

BIOL 3780 - General Ecology

Fall 2026 Syllabus, Section 01, CRN 41187,

Credit hours: 5

Instructor

Ian Renne

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Public Instructor Information

Instructor Title: Professor

Instructor Professional Qualifications: Ph.D., Zoology, Clemson University, 14 peer-reviewed publications

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Course Description

3780. General Ecology. Examination of ecological principles affecting species distributions, interactions and biodiversity; dynamics of populations, communities and ecosystems; life history evolution; origin, maintenance and loss of genetic variation; mechanisms of speciation and extinction; experimental design and analysis. Three hours lecture, four hours lab. Prereq.: BIOL 2602. 5 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Textbook (optional)		

Any good General Ecology textbook is recommended but not required (e.g.,

Stiling; Ricklefs and Relyea; Molles). Supplementary PDFs may be provided.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Proposed Topic	Due/To Prepare for Class
8/24	Introduction	No lab/campus walk (lab)
8/31	Darwin, population genetics	Field trip (1)
9/7	Natural selection	Field trip (1)
9/14	Speciation	Quiz (week 4 or 5, lecture) Field trip (1)
9/21	Extinction	Field trip (1)
9/28	Behavioral ecology	Field trip (1)
10/5	Biomes, ecophysiology (?)	Field trip (1)
10/12	Ecophysiology (?)	Field trip test (2, lab) Project discussion
10/19	Life-history strategies, population ecology	Exam 1 (4; lecture, week 8 or 9) Reading/video
10/26	Population ecology, dispersal	Reading/video
11/2	Competition, herbivory/predation, parasitism (Coevolution)	Reading/video
11/9	Community ecology	Reading/video

11/16	Functional traits, succession Ecosystem ecology	Misc. read or library time
11/23	Island biogeography	Thanksgiving
11/30	Seed ecology, conservation	Student presentations (3) Exam 2 (4; lecture)
12/7		Final exam (optional, see text)

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.