Valdosta State University Department of Biology BIOL 3250, Sections A & B: Ecology & Evolution Course Syllabus, Fall 2023

Instructor: Dr. Erin Grabarczyk Office: Bailey Science Center (BSC) 2216 Office Phone: 229.333.7380 E-mail: egrabarczyk@valdosta.edu In-person office hours: Monday 9-10AM, Wednesday 3:30-4:30PM, or by appointment. Virtual office hours: Thursday 9AM-12PM on TEAMS, or by appointment.

Lecture: MW 2-3:15 PM, BSC 1202 Lab: Monday 10-12:50 PM OR Tuesday 9:30 AM-12:20PM, BSC 2073

Required text: Ecology, Evolution, Applications, Integrations, 2nd Edition by David Krohne, Oxford University Press <u>AND</u> 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.

AI: VSU's <u>Academic Student Conduct Code</u> states that "no student shall engage in plagiarism, which is presenting the words or ideas of another person as if they were the student's own." Content generated by an Artificial Intelligence third-party service or site (AI-generated content) without proper citation is another form of plagiarism. If you are unsure about whether something may be plagiarism or another form of academic dishonesty, please reach out to me as soon as possible.

Accommodation Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office (https://www.valdosta.edu/student/disability/) 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. To request reasonable accommodations for pregnancy and childbirth, contact Ms. Myia Miller, Title IX Compliance Officer, at maburden@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

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 Ms. Selenseia Holmes. To view the full policy or to report an incident visit: <u>https://www.valdosta.edu/administration/student-affairs/title-ix/</u>

Grading Scale:

Letter	%	Points
Α	90-100	711-790
В	80-89	632-710
С	70-79	553-631
D	60-69	474-552
F	<60	<474

Assessments:

3 Exams (100 points each) Final exam (150 points) In-lecture participation (50 points) Lab (290 points)

Break-down of the 290 lab associated points: Lab simulations (50 points) Environmental Report (25 points) Peer-review (20 points) Grant proposal (100 points) Poster (20 points) Other homework (75 points)

Exam Dates:

- 1. Monday, September 11th
- 2. Wednesday, October 4th
- 3. Wednesday, November 8th
- 4. Final Exam: Tuesday, December 5th 2:45 4:45 PM

Tentative Lab Schedule*

Week of	Lab number	Lab topic
Aug 14	1	Sound walk & scavenger hunt – outside!
Aug 21	2	Grand Bay field data collection – outside!
Aug 28	3	Natural selection
Sept 4	-	No lab this week
Sept 11	4	Lake Louise field data collection – outside!
Sept 18	5	Phylogenetic inference
Sept 25	6	Experimental design
Oct 2	7	Island Lizards
Oct 9	-	No lab this week
Oct 16	8	Peer-review for grant proposals
Oct 23	9	Climate change modeling
Oct 30	10	Demography – outside!
Nov 6	11	Project work day
Nov 13	12	De-extinction
Nov 20	-	No lab this week
Nov 27	13	Campus mist netting – outside!

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

Tentative Lecture Schedule*

Week of	Krohne Chpt	Lecture topics
Aug 14	**	Introduction to course, Evolution
Aug 21	**	Natural selection, Bloom & Blast
Aug 28	**	Patterns of selection, Other evolutionary processes
Sept 4	**	Sexual selection
Sept 11	* *	Exam 1, Systematics & Phylogenetics
Sept 18	**	Macroevolution, RIM
Sept 25	1, 3-5, 12	Co-evolution, A VERY brief intro to Ecology, Geographic
		distributions
Oct 2	17-18	Ecosystem cycles, Exam 2
Oct 9	17-18, 6	Ecosystem cycles, Behavioral Ecology
Oct 16	-	TBD
Oct 23	7-8	Plasticity, Population Ecology
Oct 30	9-10	Population Ecology
Nov 6	15-16	Community Ecology, Exam 3
Nov 13	20	Landscape Ecology, Conservation Biology
Nov 20	19	Conservation Biology
Nov 27	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.