College Biology II

BIOL1620

Instructor Information	on
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Communication Plan

The best way to contact me is via the Canvas Inbox, as I will prioritize this over other modes of communication for anything course-related. I should respond within 2 business days.

Approximate grading timelines:

- Quizzes are graded immediately upon submission by Canvas, except for write-in answers which will be graded within 1 week of the due date.
- · Exams within 2 days of the exam date.
- Assignments are graded within 1 weeks of the due date.

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!

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 Calendar

This is tentative, so dates are approximate. Major changes to the schedule will be announced in class and on Canvas.

Week/Day	Date	Topic	Major Items
1 Mon	19 Aug	Classes start Tues (20 Aug)	

1 Wed	21 Aug	Course Intro	Syllabus quiz
2 Mon	26 Aug	Science	Intro survey
2 Wed	28 Aug	Evolution	Research article
3 Mon	2 Sep	Labor Day - no classes	
3 Wed	4 Sep	Population Genetics	
4 Mon	9 Sep	Phylogeny	Cladogram activity
4 Wed	11 Sep	Review for Exam 1	
5 Mon	16 Sep	Exam 1	
5 Wed	18 Sep	Origin of Life	Extinction report
6 Mon	23 Sep	Viruses	
6 Wed	25 Sep	Prokaryotes	Prokaryote report
7 Mon	30 Sep	Eukaryote Evolution	
7 Wed	2 Oct	Reproduction	Paper discussion
8 Mon	7 Oct	Protist Diversity	Tree-of-Life activity
8 Wed	9 Oct	Review for Exam 2	
9 Mon	14 Oct	Exam 2	
9 Wed	16 Oct	Plants	
10 Mon	21 Oct	Plants	Article summary
10 Wed	23 Oct	Fungi	
11 Mon	28 Oct	Animals	Animal phylum slide
11 Wed	30 Oct	Invertebrates	Animal phylum report
12 Mon	4 Nov	Review for Exam 3	
12 Wed	6 Nov	Exam 3	
13 Mon	11 Nov	Vertebrates	
13 Wed	13 Nov	Ecology	Biome report
14 Mon	18 Nov	Population Ecology	
14 Wed	20 Nov	Community Ecology	
15 Mon	25 Nov	Ecosystems	SLOSS activity
15 Wed	27 Nov	Thanksgiving - no classes	
16 Mon	2 Dec	Review for Exam 4 & Final	
16 Wed	4 Dec	Exam 4	
17 Mon	9 Dec	Final Exam: 11:20 am - 1:20 pm	

Course Presentation

You are in section 402, which meets 11:30-12:50 on Mondays and Wednesdays in SI 291 (Redwood campus). This course has in-person (face-to-face) class meetings. I will record the broadcast for each class so that they are available later for students who could not attend on a particular day.

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.

Course Prerequisites

Pre-Requisite(s):

- BIOL 1610 w/C or better
- BIOL 1625 w/C or better or BIOL 1625 must be concurrent

Required Textbook or Materials

Biology

Title: Biology

Subtitle: This is an OER (free, online text).

ISBN: 978-1-947172-52-4

Authors: Clark, Douglas, Choi

Publisher: Openstax Edition: 2nd Edition

OID: https://openstax.org/details/books/biology-2e

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

Course Learning Environment

I want the classroom environment to be welcoming, inclusive, and suitable for learning. Therefore, any behavior that is disruptive for a successful learning environment will not be tolerated. Unacceptably disruptive behaviors typically involve excessive audio and visual distractions.

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 or send feedback via the anonymous open survey on our Canvas
 site.
- If you feel like your performance in the class is being impacted by your experiences
 outside of class, please don't hesitate to let me know and request extra time on
 your course work. I want to be a resource for you and help you learn these
 materials without adding to anyone's level of stress and I promise to treat everyone
 with compassion.

General Course Policies

Communication: I will distribute one or more Canvas announcements per week regarding course happenings and due dates. To make sure you're receiving those in a timely manner, you should go to <u>Account</u> > Notifications > Announcement and set it to either 'Notify immediately' or 'Daily summary'. The best way for you to reach me is by the Canvas email system. You should expect a response within 2 business days.

Attendance: Being present and actively engaged in the materials and activities is one of the best ways to learn. This is <u>not</u> an optional attendance class. I expect students to attend and participate in every class session, but I try to be flexible because on occasion other things may interfere. This is why I record classes and do not include attendance

directly as a major component of grade calculation. This flexibility is intended to alleviate infrequent absences. It is not intended to facilitate regular non-attendance.

Score Drop Policy: For some graded items, I will drop one or more low scores, meaning that item will be excluded from grade calculations. I do not remove scores from Canvas. The primary reason that I drop a few scores is that sometimes things outside your control (for example: family, work, or health issues) may prevent you from fully engaging in or properly preparing for class. Rather than being penalized for it, you will be able to miss that item and the score will be dropped.

Late Work & Make-Ups: It is your responsibility to plan ahead and allocate enough time to complete quizzes, exams, and assignments. Don't wait until the very last minute to attempt to submit something – you could encounter technical or other unexpected issues. Because of the score drop policy and the fact that most items are available for several days to several weeks, I do not allow any make-ups or late work except for unusual circumstances, subject to my approval.

Electronic Devices & Recordings: You may use electronic devices (phones, tablets, laptops, etc.) during class as long as you mute all sounds and do not talk on the phone. However, if your use of an electronic device is distracting other students, you will be asked to turn it off. Also, electronic devices are not permitted during exams and quizzes, unless otherwise directed by the instructor. You are permitted to make audio recordings (but not video) during class for study purposes only. However, those recordings may not be posted online or published in any format. Such action would violate individual privacy and intellectual property rights. Recordings of class sessions that include video and audio will be posted on Canvas.

Academic Integrity: 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.

Academic dishonesty, or cheating, will not be tolerated. A student caught participating in any form of academic dishonesty may receive a zero on the work in question, be subject to academic discipline, and be given a course grade of E. If a cheating-related infraction

results in a zero for your exam score instead of expulsion from the class, the zero grade will not count as your lowest score and will not be dropped. Examples of academic dishonesty include, but are not limited to:

- Asking for or receiving help from another person on an exam.
- Claiming another person's work as your own (this includes copying materials found on the internet).
- Communicating about exam content with a student who has not yet taken that exam.
- Accessing materials not allowed during a quiz or exam.

Accessibility: SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you need accommodations to improve access to learning materials or the learning environment, please contact the Disability Resource Center: (phone) 801-957-4659; (email) drc@slcc.edu; (website) www.slcc.edu/drc.

Emergency Procedures: We will follow school guidelines (http://i.slcc.edu/emergency-procedures.aspx). If we need to evacuate the classroom, please follow the instructor's directions.

Drop, Withdraw or Incomplete Grade: See the academic calendar for the last dates to drop with and without a refund. 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. ~75%) with a passing grade.

SLCC Academic Policies: SLCC academic policies may be found in the <u>SLCC 2023-2024 Catalog</u>, and the <u>Code of Student Rights and Responsibilities</u>.

Keys to Success

You will need to put in considerable time and effort to succeed in this course. You should spend about 3 hours studying and preparing outside of class for every hour in class, which amounts to roughly 9 hours per week. I highly recommend you:

Attend every class session, participate in activities, and take notes.

- Read relevant chapters and other materials before they are covered in class.
- Review your notes frequently and ask yourself questions about the material.
- Seek help with understanding materials/concepts, when needed. In other words, ask guestions.
- Form study groups. Helping your peers will reinforce your learning.

Description of Assignments/Exams

Participation: There will be a variety of participation activities, such as discussions and reports. Some of these will require you to be present in class to fully complete. If you are absent on a day we do an activity, you will likely miss some points for it. There are no make-ups for missed activities. I will drop your four lowest scores.

Also, participation during the first week is mandatory. Any student who does not engage in the course (this will be assessed primarily by completion of the "syllabus quiz") by <u>Sunday, 25 August risks</u> being dropped.

Quizzes: There will be a weekly quiz that covers recent material. Quizzes will vary in number and type of questions. Most quizzes will be open on Canvas from Thursday to the following Monday. You will be allowed just one attempt, but there is no time limit. I will drop your four lowest quiz scores.

Examinations: There will be five exams: four midterms and one final. Midterm exams will cover about 5 class meetings and will have questions of various types (e.g., multiple choice, matching, short answer). The final exam is comprehensive (cumulative) for the entire semester. I will drop your lowest exam score.

Exams will be in the regular classroom. Midterms will be during the regularly scheduled class time, but the final will be held as dictated by the SLCC finals schedule. Exams are closed, meaning you will not be allowed to 1) discuss it with other people, 2) access digital devices, or 3) use notes, books, or other relevant materials. Be sure to bring a writing utensil on an exam day.

Grading Scale

This table shows what assessments are included in determining your course grade.

Item	Number	Number Dropped	Points
Participation	16	4	30%
Quizzes	16	4	20%
Exams	5	1	50%
		TOTAL	100%

This table shows how letter grades will be determined at the end of the semester. Keep in mind that the percentage that Canvas automatically calculates may be a little off.

Grade	Range		
Α	≥ 93%		
A-	90-92.99%		
B+	88-89.99%		
В	83-87.99%		
B-	80-82.99%		
C+	78-79.99%		
С	73-77.99%		
C-	70-72.99%		
D+	68-69.99%		
D	63-67.99%		
D-	60-62.99%		
Е	< 60%		

Extra Credit: Several opportunities may be offered, but the maximum increase from extra credit is 5%.

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

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-

<u>syllabus</u>. 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
8/25	Syllabus Quiz	Quiz	1
8/26	Activity 0: Intro Survey	Quiz	10
8/26	Quiz 1	Quiz	5
8/28	Activity 1: Research Article	Assignment	10
9/4	Activity 2: Species Concepts	Assignment	10
9/4	Activity 3: Hardy- Weinberg Equilibrium	Assignment	10
9/5	Quiz 2	Quiz	5
9/9	Quiz 3	Quiz	5