## 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. Lab.

## **Instructors:**

Dr. Jeb Byers
Office: 194B Ecology
Phone: 583-0012
Dr. Alan Covich
Office: 139 Ecology
Phone: 542-6006

Office Hours: Tue. 10:45 AM – Noon
Or by appointment.

Office Hours: Tue. 2:00-3:00 PM
Wed. 9:00-11:00 AM

Or by appointment.

E-mail: <u>jebyers@uga.edu</u> E-mail: alanc@uga.edu

#### Lectures:

Ecology Auditorium T R 9:30-10:45 AM

#### **Laboratories:**

BioScience 306

#### TAs:

Bill McDowell (wgmcdowell@gmail.com) Jenna Malek (malekjc1@uga.edu) Kristy Segal (kristys19@gmail.com) James Moree (moree.james@gmail.com)

## Textbook:

Krebs, C. J. 2008. *Ecology: The Experimental Analysis of Distribution and Abundance* (6<sup>th</sup> 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 (200 points each)

Homework assignments (100 points):

Laboratory reports, field/lab notebook, participation:

600\* points
100 points
300 points

\*Your lowest exam score among the four will be dropped. If you miss an exam you will be graded on the three you do take. There are no make-up exams.

Course total: 1000 points

Your attendance, alertness, participation, and enthusiasm are expected. Punctuality is a <u>MUST</u>, 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 <u>severe</u> 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 <u>before</u> 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 <a href="http://www.uga.edu/honesty/ahs/ahs.htm">http://www.uga.edu/honesty/ahs/ahs.htm</a>, 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) (<a href="http://drc.uga.edu/about/registerforservices.php">http://drc.uga.edu/about/registerforservices.php</a>; 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.

# <u>Lecture Schedule</u> (subject to changes that will be announced as necessary)

Week	Topic
1: Jan 10	Introduction; Distributions/Range Limitation
2: Jan 17	Experimentation, Population Growth
3: Jan 24	Population Growth and Regulation
4: Jan 31	Population Growth
5: Feb 7	Population Growth , Predator-Prey Interactions
First Exam: Feb 9	
6: Feb 14	Predator-Prey Interactions
7: Feb 21	Predator-Prey Interactions, Competition
8: Feb 28	Competition, Mutualism/Parasitism
9: Mar 6	Communities
Second Exam: Mar 6	
Mar 13Spring Break: No Class this week	
10: Mar 20	Communities: Introduction & Succession

10: Mar 20	Communities: Introduction & Succession
11: Mar 27	Communities: Biodiversity

12: Apr 3 Community: Organization

Third Exam: Apr 5

13: Apr 10 Ecosystems: Primary Production

14: Apr 17 Ecosystems: Secondary Production

15: Apr 24 Ecosystem: Nutrient Cycling/Human Impact

Fourth Exam: May 2-4, 7-8, exact time TBA, Ecology Auditorium