

## **BIOL 3250 – Ecology and Evolution**

### **SPRING 2019 - Syllabus**

#### **COURSE INFORMATION:**

- a. **Title:** Ecology and Evolution
- b. **Instructor:** Dr. Timothy Henkel ([tphenkel@valdosta.edu](mailto:tphenkel@valdosta.edu))
- c. **Office:** Bailey Science Center 2212
- d. **Office Hour:** Tues 9:00-10:00 am and by appointment
- e. **Class Meets:** T/TH 11-12:15 Bailey 2202
- f. **Lab:** M 1 – 3:50 pm - Bailey 2073;

**CATALOG DESCRIPTION:** Prerequisites: BIOL 1107K, BIOL 1108K, BIOL 3200. An introduction to major topics in ecology and evolution, including population, community, and ecosystem ecology; Darwinian theory of evolution through natural selection; microevolution and macroevolution. Computer and field labs will provide exposure to both evolutionary theory and field ecology.

#### **COURSE OBJECTIVES:**

During this course, students will:

- a. Apply evolutionary theory to understanding of ecological principles;
- b. Develop ways to test evolutionary and ecological principles using lab and field techniques;
- c. Analyze and interpret data examining the factors structuring biological systems;
- d. Effectively organize, communicate and apply their knowledge of ecology and evolution to their everyday lives.

#### **COURSE MATERIALS:**

Textbook: Krohne, D.T. (2017) *Ecology: Evolution, Application, Integration*. Oxford Press.

Additional readings and resources will be posted to Blazeview throughout the semester.

Textbook readings are to be completed before class in order to be able to participate in class activities. Quiz and exam questions will be based on readings as well as in class material.

**INSTRUCTIONAL ACTIVITIES:** Learning is not a passive activity in which you simply absorb and repeat back facts given by an instructor. Rather, learning requires you to take an active role. To truly understand science, you must construct your own personal interpretation of the concepts and store them away in a form that is meaningful to you.

Facts and vocabulary are important to any discipline, though you are expected to go beyond simple memorization of details and interconnect those facts to concepts, applications and problems; to ask meaningful questions; to test well developed hypotheses; to develop a range of intellectual abilities, including critical thinking, logical argument, appropriate uses of evidence and interpretation of varied kinds of information; and to communicate your understanding in writing and orally to multiple audiences.

**GRADING PROCEDURES:** Letter grades will be assigned based on the following tables:

Course Component	% of Course Grade
Exams	60%
In Class Activities/Quizzes	15%
Lab Assignments	25%
<b>Total</b>	<b>100%</b>

**Final Letter Grade**

A: 90 – 100%  
B: 80 – 89%  
C: 70 – 79%  
D: 60 – 69%  
F: < 60%

**Exams:** There are four exams scheduled throughout the semester; each will cover the material from the end of the previous exam through the current exam. Each exam will be weighted equally and comprise 60% of your final grade. While exams are not labeled as cumulative, concepts that are connected throughout the course are fair material for exams. The last exam is scheduled during the final exam period of the course.

**In Class Activities and Quizzes:** Points will be obtained through in-class written assignments and quizzes, all of which are possible during any given class session. You must be present to obtain these points.

**Lab Assignments:** Quizzes and written assignments will be given during your registered lab section. All material must be turned in within the first 10 minutes of class on the due date. Late work is penalized 10% every day it is late.

**There will be NO UNEXUSED MAKE-UPS and NO EXTRA CREDIT!**

**ATTENDANCE POLICY:** You are expected to attend all scheduled course activities, and active participation is part of your course grade. Because of the nature and structure of the class, attendance is vital to your success in the course. We will strictly adhere to VSU’s policy on attendance which states: “A student who misses more than 20% of the scheduled classes of a course will be subject to receiving a failing grade in the course” (Undergraduate Catalog 2011-2012, p. 89).

**LAB DAYS:** You are required to attend your registered lab period and must be present from beginning to the end of the lab in order to be considered present. You are also expected to actively engage in lab activities and fully support and complete any individual and group assignments.

Note that labs will include work ‘in the field’ – ie outside. When we are traveling outdoors, you must have appropriate footwear (close toed shoes and socks) and pants. You may wish to bring insect repellent, hat/sun screen and water. Individuals not wearing appropriate field clothes are endangering themselves and therefore will not be allowed in the field and not receive credit.

**COMMUNICATION:**

**Email:** Email is the simplest way to contact me outside of class and is the quickest way for me to contact you as well. You are required to check and maintain your Valdosta State University email account. I will only communicate with you through this official email account.

**Blazeview:** We will be using Blazeview D2L throughout the semester as a tool for sharing information. I will post course notes after each class to the website, as well as provide additional resources, readings, and homework assignments. All official course information is located on Blazeview and students are expected to regularly access the Blazeview website.

**Notes on emailing your professor:**

In order to get a reply to your emails you must do the following in your email communication:

- Include your course number and section in the subject line of any email.
- Communicate as you would at work and in a professional manner. This includes using proper grammar and spelling, a greeting and salutation, and be sure to include your full name at the end of all emails.

**ACADEMIC HONESTY POLICY:** Cheating, plagiarism (submitting another person's material as one's own, or doing work for another person which will receive academic credit) are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an assignment or exam, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were your own work. **Computer software will be used to ensure plagiarism does not take place in this course.** Students are responsible for knowing, understanding and complying with the VSU Student Code of Conduct, in Appendix A of the Student Handbook

(<https://www.valdosta.edu/administration/student-affairs/student-conduct-office/documents/student-code-of-conduct.pdf>)

If substantial evidence exists for a violation of this policy, ***the student(s) involved will receive a grade of 'F' for the course*** and an official record will be filed following the Academic Integrity Response along with a letter to the Dean of Students (<http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml>).

**CLASSROOM CONDUCT:** A classroom policy will be developed by the course during the first week and will be the standard for behavior in the class. The policy will be posted to Blazeview and enforced during class sessions. Initial violations of the policy will result in a warning and a repeated occurrence will result in grade reduction of 10%. Continued violations may result in permanent removal from the course.

**ACCESS OFFICE:** Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit [VSU's Access Office](#) or email: [access@valdosta.edu](mailto:access@valdosta.edu).

**FEDERAL PRIVACY ACT:** It is illegal to release personal information about an individual to others. Therefore grades, averages, and other personal information about any person will not be released to another person or over email.

**TITLE IX STATEMENT:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: the Director of the Office of Social Equity, [titleix@valdosta.edu](mailto:titleix@valdosta.edu), 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

**ACADEMIC SUPPORT CENTER:** [The Academic Support Center](#): The Academic Support Center (ASC) provides free peer tutoring in core curriculum courses, including, math, writing, sciences, social sciences, humanities, and foreign languages. The ASC also provides supplemental instruction (tutor-led study group sessions) for historically difficult courses like biology, chemistry, geosciences, psychology and sociology, as well as academic success workshops. New for fall 2018: 24/7 access to online tutoring through ThinkingStorm, which includes Writing Center where you can submit drafts for feedback and get help with core courses when the ASC is closed. Call 229-333-7570 to make an appointment, email us at [asc@valdosta.edu](mailto:asc@valdosta.edu), or visit our website [www.valdosta.edu/asc](http://www.valdosta.edu/asc). Located in Langdale Hall.

## TENTATIVE TOPICS

- What makes organisms different?
- How can we determine if a population is evolving?
- What are the mechanisms that result in evolution?
- What is a species?
- How is evolutionary relatedness observed in biodiversity?
- What limits a species distribution?
- What is a population and how do they change over time?
- What is a community and how do they change over time?
- How do matter and energy move through ecosystems?

## IMPORTANT DATES

- **Exam 1 – Tues Feb 12**
- **Exam 2 – Tues Mar 12**
- **Exam 3 – Thurs Apr 11**
- **Exam 4 – Weds May 8, 10:15 am**
- Registration ends Jan 17
- Midterm – Mar 7
- Last Day to Withdraw – Mar 14
- Spring Break – Mar 18-22

**The schedule of topics is tentative and may be changed, however exam dates are set as written**