Course Learning Objectives:

This course covers a wide range of topics within the realm of ecology and evolution and allows student to develop their own ideas though a peer-reviewed research grant writing process. The laboratory portion offers students the opportunity to get directly involved with ecological experimentation and techniques, while diving into the evolutionary theory using a variety of simulations and activities.

By the end of the semester, each student will:

- 1) Develop a better understanding of ecological and evolutionary concepts and cultivate critical thinking skills through the scientific method.
- 2) Operate scientific instruments and equipment commonly used in biological experimentation.
- 3) Understand the basis of evolutionary ecology theory and it's application.
- 4) Translate analyzed data into meaningful scientific results, synthesize a literature review, develop their own questions/hypotheses.
- 5) Compose a research grant and build upon their scientific writing skills.
- 6) Work on their ability to convey ideas and educate others while giving presentations.

These course objectives are aimed to fulfill the VSU General Educational outcomes 3,4,5 and 7. This course's set of learning objectives support the outcomes 1, 2 and 5 of the <u>VSU Selected Educational</u> <u>Outcomes for the B.S. Degree in Biology</u>.

Grade Determination:

Assessment

Points Grading Scale:

SIMBIO platform, completed in the google folder, etc.). I reserve the right to adjust the evaluation criteria in the event of extenuating circumstances. There will be a few readings for lecture that require you to contribute discussion questions prior to meeting for class. Students who miss more than three labs will forfeit all Laboratory Assignment points.

Exams: All lecture exams 1,2,3 will be closed note and administered in person, starting at 2pm and will be due at 3:15pm when lecture ends. The Final/Exam 4 will be administered on-line and will be open note. Lab exams will be in person in the 3018 and will be open note but only for the 3 hours of lab.

<u>Make-Up Work:</u> Late assignments <u>will not</u> be accepted and make up assignments will be at the sole discretion of the professor. These assignments may or may not exactly duplicate the original and will not entitle other students to the same alternatives since they may not have experienced the same situations.

Lecture & Lab Policies: Guidelines for your safety and the safety of those around you.

1. No eating or drinking in the lecture or lab.

2. Use hand sanitizer when you enter, wash your hands after the exercises for lab.

3. Know where emergency/first aid equipment and disposal receptacles are for lab. Any injuries should be reported to me immediately!

4. Please dress appropriately for field days. I recommend comfortable closed-toed shoes or water shoes if appropriate for the specific lab, always have drinking water, and some will want to bring sunscreen and/or bug repellant. In addition, fieldtrips are often hot or cold (depending on the time of semester) and may require walking to a destination, so you should dress accordingly.

5. Although we are using a lot of technology for our class, please avoid using your phones or computers for anything else during our class time. We have a lot of focus on and juggle so you need to be 100% committed and focused to the course during your 5.5 hours with me each week. **Recordings of the Dr. Rose's lectures are not permitted without her permission.**

How to Succeed in this Course:

Attend the weekly PAL sessions to be able to review the material with our PAL mentor, Darshi Patel. She will be reviewing the lecture material, helping to troubleshoot lab activities with you, and provide guidance with the grant proposal process at weekly sessions announced in lecture.

To be able to recreate graphs/figures, concepts, and examples from lecture on the exams I highly recommend that you recopy your notes/Dr. Rose's ppts into a well-organized and concise study guide. You should also be practicing and interpreting any of the equations that we have covered in the course to make sure you understand the concepts in addition to the plugging in of numbers.

Although lab exams are open note, you will need to trouble shoot and execute all of the skills we have learned during the labs so take good notes and practice the activities before the lab exams. You will want to review what we did, why we did it, how we did it and what we found in lab.

Get ahead!!! The deadlines for every assignment this semester are listed in the syllabus calendar so there is no reason to turn in assignments late. Start assignments early to get feedback on them before they are due. Do not blame Blazeview for taking too long when loading your file at midnight.

Ask questions during class or come to office hours. If you cannot make it to office hours, please email Dr. Rose and schedule a meeting for when you are free.

Course Policies:

make appointments for either VSU tutors or ThinkingStorm tutors, click the link "Free Tutoring" in Blazeview (under "resources" or "more."). VSU's Academic Support Center is also offering online tutoring, see instructions: https://www.valdos

Fall 2022- Dr. Rose's Ecology & Evolution course