

Botany/ Zoology/Forest Ecology and Management 460: General Ecology Spring 2007

Professor **Thomas Givnish**. 315 Birge; 262-5718; givnish@wisc.edu – Plant ecology and evolution; biomechanics and physiological ecology; adaptive radiation, speciation, and molecular systematics, with special emphasis on Hawaiian and South American groups; landscape dynamics and spatially coupled feedbacks in the Florida Everglades.

Lab Coordinator **Susan Will-Wolf**. 317 Birge; 262-2754; swwolf@wisc.edu – Lichen ecology; community ecology; forest ecology and dynamics (emphasis on Wisconsin); quantitative analysis of community data; applied community ecology.

TA **Stephanie McFarlane**. 342 Birge; 890-1515; mcfarlane@wisc.edu – Plant evolutionary ecology, phylogenetics, community assembly, biogeography and conservation.

TA **Timothy Kuhman**. 429 Birge; 265-8001; kuhman@wisc.edu – Landscape ecology; invasive species ecology; effects of land use and land cover change

Text – Krebs, C. J. 2001. *Ecology: the experimental analysis of distribution and abundance*. 5th ed. Benjamin Cummings, NY.

Readings include a readings packet available from ASM Student Print (262-6216, B-114 Memorial Union).

Laboratory exercises are included in a lab manual, also available through ASM Student Print.

Lab Sections will meet once a week in Birge 101 for laboratory and discussion. Five field trips to nearby natural communities are planned. Labs will provide exposure to a variety of ecological patterns and processes, as well as techniques of measurement and analysis. Sections meet from 1:20 to 5:20 pm, on Monday (301/601), Tuesday (302/602), Wednesday (303/603), and Thursday (304/604). Normally 1 hour of the time period is discussion and 3 hours are lab. The last two labs we take bus trips away from the campus area. For these labs we are away the entire 4 hours and discussion is on the bus.

Exams: Midterm examinations (120 min) will be held at 7:15 pm on Tuesday, February 27, and on Tuesday, April 10. The **final examination** (120 min) will be held at 12:25 pm Thursday, May 17.

Writing assignments - There will be several lecture **homework assignments** – some ungraded for developing your skills, and others graded to evaluate your skills. Some assignments will involve calculating and drawing conclusions about population dynamics; two will involve short essays of roughly 4 double-spaced pages each.

You will have three written **lab writing assignments**. You may write the first 1-page lab summary on one of two labs: gradient analysis of Eagle Heights Woods, or resource use by bark-gleaning birds. You will write the second 1-page lab summary and the full lab report on the aquatic microcosms project. Guidelines for the **lab summaries** and **lab report** (ca. 4-6 pages, exclusive of figures, tables, and bibliography) are given in the lab manual. Strict late penalties will be assessed for the lab writing assignments (with the exception of documented family or medical emergencies).

The first lab summary is due before the beginning of class on Wednesday, March 7; the second is due before the beginning of class on Friday, March 23. The full microcosm lab report is due before the beginning of class on Friday, April 27. Summaries and reports will be downgraded 10% (absolute score) for every day late, and will not be accepted if more than 5 days late.

Grades will be based on the two midterms (20% each), the final exam (20%), lecture homework assignments (10%), two 1-page lab summaries (2.5% each), one full lab report (10%), attendance and participation in lab (5%), and discussion (lead one discussion 5%, participation 5%).

Course web pages: <http://botit.botany.wisc.edu/courses/460/GIVNISH/givnish.html>. Also see **Learn@UW** under Botany 460 for day-to-day postings for the course. Remember that Botany is the home department for this cross-listed course.