

# BIOL-006C: Ecology & Evolution



Spring 2025

BIOLOGY-006C.05Y: CRN 49174	In-person Labs/Field/Exams/Presentations <b>Mon &amp; Wed 10:30–1:20</b>	SC-2108
BIOLOGY-006C.06Y: CRN 48859	In-person Labs/Field/Exams/Presentations <b>Mon &amp; Wed 1:30–4:20</b>	SC-2108
	Asynchronous Lectures: <b>2 hrs; twice/week</b>	On Canvas
Instructor: <b>Bruce Heyer</b>	Email: heyerbruce @ deanza.edu Online Office Hours: Tue & Thu 12:30–2:20 pm via Zoom	
BIOL 6C class homepage: <a href="http://www.deanza.edu/faculty/heyerbruce/bio6c.html">http://www.deanza.edu/faculty/heyerbruce/bio6c.html</a>		
BIOL 6C course syllabus: <a href="https://www.deanza.edu/faculty/heyerbruce/bio6csyllabus25Sp.html">https://www.deanza.edu/faculty/heyerbruce/bio6csyllabus25Sp.html</a>		

## Schedule:

Week	Date	Day	Synchronous Lab & Field topic	Asynchronous Lecture topic	Text
1	Apr 07	Mon	Ex. 1A & 1B: Scientific Investigation ◇ EcoBeaker®: <b>Experimental Design</b>	Introduction to ecology	Ch. 52
	Apr 09	Wed	Ex. 1C: Statistical Analysis, part A. Cheeseman Environmental Studies Area (ESA)	Biogeography	“
2	Apr 14	Mon	Ex. 2A & 2B: Vegetation transects / class data ◇ EcoBeaker®: <b>Patchy Prairies</b> (+ workbook)	<b>Guest Cast: Climate Zones &amp; Terrestrial Biomes</b>	“
	Apr 16	Wed	Ex. 1C: Statistical Analysis, part B Project pitches	Population dynamics & Life history strategies	Ch. 53
3	Apr 21	Mon	Ex. 2A+B Report due. Ex. 1C: Statistical Analysis, part C ◇ EcoBeaker®: <b>Population Growth Models</b>	Community ecology	Ch. 54
	Apr 23	Wed	Ex. 3A pre-lab Ex. 3B & 3C: Population size & dispersal.	Biodiversity dynamics	“
4	Apr 28	Mon	Ex. 3B & 3C report due. Ex. 1C: Statistical Analysis, part D ◇ EcoBeaker®: <b>Top-Down Control</b>	<b>Guest Cast: Niche Partitioning and Biodiversity</b>	“
	Apr 30	Wed	<b>EXAM 1</b> Project pitches due / Project groups assemble. <b>Preview: Stevens Creek ecology</b>	Local ecology: creeks, rivers, & watersheds	

5	May 05	Mon	Ex. 1C. pt. D report due <b>Field Day: Stevens Creek Watershed – Site 1</b> ◊ <b>EcoBeaker®: Limiting Nutrients</b> (+ workbook)	Ecosystems — energy & water	Ch. 55
	May 07	Wed	<b>Field Day: Stevens Creek Watershed – Site 2</b>	Ecosystem resource cycles	“
6	May 12	Mon	<b>Field Day: DeAnza campus birds</b> ◊ <b>EcoBeaker®: Keystone Predator</b>	CA ecological provinces	<i>Atlas of the Biodiversity of California</i>
	May 14	Wed	Ex. 6A: Report due Project proposal draft due / materials & logistics Ex. 5A, 5B & 5C: Behavioral ecology	Pollution and Ecotoxicology	
7	May 19	Mon	<b>Field Day: SF Bay Refuge / Baylands</b> ◊ <b>EcoBeaker®: Nutrient Pollution</b>	Conservation & restoration	Ch. 56
	May 21	Wed	Ex. 4C: Bird data – habitats 1 & 2 Ex. 5B: Behavioral ecology, pt.2	<b>Guest Cast: Apex Predators &amp; Keystone Species</b>	“
8	May 26	Mon	<b>HOLIDAY</b> ◊ <b>EcoBeaker®: Isle Royale</b>	<b>Case Study: Wolves and Moose</b>	
	May 28	Wed	<b>EXAM 2</b>   Ex. 4C: Bird diversity – habitats 1 & 2	Behavioral biology	Ch. 51
9	Jun 02	Mon	Ex. 5 Report due. Ex. 5C: Behavioral ecology, pt.3 <b>EvoBeaker®: Sickle-Cell Alleles</b>	Origins & paradigms	Ch. 22
	Jun 04	Wed	<b>Field Day: Monterey Bay Aquarium</b>	Mechanisms of evolution	Ch. 23
10	Jun 09	Mon	Ex. 4C Report due. <b>TBA</b> ◊ <b>EvoBeaker®: Genetic Drift</b>	Reproductive ecology & sexual selection	“
	Jun 11	Wed	Work on projects.	<b>Case Studies: Microevolution examples &amp; mechanisms</b>	“
11	Jun 16	Mon	Work on projects. ◊ <b>EvoBeaker®: How the Guppy Got Its Spots</b> (+ workbook)	Speciation & diversity	Ch. 24
	Jun 18	Wed	<b>Final research reports/ class presentations</b>	<b>Guest Cast: Connecting genes to ecosystems</b>	
12	Jun 23	Mon Sec 06Y	<b>EXAM 3</b> (1:45–3:45)		
	Jun 25	Wed Sec 05Y	<b>EXAM 3</b> (9:15–11:15)		