

Campbellsville University
Division of Natural Science
Course Syllabus
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I. COURSE TITLE: BIO 341, Ecology, 4 semester hours

II. COURSE DESCRIPTION: An examination of basic principles governing the structure and function of ecological systems, and the distribution and abundance of organisms. Prerequisite: BIO 201 or consent of instructor.

III. COURSE OBJECTIVES: Specifically this course will prepare students for scientific work in related fields of biology. Students will be provided with a working knowledge of the following so that they will gain an appreciation for and enhanced understanding of the science of ecology.

- a. Population growth
- b. Life history strategy
- c. Distribution and abundance
- d. Species interactions: competition, predation, parasitism, disease
- e. Water and temperature relations
- f. Community Structure
- g. Energy flow and nutrient cycling
- h. Succession and community stability
- i. Global ecology

IV. COURSE EXPECTATIONS:

A. Classroom behavior: Students are expected to behave with respect for the instructor and fellow classmates during instructional periods. Unacceptable behaviors include but are not limited to cell phone use, doing homework, talking during lecture, eating, snoring or anything else that prevents the student from devoting full attention to the subject matter or that diminishes the rights of others to do the same.

B. Attendance: Students are expected to attend all classes. Students frequently miss class, who are frequently tardy or who anticipate end of lecture by putting up books, etc. should expect their final grade to suffer. It is the responsibility of each individual student to make-up any missed lecture materials by securing those notes from others in the class. Campbellsville University has an established policy on attendance that will be followed in this class. This policy is published in the student handbook.

C. Missed examinations: Exams will be scheduled at least one week in advance. An effort will be made to not schedule exams on days when students will be absent due to a university sponsored activity such as an academic field trip. For absences arising from extenuating circumstance, the instructor may give a makeup test. No makeup exams will be given before the scheduled exam and makeup exams may differ in content from the original exam. Students

who arrive late to an exam will only be allowed to take the exam if they arrive before the other students have finished and will only be allotted the remaining class time to complete the exam. Calculators or other electronic devices will not be allowed during examinations unless deemed appropriate by the instructor.

D. Academic honesty: Students will be held to a strict code of honor. Cheating, copying, plagiarism, or any behavior that promotes these activities in the class will be considered academic dishonesty. An academically dishonest student will receive no credit for the work in question and may receive an "F" in the class. Additionally, the student will have his/her name provided to the Academic Dean for adjudication. Students will also be provided with a copy of the Natural Science Division Policy on Academic Integrity.

E. Preparation: Students will be assigned readings from the text or other sources and will be expected to come to class prepared to be an active participant.

V. COURSE REQUIREMENTS and EVALUATION:

- a. Students will complete reading assignments.
- b. Students will participate in class discussions.
- c. Students will complete 2-3 written reviews of ecological literature.
- c. Students will complete 3 one-hour examinations.
- d. Students will complete one comprehensive final.
- e. Students may be expected to attend one field trip.
- f. Students may be expected to attend one or more seminars or other professional speaker engagements.

Evaluation: Three Hour Examinations (300pts)
Final Examination (150 pts)
Written Reviews (50-75 pts)
Total- 500 points (10-point grading scale)

VI. LITERATURE

- Alee, W. C. 1949. Principles of animal ecology. Saunders.
- Blackburn, T.M. and Kevin J. Gaston. 2003. Macroecology concepts and consequences. British Ecological Society.
- Rhodes, O.E., Jr., R.K. Chesser, and M.H. Smith. 1996. Population dynamics in ecological space and time. University of Chicago Press.
- Rosenzweig, M.L. 1995. Species diversity in space and time. Cambridge University Press.
- Cotgreave, P. and I. Forseth. 2002. Introductory ecology. Blackwell Science.
- Janzen, D.H. 1983. Costa Rican natural history. University of Chicago Press.
- Ricklefs, R.E. and D. Schluter. 1993. Species diversity in ecological communities: historical and geographical perspectives. University of Chicago Press.
- Adl, S.M. 2003. The ecology of soil decomposition. Cambridge University Press.
- Real, L.A. and J.H. Brown. 1991. Foundations in ecology. University of Chicago Press.

Cody, M.L. and J.M. Diamond. 1975. Ecology and evolution of communities. Belknap Harvard.
Wiens, J.A. 2000. The ecology of bird communities. Cambridge University Press.
Wootton, R.J. 1990. Ecology of teleost fishes. Chapman and Hall.
Other literature made available as appropriate or upon request.

VII. Disability Statement: Campbellsville University is committed to reasonable accommodations for students who have documented physical and learning disabilities, as well as medical and emotional conditions. If you have a documented disability or condition of this nature, you may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Coordinator of Disability Services at 270-789-5192 to inquire about services

VIII. In case of emergency contact Campus Security at ext. 5556 or 270-403-3611.