

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.

You can access the document by clicking on the following link: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus

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, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. 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:

SLCC Student Academic Calendar

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, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. 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
	Archaeplastida part 1 Lab Exercises	Assignment	10
	Archaeplastida part 2 Lab Exercises	Assignment	10
	Archaeplastids part 1	Quiz	10
	Basal Animals and Deuterostomes	Quiz	10
	Basal Animals and Deuterostomes Lab Exercises	Assignment	10
	ePortfolio and Reflection	Assignment	10
	Field Trip	Assignment	10
	Fungi Lab Exercises	Assignment	10
	History of Life Lab Exercises	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Microscopy Lab Exercises	Assignment	10
	Phylogeny Exercises	Assignment	10
	Plant Measurements	Assignment	10
	Practical Exam 1	Assignment	25
	Practical Exam 2	Assignment	25
	Preliminary Data	Assignment	20
	Prokaryotes Exercises	Assignment	10
	Protostomes	Quiz	10
	Protostomes Lab Exercises	Assignment	10
	Quiz - Prep for Field Trip!	Quiz	10
	Quiz - Archaeplastids part 2	Quiz	10
	Quiz - Fungi	Quiz	10
	Quiz - Supergroups Excavata, Amoebozoa, and SAR	Quiz	10
	Research Poster	Assignment	40
	Research Presentation	Assignment	20

Due Date	Assignment Name	Assignment Type	Points
	Supergroup Excavata, Amoebozoa, and SAR Lab Exercises	Assignment	10
8/28	Quiz - Microscopy	Quiz	10
9/4	Quiz - History of Life	Quiz	10
9/6	Research - Experimental Design	Quiz	10
9/6	Question and Hypothesis	Assignment	5
9/18	Quiz - Phylogeny	Quiz	10
9/25	Prokaryotes Quiz	Quiz	10

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]