

**Instructor:** Dr. Sparkle L. Malone

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**Office Hours:** Monday's 9:30am-11:30am or by appointment

**Lecture and Discussion:** MW 8-9:15, PG6 112

### ECOLOGY (PCB 3043 U04 1188)

**Course Goals:** In this course, you will learn how organisms interact with their abiotic and biotic environment. Understanding these relationships are essential for measuring our impact on the environment, evaluating ecosystem health, and for managing natural resources. The readings and lectures will present ecological concepts that are important for: (1) understanding the patterns observed in nature and contemporary ecological issues, (2) critically evaluating case studies in the context of ecological theory, and (3) using ecological theory to develop solutions to modern ecological problems.

**Textbook:** The economy of Nature, 8<sup>th</sup> edition, Robert Ricklefs & Rick Relyea

**Clickers:** We will use **iclickers** in the lecture. Clicker questions will appear *in all class meetings*. You can use iClicker remotes or iClicker Reef on a smartphone, tablet or laptop. It is your responsibility to properly register your iClicker remote or iClicker Reef device in a timely fashion. It is also your responsibility to regularly check your iClicker grades for any discrepancies and bring them to my attention quickly. You are responsible for the proper functioning of your clicker.

**Canvas:** All course information and assignments are on the course website ([canvas.fiu.edu](https://canvas.fiu.edu)).

**Grading:** These numbers are approximations and may change.

Assignments	Units	Points/Unit	Total Points	Percentage of Grade
Midterm Exams	3	100	300	27%
Cumulative Final Exam	1	200	200	18%
Lecture Activities	20	10	200	18%
Pre- / Post- Lecture Assignments	40	10	400	36%
Bonus Assignments (Pop quizzes, surveys, essays,...etc)	~15	~5-10	100 (Bonus)	-

Grade Scale	A	B	C	D	F
Percentage	90-100	80-89	70-79	60-69	0-59

**The course final grade will not be rounded. There will be no exceptions, no curving, no points added, no grades dropped, and no additional bonus assignments offered.**

**Exams:** There will be 3 online midterm exams and one online final exam. All exams have time limits. You will have 1 hour to complete each midterm exam and 2 hours to complete the final. Question types include: T/F, multiple choice, matching, and short essays. Everything covered in the lecture and in the corresponding reading will be on the exams. You are expected to know each topic to the breadth and depth that we cover in class and in the course materials. A solid understanding of the concepts and examples discussed should be enough to pass (C), but to achieve a superior grade (A), you will also need to synthesize concepts and apply them to new situations. **Do not miss an exam!** All exams are online and a class period is dedicated to each exam. There are no makeups for missed exams and exams will not be extended for any reason. **The bonus assignments are the only opportunity to earn points to make up for missed assignments.**

**All students must download Respondus LockDown Browser to take exams:**

<http://ecampus.fiu.edu/students-respondus.html>. Students may use a personal computer to complete exams requiring LockDown Browser, however an FIU licensed copy must be used. In addition, LockDown Browser is available in various computer labs across campus.

**Lecture Activities:** Lectures include in-class interactive activities (i.e., case studies, quizzes, and surveys). For each activity, you will use iclicker to participate. You are required to bring a device to participate in iClicker lecture activities. You can use iClicker remotes or iClicker Reef on a smartphone, tablet or laptop. It is your responsibility to properly register your iClicker remote or iClicker Reef device in a timely fashion. It is also your responsibility to regularly check your iClicker grades for any discrepancies and bring them to my attention quickly. **The bonus assignments are the only opportunity to earn points to make up for missed assignments.**

**Pre- and Post-Lecture assignments:** There will be an online pre- and post- lecture assignment associated with each lecture. All assignments must be submitted by the deadline. **The bonus assignments are the only opportunity to earn points to make up for missed assignments.**

**Bonus Assignments:** Bonus points can be earned through pop-quizzes, surveys, and essays. Pop-quizzes will occur during the lecture and you will use iclicker to participate. All other assignments will be on the course website. **There are no makeups for missed bonus assignments. The bonus assignments are the only opportunity to earn points to make up for missed assignments.** Throughout the course, 100 bonus points will be offered.

**General expectations and how to succeed:**

- **Invest study effort.** Schedule enough time to read, study and keep up with assessments.
- **Watch Dr. Chew and do it:** <http://www.samford.edu/how-to-study/>
- **Read the chapters *before*** you attempt the corresponding lecture assessments.
- **Attend every class** and *actively* participate in discussions, interactive questions, and activities.

- **Take good lecture notes.** Indicate any areas of difficulty to look up after class. Structure your notes as lists, outlines, or in some other form that is useful to you.
- **Ask questions;** ask for clarification if you don't understand something.
- **Help your neighbor** and contribute to the group. If you help each other, everyone will do better including you.
- **Review concepts** ASAP after class, using the book and other resources to clarify any hazy areas. For the most enduring learning, try to find the answers to your questions yourself, or through active participation in a study group.
- **Assess your knowledge** continuously. Ask yourself questions and use the questions in your book. To practice concepts: draw diagrams, describe it, explain it, and discuss it.
- **Come to office hours** to discuss any questions or concerns ASAP.
- **Read all course emails and announcements** on Canvas. You are responsible for all information, as well as anything announced or posted in class.

### **Associated Laboratory:**

The laboratory (PCB 3043L) is a separate one credit course taught by a graduate teaching assistant. The course is completely independent, although many of the concepts and themes are mutually reinforcing. ***I strongly recommend that you take the lab at some point.*** Although I welcome your feedback about the lab as well as lecture, please ask your TA first about any lab-specific questions or concerns.

### **Honor and safe place policies:**

As scientists and scholars, we hold ourselves to the highest standards of integrity. The FIU honor policy will apply fully to our work in this class. Any cheating on exams or plagiarism on written work will result in a grade of F for the assignment and the course. We will use turn-it-in.com to ensure that no inadvertent plagiarism creeps into your writing. Using more than one clicker will result in permanent loss of clicker points for the owner and user.

Likewise, as a progressive learning community, FIU does not tolerate sexual harassment or any other civil rights violation against any student or course personnel.

FIU Student Code of Conduct: [http://www2.fiu.edu/~jms/standards\\_of\\_conduct.htm](http://www2.fiu.edu/~jms/standards_of_conduct.htm)

FIU's discrimination and sexual harassment policies: <http://regulations.fiu.edu/regulation>

*This syllabus information, including course requirements and grading, may change at any time to better meet the needs of the group, or due to unforeseen circumstances. The most current version will be kept updated on the course website, so check there if in doubt.*

Proposed schedule (note: this may not be exact and could change. Updated versions will be posted on Canvas).

<b>Week</b>	<b>Lecture Topic</b>	<b>Date</b>
1	<b>Introduction to Ecology</b>	8/20
	Chapter 1 Ecology, Evolution, and the Scientific Method	8/22
2	Chapter 2 Adaptations to Aquatic Environments	8/27
	Chapter 3 Adaptations to Terrestrial Environments	8/29
3	<b>Labor Day</b>	<b>9/3</b>
	Chapter 4 Adaptations to Variable Environments	9/5
4	Chapter 5 Climates and Soils	9/10
	Chapter 6 Terrestrial and Aquatic Biomes	9/12
5	<b>EXAM 1 (ONLINE)</b>	<b>9/17</b>
	Chapter 7 Evolution and Adaptation	9/19
6	Chapter 8 Life Histories	9/24
	Chapters 9 Reproductive Strategies	9/26
7	Chapter 10 Social Behaviors	10/1
	Chapters 11 Population Distributions	10/3
8	<b>TBD</b>	10/8
	Chapter 12 Growth and Regulation	10/10
9	Chapter 13 Population Dynamics over Space and Time	10/15
	<b>EXAM 2 (ONLINE)</b>	<b>10/17</b>
10	Chapter 14 Predation and Herbivory	10/22
	Chapter 15 Parasitism and Infectious Diseases	10/24
11	Chapter 16 Competition	10/29
	Chapter 17 Mutualism	10/31
12	Chapter 18 Community Structure	11/5
	Chapter 19 Community Succession	11/7
13	<b>Veterans' Day</b>	<b>11/12</b>
	<b>EXAM 3 (ONLINE)</b>	<b>11/14</b>
14	Chapter 20 Movement of Energy in Ecosystems	11/19
	Chapter 21 Movement of Elements in Ecosystems	11/21
15	Chapter 22 Landscape Ecology	11/26
	Chapter 23 Global Biodiversity Conservation	11/28
16	<b>Comprehensive Final (ONLINE)</b>	<b>12/3-12/7</b>