

Syllabus for BCM 725

Evolution, Biodiversity, and Conservation

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Explore species concepts, biogeography, and phylogenetics as they relate to conservation. Evaluate the curation and use of biological collections in conservation research and education. Practice using taxonomic keys and exploring molecular techniques.

Prerequisite(s)

None.

Course Outcomes

Upon completing this course, you will be able to do the following:

- Demonstrate an understanding of the process of phylogenetic inference, including data collection, data curation, model selection, and quantification of uncertainty.
- Interpret phylogenetic trees in an evolutionary and biogeographic framework.
- Integrate taxonomic theory and practice (e.g., what species are; how they are named and described) and apply systematic data to conservation issues.
- Describe how biological collections are used for conservation research and education.
- Summarize important curatorial practices and considerations for biological collections.
- Develop and communicate a visual summary of a taxon-focused conservation issue.
- Explore emerging technologies and trends in conservation biology and diversity.
- Examine conservation genetics and how it relates to evolution, biodiversity, and conservation.

Course Requirements/Components

- Discussions
- Assignments
- Individual project

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	93% - 100%
AB	90% - 92%
B	83% - 89%
BC	80% - 82%
C	73% - 79%
CD	70% - 72%
D	60% - 69%
F	0 - 59%

Assignment	Points
Discussions	80
Assignments	30
Individual project	55
Total Points	165