

Conservation Biology Theory PCB 6042

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Class website: <http://sciences.ucf.edu/biology/d4lab/conservation-biology/> - here you will find all the materials necessary for classes and exercises.

Spring 2023

Course description:

This course provides a space to identify and debate current conceptual backgrounds and narratives in Conservation Biology. It aims to review and evaluate information and promote critical thinking.

Prerequisites:

No prerequisites

This class will provide basic information and practical advice on how to ask pertinent questions and evaluate and interpret ecological and evolutive data.

Estimated enrollment: **10-16**

Conservation Biology Theory

Course Outline

This course constitutes a review of current issues in Conservation Biology. Individual sections cover aspects of application of ecological and evolutive information for biological conservation and debating social and political aspects of this practice.

Main goals for students in this course:

- **Identify important issues in conservation biology**
- **Recognize the implications of different interpretations of information**
- **Review and discuss research problems in conservation biology**
- **Recognize the advantages and limitations of different approaches to evaluate biological data**

Course Prerequisites: NA

Student duties:

Conduct: Students must follow the University standards for personal and academic conduct as outlined in the Golden Rule (<http://www.goldenrule.sdes.ucf.edu/>).

Readings:

Specialized literature will be used to review examples on specific topics.

Debates

The course is organized by weekly sessions. Each weekly session has two components: (1) presentation and planning, and (2) review and debate. Both are developed with guidance in class but is expected that the sessions will be led by the students. The instructor will suggest reading materials that will inform on each weekly topic. This material will be used to identify important concepts and ideas to be searched in the literature and debated during the second part of the weekly session. It is responsibility of the students to find reading materials as background and supporting material for the discussion portion.

Class schedule:

Session	TOPIC	Class dates for weekly sessions
0	Class presentation	January 10-12
1	Diversity	January 17-19
2	Species concept	January 24-26
3	Genetics vs Demography	January 31-February 2
4	Metapopulations and spatial dynamics	February 7-9
5	Conserving evolutionary processes	February 14-16
6	Hybridization & Introgression	February 21-23
7	Climate change and disturbances	February 28 March 2
8	Invasive species	March 7-9
	SPRING BREAK	March 13-17
9	The next communities	March 21-23
10	Ecosystem recovery	March 28-30
11	Transgene escape	April 4-7
12	Nature vs culture	April 11-13
13	Conservation practice	April 18-20
	End of our class	April 25

Performance Evaluation:

- 13 exercises. Grade is based on class participation during the weekly sessions. Only the best 10 are considered.
- Grade scale: A = 90-100; B = 80-89; C = 70-79; D = 60-69; F= below 60