

SPECIAL LABORATORY I (BISC 108L) SYLLABUS

Lab Manager: TBA ZHS 362 Tel/Fax: 213-740-6078
 E-mail: Office hours:

Laboratory Schedule (the same as BISC 120 lab schedule):

<u>Lab #</u>	<u>The week of</u>	<u>Laboratory</u>
	Aug 23 rd	NO LAB THIS WEEK
1	Aug 30 th	Introduction to BISC 120 Labs & Assignments/ Laboratory Safety
2	Sep 6 th	The Microscope
3	Sep 13 th	Scientific Investigation I (Beans & Beetles)
4	Sep 20 th	Scientific Investigation II* / Scientific Writing*
5	Sep 27 th	Evolution* (Peer Review due)
6	Oct 4 th	Animal Behavior
	Oct 11 th	NO LAB THIS WEEK – FALL RECESS on the 14 th & 15 th
7	Oct 18 th	Bacteria I*
8	Oct 25 th	Bacteria II*
9	Nov 1 st	Plants
10	Nov 8 th	Ecology (Lab Report due)
	Nov 15 th	LAB EXAM
	Nov 22 nd	NO LAB THIS WEEK – THANKSGIVING
	Nov 29 th	Biodiversity Conservation Presentations

* Exercise for which 5-7 pages, type-written lab report is required.

* Exercise for which there is a homework, pre-lab or a post-lab assignment.

The Lab Manager reserves the right to make some changes to the lab syllabus during the semester. Some adjustments might be necessary due to everchanging COVID-19 conditions.

IMPORTANT: COVID-19 PROTOCOLS

Students must remain compliant with any and all COVID-19 safety protocols outlined by federal, state, local, and university policies. Keep in mind that these policies will evolve with the changing conditions of the COVID-19 pandemic and may include social distancing, the use of face coverings at all times, and regular COVID testing, among others.

Learning Objectives:

At the end of the course, students will:

- know key concepts of the scientific method
- know the mechanisms of heredity
- know the theory of evolution
- understand how evolution explains the diversity of life on Earth
- know the defining characteristics of the domains Bacteria and Eukarya
- understand how the environment and organisms contribute to the evolution of ecological relationships
- understand how the environment continues to change and how this affects the evolution of life on Earth
- be able to design and conduct scientific investigations
- be able to think critically about how experimental evidence answers a scientific question
- be able to perform biological laboratory techniques

REQUIRED READING

A PDF of the [Fall 2021 BISC 120 Laboratory Manual](#) will be [posted on Blackboard](#). Chapter printouts must be brought to lab each week.

LABORATORY POINT DISTRIBUTION

The laboratory portion ([328 points](#)) will count for [~33%](#) of your final course grade, distributed as follows:

Lab Quizzes (10 – 4 points each)	40 pts
Homework (2 – 10 points each)	20 pts
Scientific Reading	12 pts
Lab Report	40 pts
Lab Report Peer Review	20 pts
Lab Exam	146 pts
Biodiversity Conservation Presentation	30 pts
Lab Participation (2 points per lab)	20 pts

LABORATORY PERFORMANCE GUIDELINES

You are required to attend all lab sessions. Any unexcused absences will seriously affect your evaluation and lab participation points. Come to lab on time. You are also to remain for the entire lab session or until excused by your instructor. DO NOT make any other appointments for the time you are scheduled to be in lab.

You are required to wear closed toe shoes, long pants and a knee-length lab coat. Before you begin the lab exercise, make sure that you remove all unnecessary materials from your work area. At the end of the lab session, clean and return all supplies to their proper place, clean your work area, and slide your chair under the table. Check with your instructor before leaving.

NO EATING OR DRINKING IS ALLOWED IN THE LABORATORY UNDER ANY CIRCUMSTANCES.

PRE-LAB QUIZZES

Each student will take a Blackboard pre-lab quiz prior to coming to lab each week. Quizzes will consist of multiple choice questions. Questions will test your knowledge of the material you will be covering that week in lab.

LAB MANUAL

During each lab students need to record their results (drawings, observations, calculations) in their lab manual. Tables need to be filled and all post-lab questions answered. Each student is required to show their TA the lab manual and obtain their signature before leaving the lab.

HOMEWORK ASSIGNMENTS

During the semester you will have two homework assignments, based on your lab experiments. Assignments are explained in the lab manual and more information can be found on Bb.

PRE-LAB ASSIGNMENT – SCIENTIFIC READING

You will have to read a peer-reviewed scientific paper and answer questions on Bb before you come to lab. You are expected to participate in a lab discussion of the paper with your lab instructor and your labmates.

SAMPLE LAB REPORT PEER REVIEW

Each student will review one of the sample lab reports. Instructions will be posted on Blackboard once the semester starts.

LAB REPORT

One lab report will be written during the semester. Lab report must be posted on Blackboard (*Lab Reports* [turnitin](#) link) and a hard copy turned in at the beginning of the lab session. Lab report guidelines will be posted on Bb (<https://blackboard.usc.edu/>) in the beginning of the semester.

LAB EXAM

The cumulative lab exam will test your understanding of the topics, concepts and exercises covered during the semester.

Missed Lab Exam: *It is your responsibility to be present on the day of the lab exam.*

If you miss a lab exam due to a serious illness, you must present a valid excuse to the Lab Manager **within 24 hours** of the missed exam. A valid excuse is considered to be an official note from your doctor, or the summary of your visit. Note that neither you, nor your doctor, need to tell us the nature of your illness – we just want to verify whether you were too ill to take the exam. If you miss an exam for non-illness related reasons, you must provide similarly convincing documentation of the emergency to the Lab Manager. If we judge your excuse to be valid, you will be allowed to take lab exam in another lab section. If you do not have a valid excuse or fail to provide it within the allotted time, you will receive zero points for the missed lab exam.

MISSED LABS

If you miss a scheduled lab exercise **due to illness or emergency**, please contact the Lab Manager to see whether it will be possible to make up the exercise by attending an alternative lab section. For logistical reasons, it will not be possible to make up a missed lab exercise after Friday afternoon of the week in question. Therefore, students with labs scheduled on Fridays will have little or no alternative should they miss lab unexpectedly. Only a few requests for alternative labs can be accommodated, because few sections have available space. Therefore, it is very important for you to attend your scheduled lab section.

Students who wish to miss a lab for observance of a religious holy day should be aware of the University's policy on such absences, published at: <http://orl.usc.edu/life/calendar/absences/>. Requests for such absences should be made by email addressed to the Lab Manager (bezmalin@usc.edu) at least 2 weeks in advance of the absence. If the absence is approved, the instructors will determine a reasonable accommodation for the student.

Student-athletes who must miss occasional labs for legitimate reasons should bring the SAAS excuse letter to the Lab Manager at least 2 weeks in advance so alternatives can be arranged.

Please note that no lab make-ups will be allowed during the week prior to a holiday, and for school-unrelated activities.

BIODIVERSITY CONSERVATION PRESENTATION

Detailed instructions for preparing your presentation, including how points will be assigned, will be provided on Blackboard (<https://blackboard.usc.edu/>).

LAB SCORES

You can find scores for all of your lab assignments on Blackboard: <https://blackboard.usc.edu>. Your lab scores will be posted under your LAB SECTION. Be sure to check for additional postings on a regular basis. It is the student's responsibility to immediately notify his/her Lab Instructor or Lab Manager in the event of any mistakes, so please check your Blackboard scores weekly.

LAB SCORE NORMALIZATION

The lab scores will be normalized at the end of the semester by the Lab Manager to correct for differences in grading between Lab Instructors/TAs.

STUDENTS WITH DISABILITIES

Students requesting academic accommodations based on a disability are required to register with the Office of Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from the DSP website. Please be sure to email the accommodations letter (PDF) to the Laboratory Manager as early in the semester as possible, preferably by Sep 10, 2021. DSP is located in GFS 120 and is open from 8:30 a.m. to 5:00 p.m., Monday through Friday. Their telephone number is 213-740-0776. If a student's approved accommodation is limited to extra time on exams, the teaching staff of BISC 120 will provide the accommodation. For any other accommodation, such as a private room, reader or a scribe, students must make prior arrangements with the DSP office 2 weeks before the exam date. For more information please visit the following website: http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html.