

**Valdosta State University
Department of Biology
BIOL 3250: Ecology & Evolution
Course Syllabus, Fall 2022**

Instructor: Dr. Erin Grabarczyk

Office: Bailey Science Center (BSC) 2216

Office Phone: 229.333.7380

E-mail: egrabarczyk@valdosta.edu

Office drop-in hours: Monday 11AM-12PM, Tuesday 2-3PM, or by appointment

Lecture: TR 3:30- 4:45 PM, BSC 1202

Lab: Monday 12 – 2:50 PM OR Tuesday 9:30 AM – 12:20PM, BSC 2073

Required text: Ecology, Evolution, Applications, Integrations, 2nd Edition by David Krohne, Oxford University Press

AND any general textbook on evolution:

Herron JC, Freeman S. Evolutionary Analysis. Pearson.

Bergstrom CT. Evolution. Norton.

Futuyama DJ. Evolution. Sinauer Associates, Inc.

Hall BK. Evolution Principles and Processes. Jones and Barlett.

Ridley M, Evolution. Blackwell.

Course overview

BIOL 3250. Ecology and Evolution. 4 Hours.

Prerequisites: [BIOL 1107](#), [1107L](#), [BIOL 1108](#), [1108L](#), and [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.

Standards

Education outcomes for BS Degree in Biology: 1, 2, & 5. VSU General Education Outcomes: 3, 4, 5, & 7.

Class Policies

- **Classroom etiquette:** Please be on time. Please turn off your cell phone. If you are disrupting the class, I will ask you to leave. Do not use the internet in class unless the lab requires it. Be respectful of yourself, your classmates, and your instructor.
- **Ask questions:** If you have a question or don't understand something please let me know. I am more than willing to take as much time as necessary to help you understand a concept, but you have to let me know.
- **Late work:** Once during the semester you may turn in late work for full credit. I will give you 48 hours to submit your work, no questions asked. Your assignment needs to be emailed to me, turned into my mailbox in the biology office, or submitted on BlazeVIEW. After your one late work turn-in, late assignments will not be accepted.
- **Email:** Use your VSU account for e-mail communication.

- **Lab completion:** Lab attendance is mandatory and you must complete every lab in order to receive points for both lab participation as well as the assignment for that week.
- **Cheating:** You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at <http://valdosta.edu> under Student Code of Conduct.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test. All forms of academic dishonesty including, but not limited to collusion, fabrication, cheating and plagiarism are worthy of punishment according to the policy set forth by Valdosta State University. This includes doing your own work on lab assignments. While you are allowed to brainstorm with each other, it is expected that your answers are your own. **I will not tolerate any form of cheating.**
- **Field trip attire:** Throughout semester we will collect data and run experiments outside. On days we are outside, I recommend you wear walking shoes and dress for the weather. **Acceptable clothes include pants, socks, and comfortable walking shoes. You may wish to bring a hat, insect repellent, drinking water, and wear sunscreen.**

Students with disabilities: 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 University Center Room 4136 Entrance 5. 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

Title IX Statement: Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Mr. Darius Thomas. To view the full policy or to report an incident visit: <https://www.valdosta.edu/administration/student-affairs/title-ix/>

Grading Scale:

Letter	%	Points
A	90-100	729-810
B	80-89	648-728
C	70-79	567-647
D	60-69	486-566
F	<60	<485

Assessments:

3 Exams (100 points each)
 Final exam (150 points)
 In-lecture participation (50 points)
 Lab (310 points)

Break-down of the 310 lab associated points:

Lab simulations (50 points)
 Environmental Report (25 points)
 Peer-review (20 points)
 Grant proposal (100 points)
 Poster (30 points)
 Other homework (95 points)

Exam Dates:

1. Thursday, February 2nd
2. Thursday, March 2nd
3. Thursday, April 6th
4. Final Exam: Friday May 5th 2:45 – 4:45 PM

Tentative Lab Schedule*

Week of	Lab number	Lab topic
Jan 9	1	Sound walk & scavenger hunt – outside!
Jan 16	-	No labs this week
Jan 23	2	Natural selection
Jan 30	3	Grand Bay field data collection – outside!
Feb 6	4	Lake Louise field data collection – outside!
Feb 13	5	Experimental design
Feb 20	6	Phylogenetic inference
Feb 27	7	Island Lizards
Mar 6	8	Peer-review for grant proposals
Mar 13	-	No labs this week
Mar 20	9	Field Ecology – outside!
Mar 27	10	Project work day
Apr 3	11	Demography – outside!
Apr 10	12	De-extinction
Apr 17	13	Climate change modeling
Apr 24	14	Campus mist netting – outside!

***Weather permitting. An updated lab schedule will be posted on the course BlazeView page if we need to re-arrange weekly topics.**

Tentative Lecture Schedule*

Week of	Krohne Chpt	Lecture topics
Jan 9	**	Introduction to course, Evolution
Jan 16	**	Natural selection, Bloom & Blast
Jan 23	**	Patterns of selection, Other evolutionary processes
Jan 30	**	Sexual selection, Exam 1
Feb 6	**	Selection Part 2, Systematics & Phylogenetics
Feb 13	**	Macroevolution, RIM
Feb 20	1, 3-5, 12	Co-evolution, A VERY brief intro to Ecology, Geographic distributions
Feb 27	17-18	Ecosystem cycles, Exam 2
Mar 6	17-18, 6	Ecosystem cycles, Behavioral Ecology
Mar 13	-	No lecture this week
Mar 20	7-8	Plasticity, Population Ecology
Mar 27	9-10	Population Ecology
Apr 3	15-16	Community Ecology, Exam 3
Apr 10	20	Molecular Ecology, Landscape Ecology
Apr 17	19	Conservation Biology
Apr 24	21	Applied Ecology

***Subject to change. ** Chapter numbers will vary depending on your selected Evolution textbook (see above). Work with Dr. G to identify the specific chapters to read for each weekly topic.**