

California State University, Los Angeles
College of NSS/Department of Biological Sciences
BIOL1200, Diversity of Life, Spring, 2023

COURSE INFORMATION

Instructor: Joshua Cohen

Office Location: Library South Palmer Wing Room 2097

Email: jcohen11@calstatela.edu

Student Office Hours: MW 11:00am–12:00pm in Library South Palmer Wing Room 2097.

General Course Information

Lecture Days/Time: Mondays and Wednesdays 12:15 PM – 1:30 PM

Lecture Location: Student Services Building L120

Recitation & Laboratory Location: ASCB 344 or ASCB 362

Recitation & Laboratory Times:

Lecture Section	Recitation Section	Laboratory Section	Day	Instructor	Location	Time
32221	32222	32223	Mon	Maral Keushkerian	ASCB 344	2:05PM - 5:30PM
32224	32225	32226	Mon	Lisa Lugo	ASCB 362	2:05PM - 5:30PM
32227	32228	32229	Tues	Lisa Lugo	ASCB 362	10:00AM - 1:25PM
32230	32231	32232	Wed	Maral Keushkerian	ASCB 344	2:05PM - 5:30PM
32233	32234	32235	Wed	Alexandra Garcia	ASCB 362	2:05PM - 5:30PM
32613	32615	32616	Thurs	Alexandra Garcia	ASCB 362	10:00AM - 1:25PM

Prerequisites: BIOL 1100 with grade of C or higher, Pre/Co-requisite of MATH 1083 or MATH 1085 or MATH 1040 or equivalent.

Course Description

Introduction to the ecology, evolution, and diversity of life; structure and function, reproduction, and energy metabolism in plants, animals, and fungi. Lecture 3 hours, Laboratory 3 hours. Recitation 1 hour.

Biology 1200 is the second course in the introductory biology major series. This course provides an important foundation in ecology, evolution, and diversity of life, leading to more advanced study of these topics in the major core courses and electives.

Student Learning Objectives and Course Learning Objectives/Outcomes

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- Describe the processes that contribute to changing allele frequencies in natural populations
- Link microevolutionary processes with macroevolutionary patterns
- Interpret evolutionary relationships on a phylogenetic tree
- Analyze the evolutionary and biogeochemical significance of metabolic evolution in prokaryotes
- Compare the evolution of plant and animal life cycles through the process of terrestrialization
- Compare the physiology, anatomy, and development of major plant and animal taxa
- Describe the evolutionary diversity and ecological roles of fungi
- Analyze the influence of various types of species interactions on community assembly, structure, and stability

Course Structure

This course is scheduled to meet in person on campus. You will participate in the course using the Cal State LA learning management system [Canvas](#) that you access through MyCalStateLA. Our lecture Canvas course is linked to McGraw Hill Connect, which is your source of the ebook, for smartbook reading assignments and homework. My “student office hours” are times when I am available to you for any questions about course content or if you need help. If the student office hour times do not work for you, you can send me a message in canvas and we can arrange another time to meet.

REQUIRED COURSE MATERIALS

Textbook

You are required to register for McGraw Hill (MH) Connect to access the etext and assignments. **If you previously purchased an access code for Connect for BIOL 1100 or 1200, that code is valid for 364 days.** You should not need to purchase another code if you are within the 364-day period. Your textbook “Biology, Raven 13th edition” is the same text that was used for BIOL 1100 and is included on the MH

Connect site as an ebook and an interactive Smartbook. **If you are buying a code for the first time, I recommend purchasing the code directly through the McGraw Hill publishing website; instructions and links are posted on our Cal State LA Canvas course site.** The MH Connect reading assignments and homework will be included in the weekly modules on our Cal State LA Canvas course site. Canvas and Connect are linked, and the grades for assignments that you complete in Connect will show up in both Canvas and Connect. A video link will be provided in Canvas that explains how to register for our Connect section.

Title: Biology (Access Code)

Author: Raven

Edition: 13th Edition

ISBN: 9781265605247

Note – this ISBN is for the access code through publisher. You are not required to buy a hardcopy print version of the textbook at the Cal State LA bookstore.

Computer Requirements

You will need to have an up-to-date browser, operating system and some additional software on your computer to take this class. Check the [ITS Helpdesk Student Resources page](#). Some of the documents in this course will be available to you in PDF form. You will need download and install [Adobe Acrobat Reader software](#) on your computer.

COURSE COMMUNICATION

Questions

It is normal to have many questions about things that relate to the course, such as clarification about assignments, course materials, or assessments. Please post these in the *FAQ* discussion.

Discussion Forum

We will be using discussion forums in lecture. You are expected to make weekly posts in each forum. For lecture, you must make a *Discussion Forum* post by Wednesday at midnight, and respond to two student posts by Friday at midnight. Your weekly post is worth 5 points per week.

Netiquette

When posting on the discussion boards and chat rooms it is important to understand how to interact with one another online, *netiquette*. You can read more about the rules of netiquette at [15 Rules of Netiquette for Online Discussion Boards](#).

ASSIGNMENTS AND GRADING POLICY

65% of the course grade is based on lecture, and the other 35% from recitation and laboratory activities. Due dates and times for reading assignments, chapter homework, exams, can be found in the “Course Summary” on the course syllabus page in Canvas.

We will follow the due dates in Canvas/Connect for all assignments to keep everyone on track. Discussion posts cannot be extended, but can be exempted with a medical excuse. There is no extra credit available. In order for the class to count toward the BS Biology degree you must earn a grade of C or higher.

Lecture Activities: 100 points

Weekly Lecture Discussion Posts and Replies 100 points (based on final % earned)

Connect Assignments: 200 points

Pre-lecture Connect Smartbook Reading Assignments 100 points (based on final % earned)

Post-lecture Connect Homework 100 points (based on final % earned)

Exams: 350 points

Midterms (2 @ 100 each) 200 points

Final Exam (cumulative) 150 points

Lab/Recitation Assignments: 350 points

Pre-Lab Quizzes (10 @ 5 each) 50 points

Recitation Activities (5 or 10 pts each) 100 points

Worksheets 50 points

Lab Reports and Drafts 80 points

Lab Notebook 70 points

Grading Criteria

You can view your grades using the GRADES button in the Canvas course navigation. Please check your grades regularly to make certain that I have received all your assignments. If you have a question about a grade, email me at jcohen11@calstatela.edu. Questions about recitation and laboratory grades should be directed to your lab instructor, those are maintained in the recitation/lab canvas course. Please do not post your personal concerns about grades in a discussion forum.

Assignment	Percentage
Exams	35.0%
Connect SB Readings	10.0%
Connect Ch.Homework	10.0%
Laboratory/Recitation	35.0%
Lecture Activities	10.0%
Total:	100%

Grading Scale

Letter Grade	Percentage
A	94-100%
A-	90-94%
B+	87-89.9%
B	83-86.9%
B-	80-82.9%
C+	77-79.9%
C	70-76.9 %
D	60-69.9%
F	<59.9%

Rubrics

We will use Rubrics to grade the discussion posts, laboratory report assignments, and recitation activities. The rubrics provide you with specific and detailed criteria that we will use to evaluate your work. You should consult the rubrics to make sure that you have met the criteria before submitting your work so that you can earn full credit.

HELPFUL STUDENT RESOURCES

Technical Resources

Information on Cal State LA technical support resources for students: [Technical Support Resources](#)

Student Support Resources

Information on Cal State LA student support resources for students: [Student Support Resources](#)

Academic Support Resources

Information on Cal State LA academic support resources for students: [Academic Support Resources](#)

Canvas Student Support

Information for students on how to be a successful online student and how to use Canvas are included in resources module on Canvas.

Glazer Family Dreamers Resource Center

The [Erika J. Glazer Family Dreamers Resource Center](#) promotes the success of undocumented students and students from mixed-status families at Cal State LA through a variety of resources, services, and community engagement opportunities. Such programs and services are weekly immigration legal clinics, California Dream Act Application for Financial Aid Assistance, and professional and academic development workshops.

UNIVERSITY POLICIES

Student Conduct

Information on student rights and responsibilities, standards of conduct, etc., can be found by visiting the Cal State LA [University Catalog Appendices](#).

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Students should be aware of the current deadlines and penalties for adding and dropping classes by visiting the [GET home page](#).

Americans with Disabilities Act (ADA)

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. For more information visit the [Office for Students with Disabilities](#) home page.

Academic Honesty

Many incidents of plagiarism result from students' lack of understanding about what constitutes plagiarism. However, you are expected to familiarize yourself with the [Cal State LA Academic Honesty Policy](#) including [Appendix D – Academic Honesty](#) and [Appendix E - Student Conduct / Student Conduct Procedures](#). All work you submit must be your own scholarly and creative efforts. Cal State LA plagiarism as follows: “At Cal State LA, plagiarism is defined as the act of using ideas, words, or work of another person or persons as if they were one’s own, without giving proper credit to the original sources.” In this course we may utilize turnitin.com, an automated system which instructors can use to quickly and easily compare each student’s assignment with billions of web sites, as well as an enormous database of student papers. After the assignment is processed, I receive a report from turnitin.com that states if and how another author’s work was used in the assignment. Please visit the [Turnitin Student FAQ](#) page for more info. Exams are individual assessments. Working together on exams (in person or virtually) and sharing of any exam content during the exam period is considered a violation of the Cal State LA Academic Honesty Policy. Additionally, utilizing any online resource to complete assignments or activities (e.g. Chegg, ChatGPT, etc.) will be considered a violation of the Cal State LA Academic Honesty Policy.

Covid Policies

Cal State LA Covid 19 Protocols: Information and updates can be found at the following link: <https://www.calstatela.edu/healthwatch>

Vaccination Requirements: The CSU now requires COVID-19 vaccination including booster shots for Spring 2022. Cal State LA is requesting that students provide proof of vaccination through the COVID-19 Self-Certification process in your MyCalStateLA portal.

Facecoverings: Facecoverings are required at Cal State LA while indoors.

Symptoms of COVID-19 include fever, cough, and shortness of breath. If you become ill, please:

- Stay home and avoid contact with others, except for seeking medical care if needed.

Students may seek medical care from the Student Health Center (SHC). Please call first at (323) 343-3300 before visiting the SHC. The SHC is following the guidelines of Public Health in assessing and caring for patients presenting with symptoms. For other information and hours of operation, please visit the [Student Health Center webpage](#)

COURSE PACING GUIDE/SCHEDULE OF ASSIGNMENTS

Schedule

Week	Topic	Readings, Assignments, Deadlines:
1 01/23- 01/27	Introduction Evolution of Populations	Lecture <ul style="list-style-type: none"> • Register for McGraw Hill Connect • Pre-Lecture Connect Readings: SB Chs 1, 20 • Post-Lecture Connect Homework: Ch 20 • Discussion Post #1: Meet & Greet Recitation/Laboratory <ul style="list-style-type: none"> • Introduction, Enrollment, Expectations
2 01/30- 02/03	Evidence for Evolution Species and Speciation	Lecture <ul style="list-style-type: none"> • Pre-Lecture Connect Readings: SB Chs 21, 22 • Post-Lecture Connect Homework: Chs 21, 22 • Discussion Post #2: New species Recitation/Laboratory <ul style="list-style-type: none"> • Lab 1: Microscopy and Life in Pond Water
3 02/06- 02/10	Phylogenies	Lecture <ul style="list-style-type: none"> • Pre-Lecture Connect Readings: SB Ch 23 • Post-Lecture Connect Homework: Ch 23 • Discussion Post #3 Recitation: Intro to Graphing Laboratory: <ul style="list-style-type: none"> • Variation Lab
4 02/13- 02/17	Population Growth and Regulation Community Ecology	Lecture <ul style="list-style-type: none"> • Pre-Lecture Connect Readings: SB Chs 54, 55 • Post-Lecture Connect Homework: Chs 54, 55 • Discussion Post #4 Recitation: Lab Safety/Unicorn Phylogeny Laboratory <ul style="list-style-type: none"> • Phylogenetics Activity
5 02/20- 02/24	Exam Origin of Life	Lecture <ul style="list-style-type: none"> • Pre-Lecture Connect Readings: SB Ch 25 • Post-Lecture Connect Homework: Ch 25 • Discussion Post #5 Recitation: Spider Bite Case Study Laboratory <ul style="list-style-type: none"> • Lab 2: Bacteria Around Us (Part I)

6 02/27- 03/03	Bacteria & Archaea	Lecture <ul style="list-style-type: none"> • Pre-Lecture Connect Readings: SB Ch 27 • Post-Lecture Connect Homework: Ch 27 • Discussion Post #6 Recitation: Lab Report Review Laboratory <ul style="list-style-type: none"> • Lab 2: Bacteria Around Us (Part II)
7 03/06- 03/10	Origin of Eukaryotes/Protists I & II	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 28 • Post-Lecture Connect Homework: Ch 28 • Discussion Post #7 Recitation: Literature Search Laboratory <ul style="list-style-type: none"> • Labs 3 & 4: Algal and Animal like protists
8 03/13- 03/17	Bryophytes and Seedless Vascular Plants I&II	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 29 • Post-Lecture Connect Homework: Ch 29 • Discussion Post #8 Recitation: Mutualism Laboratory <ul style="list-style-type: none"> • Lab 5: Bryophytes and Seedless Vascular Plants
9 03/20- 03/24	Rise of the Seed Plants; Gymnosperms and Angiosperms	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 30 • Post-Lecture Connect Homework: Ch 30 – Angiosperms, Ch 30 – Gymnosperms • Discussion Post #9 Recitation: Food Garden, Campus Walk Laboratory <ul style="list-style-type: none"> • Lab 6: Gymnosperms and Angiosperms
10 03/27- 03/31	Spring Break	No lecture, recitation or labs
11 04/03- 04/07	Fungi Animal Diversity	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 31, 32 • Post-Lecture Connect Homework: Ch 31, 32 • Discussion Post #10 Recitation: <ul style="list-style-type: none"> • Hypothesis Development Laboratory <ul style="list-style-type: none"> • Stomata Lab
12 04/10- 04/14	Exam Sponges and Cnidarians	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB 33-I • Post-Lecture Connect Homework: Ch 33 • Discussion Post #11 Recitation <ul style="list-style-type: none"> • Stomata Data Analysis/Graphing Laboratory <ul style="list-style-type: none"> • Lab 7: Fungal Diversity

13 04/17- 04/21	Intro to Bilateria, Flatworms Lophotrochozoa: molluscs + annelids	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 33-II • Post-Lecture Connect Homework: Ch 33 – Spiralia • Discussion Post #12 Recitation <ul style="list-style-type: none"> • Dissection 1 Laboratory <ul style="list-style-type: none"> • Labs 8 & 9: Porifera, Cnidaria, Platyhelminthes
14 04/24- 04/28	Ecdysozoa: arthropods + nematodes Intro to Deuterostomes	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 33-III, IV • Post-Lecture Connect Homework: Ch 33 – Ecdysozoa • Discussion Post #13 Recitation <ul style="list-style-type: none"> • Dissection 2 Laboratory <ul style="list-style-type: none"> • Labs 10 & 11: Annelida, Mollusca, Arthropoda
15 05/01- 05/05	Echinoderms + Chordates Vertebrate Radiation	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB Ch 34-I-III • Post-Lecture Connect Homework: Ch 34 • Discussion Post #14 Recitation: Dissection 3 Laboratory <ul style="list-style-type: none"> • Labs 12&13: Echinodermata, Vertebrates I
16 05/08- 05/12	Vertebrate Radiation II Biodiversity and Conservation	Lecture <ul style="list-style-type: none"> • Pre-Lecture Readings: Connect SB 58 • Post-Lecture Connect Homework: Ch 58 • Discussion Post #15 Recitation: Jeopardy Laboratory <ul style="list-style-type: none"> • Labs 14 & 15: Vertebrates II & III
Finals 5/15 - 5/19	Final Exam Monday May 15	Final Exam Online – Date preliminary until confirmed by university in October.

Calendar of Recitation/Laboratory Assignments & Dates

See lab syllabus for details of assignments and lab/recitation policies.

Spring 2023 BIOL 1200 Recitation/Lab Schedule

WEEK	DATE	RECITATION	LAB	Chapter	Notes
1	Jan 23 – Jan 27	Lab Safety, Enrollment and Expectations	No Lab		
2	Jan 30 – Feb 3		Microscopy and Life in Pond Water	1	
3	Feb 6 – Feb 10	Intro to Graphing	Variation Lab	*	Variation Worksheet
4	Feb 13 – Feb 17	Unicorn Phylogeny	Phylogenetics Activity	**	Phylogenetics Worksheet
5	Feb 20 – Feb 24	Spider Bite Case Study	Bacteria Around Us I	2	
6	Feb 27 – Mar 3	Lab Report Review	Bacteria Around Us II		Bacteria Worksheet
7	Mar 6 – Mar 10	Literature Search	Algal and Animal like Protists	3,4	
8	Mar 13 – Mar 17	Mutualism	Bryophytes and Seedless Vascular Plants	5	
9	Mar 20 – Mar 24	Food Garden Campus Walk	Gymnosperms & Angiosperms	6	Bacteria Lab Report Draft Due Week of March 20
10	Mar 27 – Mar 31		Spring Break – No Lab		
11	Apr 3 – Apr 7	Hypothesis Development	Stomata Lab	***	Bacteria Lab Report Due Week of April 3
12	Apr 10 – Apr 14	Stomata Data Analysis/Graphing	Fungal Diversity	7	
13	Apr 17 – Apr 21	Dissection 1	Porifera, Cnidaria, Platyhelminthes	8,9	
14	Apr 24 – Apr 28	Dissection 2	Annelida, Mollusca, Arthropoda	10, 11	
15	May 1 – May 5	Dissection 3	Echinodermata, Vertebrates I	12,13	Comparative Anatomy Worksheet
16	May 8 – May 12	Jeopardy	Vertebrates II & III	14,15	