

California Natural History

IB 11 (Cali Nat Hist)

Fall 2022

Three (3) semester credits

Course Description

An introduction to the biomes, plants, and animals of California. The lectures explore natural history as the foundation of the sciences, including geology, paleontology, environmental history, botany, zoology, ecology, and conservation. The field labs include activities on campus and in protected areas near Berkeley. The course is open to all students without prerequisite and provides a foundation for advanced study in the life sciences and field biology.

Class Meetings

Class will meet in 212 Wheeler Hall from 11AM – 12 PM on Tuesday and Thursday each week. The lecture schedule with a list of topics will be posted to bCourses and Top Hat and is available by request.

Prerequisites and Requirements

The course satisfies a breadth requirement in Biological Science at UC Berkeley. There are no prerequisites for IB 11.

Course Objectives

After successful completion of the course, you will understand the geological and historical context of the California biota, with an appreciation for how it assembled and evolved. Practically, you will have the skill to identify the common organisms in your local area, and you will learn to make accurate accounts of morphology, life history, and animal behavior. The course may stand alone as an introduction to biology, or it may serve as a gateway to advanced work in evolutionary biology, ecology, and policy. We will work together to facilitate your independent approach to the study of nature. You will have the opportunity to immerse yourself in the study of local organisms and ecosystems, within the broad context of human history and deep time.

By the end of the semester, you will have the ability to:

- Understand the relationship between history, climate, and species diversity in California
- Identify the common organisms in your local community with colloquial and scientific names
- Produce field observations of organismal behavior and ecosystem processes
- Create natural history observations with georeferenced photos and videos
- Interpret biological research through research articles and online journalism
- Enjoy museum collections, urban ecosystems, and wildlands as sources of study and inspiration

Instructor Contact Information

Professor

Alan Shabel, Ph.D. | shabel@berkeley.edu

Department of Integrative Biology, UC Berkeley

Graduate Student Instructors (GSIs)

Anna Scharnagl | anna_scharnagl@berkeley.edu

Grey Arena | gregory.c.arena@berkeley.edu

Other support

We will have the support of one or more readers in the course who will assist with grading of assignments.

Email

You are welcome to write to the instructors at any time—and you can expect a timely response—but please be respectful of your instructor’s availability, particularly on weekends and holidays. Please compose message with care, using the style of letter writing rather than the shorthand of text messaging. Our communications are most efficient when they are brief and clear, but try to be descriptive and thoughtful, too! You have the full support of your instructors, let us know how you are doing and what you need. We want to help you solve problems.

Course Materials

There is no required textbook for this course, but there will be reading material assigned, including news stories and popular articles, as well as links to online audio and video files. You will have some flexibility in your choice of readings and activities, and you may pursue your personal interests within the very broad field of natural history. If you are into birds, you will need a pair of binoculars, and we can provide advice on your options. If you are interested in plants and insects, a magnifying glass or jeweler's loupe is invaluable. You can use a field notebook and/or smartphone for your handwritten notes and observations when outdoors. If you plan to spend time outdoors in the Bay Area, you will need appropriate walking shoes, jacket, and sun/rain protection.

Lecture content and videos from the field will be available through Top Hat (tophat.com). You will receive an email invitation to the course with a link to the course. Top Hat is \$30 for the semester, and we will use it a lot. If you are experiencing significant financial hardship, please request a free token from Dr. Shabel, and he will request one on your behalf. Download the app and navigate the course from within the app, and also visit the course through a web browser. We will post assignments on Top Hat, and it is your responsibility to track the due dates.

Discussion Section and Field Labs

Each of you has been assigned to a discussion section. These Friday sessions will be used for remote and in-person "office hours" and attendance is not required. There will also be three field labs during the semester, and these will be asynchronous and completed according to your own schedule.

Grading Summary

In order to receive a top grade in the course, you will need to (1) attend the lectures and participate in our collaborative learning process, (2) complete the online assignments associated with the readings and linked/embedded videos, (3) participate in the field activities and submit notes of good quality, and (4) perform well on the midterm activity and final course project.

In general, we strive to reduce the pressure and stress of grades in this course to create an experience that is fun, memorable, and growth-oriented. You will be allowed to “choose your own adventure” in this course in order to focus on your primary interests, and we welcome your creative approach to the course content.

General Course Policies

Promptness

All of the assignments have specific due dates, and you will be given plenty of time to complete them. You will not receive full credit on assignments submitted after the due date, and “technical difficulties” will not be a valid excuse for late submissions, although you are encouraged to let us know of any unique challenges that you encounter.

Honor Code

UC Berkeley students abide by this Honor Code: “As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others.” Naturally, we expect you to uphold the UCB honor code as a member of this course. Natural history as a field is marked by the honest and accurate study of natural phenomena, and the practice of natural history has a tacit honor code. In natural history, “respect for others” includes non-human creatures. In the field, you are expected to treat the environment as a good steward, especially in parklands and other protected areas.

Collaboration and Independence

It is possible to work in this course collaboratively and working with others is recommended when outdoors. However, we need to adhere to all local measures with respect to social distancing and masking. All

graded assignments are to be completed independently, and the materials that you submit must be the result of your own independent work. To copy text or ideas from another source without citation is plagiarism, and any form of cheating or plagiarism will result in a failing grade for the assignment, as well as further disciplinary action. For information on plagiarism and how to avoid it, go to the [UC Berkeley Library Citation Page, Plagiarism Section](#) and the [GSI Guide for Preventing Plagiarism](#).

Incomplete Course Grade

Students who have completed a substantial portion of the course but who are unable to complete the final project or final exam may request an Incomplete. The request for an Incomplete must be submitted to the primary instructor. Please provide verifiable documentation (medical, legal) for the seriousness of your circumstances. According to university policy, Incomplete grades for Fall classes must be made up by the start of the following Fall semester.

Students with Disabilities

If you require course accommodations due to a physical, emotional, or learning disability, please first contact [UC Berkeley's DSP Program](#). Once your accommodations are established with the DSP Program, please notify an instructor of the accommodations that you have received, and we will make a good plan with you.