Course Title (Code)	LAI103 Introduction to Natural Life/Science	Instructor(s)	Jason Adachi, Melody Muguerza
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Class Style	Lecture	Office Hours	
Track	General Education	Mode of Instruction	Team teaching
Credits	2	Allocated Year	Fall 2024
Active Learning	Interactive Spoken summaries Pair and group work Experimental work Field study work Presentations	Compulsory or Elective	Elective
Course Overview	Introduces concepts, experimental techniques, and scientific methodologies for exploring a natural life system. Examines aspects of the theory of evolution, morphology and physiology of the organisms com- posing the natural life systems, i.e., Monera, Protista, Animalia, Plantae and Fungi.		
Course Objectives	Content Objectives: • Be familiar with the basic principles of evolutionary ecology (e.g. adaptation, natural selection, sexual selection, and biological interactions), • Be familiar with similarity and diversity as the two faces of evolution, • Be familiar with diversified organisms around us. Language Objectives: • Know the vocabulary, and sentence structures necessary to discuss topics related to natural science, • Know how academic science papers and reports are organized in English, • Learn how to write a scientific report in English.		
Prerequisite			

Course Schedule

No	Contents	Homework
1	What are the characteristics of living things and how do you determine if a thing is alive? (Asking yes/no and WH questions.)	Read the text and answer comprehension questions.
2	What is the scientific method? What is spontaneous generation?	Read the text and answer comprehension questions.
3	What do we know about the first life (the first thing displaying these characteristics)? How might it have formed?	Read the text and answer comprehension questions. Field Assignment #1 Experiment #1
4	Why are there differences among living things? How are prokaryotic and eukaryotic cells different? How are unicellular and multicellular organisms different?	Read text and answer comprehension questions.
5	How are anaerobic/aerobic, heterotroph/autotroph and asexual/sexual different?	Read text and answer comprehension questions.
6	What are the advantages and disadvantages of these contrasting features?	Read text and answer comprehension questions. Experiment #1 Report due
7	Why do organisms change over time? What are evolution and adaptation?	Prepare for the midterm review and exam
8	Midterm Review Midterm Exam	Read text and answer and comprehension questions.

	9	How are features passed from parent to offspring? What are the principles of basic genetics?	Read text and answer comprehension questions. Field assignment #2
	10	What is Darwinian natural selection?	Read text and answer comprehension questions.
	11	What is sexual selection?	Read text and answer comprehension questions.
	12	Phylogeny and more on adaptation	Read text and answer comprehension questions.
	13	Predator-prey relationships	Reading text and answering questions Field assignment #3
	14	Plant-animal interactions – pollination and seed dispersal	Read text and answer comprehension questions.
	15	Conservation biology, ecological succession, and course review	Preparation of Final Exam Experiment #2 report due
Grading	Grades will be determined as follows: Homework 20%, Written reports 10%, Quizzes 20%, Exams 40%, Participation 10%.		
Textbooks	Course materials will be provided by instructors		
References			
NOTES	Missing the equivalent of 5 classes will result in an automatic failure. This includes late arrivals and early departures from class. Note that absence or tardiness will generally not be accepted as a valid excuse for incompletion or late submission of any task or assignment. Appropriate and timely communication by students to the instructors is ex- pected.		