

# BIOL-006C: Ecology & Evolution



Summer 2024

Week	Date	Day	Lab topic	Asynchronous Lecture topic	Text
1	Jul 01	Mon	Ex. 1A, 1B & 1C-part A: Scientific Investigation	Introduction to ecology	Ch. 52
		Asynchronous Lab	◇ EcoBeaker®: <b>Experimental Design</b>	Biogeography	“
	Jul 03	Wed	Ex. 2A & 2B: Vegetation transects Ex. 1C: Statistical Analysis, part B	<b>Guest Lectures:</b> Terrestrial Climate Biomes	“
		Asynchronous Lab	◇ EcoBeaker®: <b>Patchy Prairies</b> (+ workbook) / <b>Project pitches</b>	Population dynamics & Life history strategies	Ch. 53
2	Jul 08	Mon	Ex. 3A, 3B & 3C: Population size & dispersal Ex. 1C: Statistical Analysis, part C	Community ecology	Ch. 54
		Asynchronous Lab	◇ EcoBeaker®: <b>Population Growth Models</b>	Biodiversity dynamics	“
	Jul 10	Wed	<b>EXAM 1</b> Ex. 1C: Statistical Analysis, part D; <b>Project groups</b>	<b>Guest Lectures:</b> Niche Partitioning	“
		Asynchronous Lab	◇ EcoBeaker®: <b>Isle Royale</b>	<b>Case Study:</b> Wolves and Moose	
3	Jul 15	Mon	De Anza campus birds; Ex. 4A & 4B: Bird diversity	<b>Guest Lectures:</b> Apex & Keystone Species	
		Asynchronous Lab	◇ EcoBeaker®: <b>Keystone Predator</b>	Ecosystems — energy & water	Ch. 55
	Jul 17	Wed	<b>Field Day: SF Bay Refuge / Baylands</b>	Ecosystem resource cycles	“
		Asynchronous Lab	◇ EcoBeaker®: <b>Top-Down Control</b>	CA ecological provinces	<i>Biodiversity of California</i>
4	Jul 22	Mon	Ex. 4B: Bird diversity – habitats 1 & 2	Pollution and ecotoxicology	Ch. 56
		Asynchronous Lab	◇ EcoBeaker®: <b>Intermediate Disturbance Hypothesis</b>	Conservation & restoration	“
	Jul 24	Wed	<b>EXAM 2</b> Ex. 5A & 5B: Behavioral ecology	Behavioral biology	Ch. 51
		Asynchronous Lab	◇ EcoBeaker®: <b>Limiting Nutrients</b> (+ workbook)	Watershed & stream ecology	
5	Jul 29	Mon	Ex. 5B & 5C: Behavioral ecology	Origins & paradigms	Ch. 22
		Asynchronous Lab	◇ EvoBeaker®: <b>Sickle-Cell Alleles</b>	Mechanisms of evolution	Ch. 23
	Jul 31	Wed	<b>Field Day: Stevens Creek Watershed</b>	<b>Case Studies:</b> Microevolution mechanisms	“
		Asynchronous Lab	◇ EvoBeaker®: <b>Genetic Drift</b>	Reproductive ecology & sexual selection	“
6	Au 05	Mon	<b>Final research reports / class presentations</b>	Speciation & diversity	Ch. 24
		Asynchronous Lab	◇ EvoBeaker®: <b>How the Guppy Got Its Spots</b> (+ workbook)	<b>Guest Lecture:</b> Connecting Genes to Ecosystems	
	Au 07	Wed	<b>EXAM 3</b>		
		Asynchronous Lab	◇ EvoBeaker®: <b>Darwinian Snails</b>		