

BIOL 6961 - Forest Ecology

Fall 2026 Syllabus, Section 01, CRN 42503,

Credit hours: 2

Instructor

Thomas Diggins

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Public Instructor Information

Instructor Title: Professor

Instructor Professional Qualifications: Ph.D., Biology, SUNY at Buffalo, 1997. 29 peer-reviewed publications, including 10 in forest ecology.

Instructor Office Location: 4037 Ward Beecher Hall

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Course Description

6961. Forest Ecology. A study of the structure, function, and management/conservation of forest ecosystems, including the biology and taxonomy of woody plants. Major emphasis on eastern North America. Two hours lecture. Prereq.: 20 semester hours in BIOL or GES, or combination thereof, or permission of instructor. Coreq.: BIOL 6961L. Crosslisted: BIOL 4866. 2 s.h.

Course Readings

Group	Title	Author	ISBN
	No readings		

1) NO textbook (haven't found an ideal combination of material coverage and reasonable price).

2) Some primary literature articles will likely be distributed during the semester.

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	Intro/recap of plant biology	
8/31	Evolution of woody vegetation (conifers and angiosperms)	
9/7	Conifers – boreal biomes and ecotypes	
9/14	Conifers, especially pines – temperate ecotypes	
9/21	Eastern Deciduous Biome, northern hardwood ecotypes and species: maple, beech, etc.	
9/28	Eastern Deciduous Biome, central hardwood ecotypes and species: oak, hickory, etc. Mesophytic forests - high diversity and equity of species	
10/5	Riparian ecotypes and species, i.e. communities of riverfront trees (CRT): willow, poplar, bald cypress, etc.	Midterm exam
10/12	Woodlands, barrens, krumholtz (cool word eh?), etc.	Field practical #1 (rescheduled on inclement weather)
10/19	Forest structure and architecture	
10/26	Disturbance: fire, wind/gap, pathogens, invasives, herbivory, i.e. deer effects and impacts (DEI)	
11/2	Successional patterns and processes	
11/9	Riparian forest dynamics (case studies)	

11/16	Timber resources and wood products	
11/23	A brief introduction to silviculture and timber management	
11/30	Management, conservation, future perspectives	Field practical #2 (rescheduled on inclement weather)
12/7		Final Exam

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.