

Ecology 3500 - General Ecology**Credits:** 4.00

Physical and biological factors affecting distribution, abundance, and adaptations of organisms. Population, community, and ecosystem structure and function. Prereq: BIOL 411-412 or equivalent. MTH 424 highly recommended. Special fee. Lab.

Instructors:

Dr. Jeb Byers

Office: 194B Ecology

Phone: 583-0012

Office Hours: Tue. 10:45 AM – Noon

Or by appointment.

Dr. Alan Covich

Office: 139 Ecology

Phone: 542-6006

Office Hours: Tue. 2:00-3:00 PM

Wed. 9:00-11:00 AM

Or by appointment.

E-mail: jebbyers@uga.eduE-mail: alanc@uga.edu**Lectures:**

Ecology Auditorium

T R 9:30-10:45 AM

Laboratories:

BioScience 306

TAs:Bill McDowell (wgmcdowell@gmail.com)Amy Trice (amytrice@gmail.com)Carrie Futch (ventonj@charter.net)**Textbook:**

Krebs, C. J. 2008. *Ecology: The Experimental Analysis of Distribution and Abundance* (6th edition). Benjamin Cummings, Boston, MA.

(Also, handouts and occasional readings on reserve in the Biological Sciences Library).

Prerequisites:

[BIOL 1104 or BIOL 1108-1108L or (PBIO 1220 and PBIO 1220L)] and [(CHEM 1211 and CHEM 1211L) or (CHEM 1311H and CHEM 1311L)]. MATH 2250 highly recommended.

Your evaluation will be based on:

Four exams (150 points each)	600 points
Homework assignments (100 points):	100 points
Laboratory reports, field/lab notebook, participation:	300 points

Course total: 1000 points

Your attendance, alertness, participation, and enthusiasm are expected.

Punctuality is a MUST, especially for lab!

COURSE OBJECTIVES

1. Increase knowledge of relevant topical issues in the field of ecology.
2. Learn to implement hypothesis-oriented field experiments and observations.
3. Become acquainted with standard methods in ecology.
4. Enhance field and lab note-taking abilities.
5. Learn to analyze experimental data.
6. Develop skills in writing up experimental results in a scientific format.

Late Policy:

If you find that you have severe conflicts with turning an assignment in on time, contact Dr. Covich or Dr. Byers (for lecture assignments) or your TA (for lab assignments) to discuss the situation before the assignment is due. Otherwise, assignments must be turned in on time.

Academic Integrity

UGa students are bound by an academic honor code that details rights and responsibilities for students. You should be aware that this code provides serious sanctions for academic dishonesty (including, but not limited to, plagiarism and cheating). We expect that you will follow the honor code. If you have any questions about the honor code or about what constitutes plagiarism or cheating, please either check your UGa Student Handbook, also available on-line at <http://www.uga.edu/honesty/ahs/ahs.htm>, or speak with Dr. Covich or Dr. Byers.

Accommodations for Students with Disabilities

If you have an identified disability and will need accommodations, you should first contact The Disability Resource Center (DRC) (<http://drc.uga.edu/about/registerforservices.php>; 542-8719). They will discuss the UGa process and work with you to access supportive services. If you have a learning disability, the University will require you to provide supportive documentation and will develop an approved accommodation sheet for you. Accommodations cannot be provided until the accommodation sheet is established and we have met to discuss its applicability to this course. Accommodations cannot be provided retroactively. All conversations will be strictly confidential.

Lecture Schedule (subject to minor changes)

<u>Week</u>	<u>Topic</u>
1: Jan 7	Introduction; Distributions/Range Limitation
2: Jan 12	Distributions/Range Limitation
3: Jan 19	Experimentation, Population Growth
4: Jan 26	Population Growth and Regulation
5: Feb 2	Population Growth, Predator-Prey
6: Feb 9	Predator-Prey Interactions
First Exam: Feb 9	
7: Feb 16	Predator-Prey Interactions
8: Feb 23	Competition
9: Mar 3	Competition, Mutualism/Parasitism
Second Exam: Mar 5	
Mar 8-----Spring Break: No Class this week	
10: Mar 16	Communities: Introduction & Succession
11: Mar 23	Communities: Biodiversity
12: Mar 30	Community: Organization
13: Apr 6	Ecosystems: Primary Production
Third Exam: Apr 6	
14: Apr 13	Ecosystems: Secondary Production
15: Apr 20	Ecosystem: Nutrient Cycling/Human Impact
16: Apr 27	Conserving Earth's Biodiversity/Wrap-up
Fourth Exam: May 3-7, exact time TBA, Ecology Auditorium	