

# EFB 320 General Ecology

## Fall 2021

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**Instructor:**        **Dr. Gregory McGee**  
146 Illick Hall  
315-470-6792  
[gmcgee@esf.edu](mailto:gmcgee@esf.edu)

**Office hours: Mon. 4:00-5:00**  
**Wed 10:35-12:00 or by appt.**

**Graduate TAs:**     Myles Columbo  
**Emails: @syr.edu** Andrew Cortese  
                                 Monica Edgerton

Amanda LeMoine  
Laura Stark  
Nathaniel Wehr

**Meeting Times/Location: Tue/Thur 12:30-1:50        Grant Auditorium**

### ABOUT THIS COURSE

General Ecology (EFB320) is designed as an intermediate-level course to introduce students to broad concepts in ecology. This course will prepare you to pursue more in-depth study of ecological principles in a number of ESF's upper-division biology courses. We will study biological interactions at the organismal (physiological ecology), population, community and ecosystem levels (see lecture schedule). In laboratory we will continue developing your command for the scientific method through hypothesis development, field-based data collection and management, and technical writing.

### LECTURE TEXTBOOK

Relyea, R. 2021 The Economy of Nature. 9<sup>th</sup> Ed. Macmillan, Co, Austin.

You will be able to purchase or rent (for various periods) a print copy or an e-book of this text. Options for print include bound or loose-leaf (3-hole punched).

- Loose Leaf print book ISBN: **9781319369347**
- E-book ISBN: **9781319369323**

The text can be acquired through the SU bookstore or through any number of on-line retailers, including Macmillan Company's 'Student Bookstore':

<https://store.macmillanlearning.com> (then search by title)

### LABORATORY MANUAL

Available at the ESF Copy Center, Bray Hall, Room 5. Please acquire yours during the first week of class. We will begin lab instruction during Week 2.

### BLACKBOARD

This online course management system will serve as one gateway to this class. While we will not be relying on Blackboard extensively, I will post course information (this syllabus), readings, and homework assignments there. I will also post your exam, homework and lab assignment grades for you to access. Shortly after each lecture, I will post my slides/sketches for your review.

## **ASSIGNMENTS**

- Throughout the semester, I will assign five 10-pt reading/discussion or data analysis/interpretation assignments. They will be due before the beginning of lecture on their respective due dates.
- Laboratory assignments will be due at the beginning of your regularly-scheduled lab meeting.
- Late assignments: I will accept late work (life happens), with a -15% per day penalty. Please note that once the deadline has passed for an assignment (the beginning of lecture or lab), the work is then 1 day late (i.e., if you're one minute late, you're one day late).

## **ATTENDANCE**

In life, showing up is 90% of the game. Do as you wish. I do hope you will enjoy coming to lectures and labs to explore interesting concepts and develop important professional skills. Unless you have an excused absence, please do not expect any accommodation from me or your lab instructor. In these instances, if you miss material from a lecture or laboratory, it will be your responsibility to acquire it somehow. Make-up examinations will not be granted for unexcused absences.

You may seek accommodations for an excused absence only in cases of (1) a medical or family emergency; or (2) the observance of a religious holiday. If you are feeling ill, then you should be seeking medical attention and be able to prove that you visited a doctor. In cases when a personal or family emergency causes your absence from all of your classes, you should be in touch with the Office of Student Life to assist you in contacting all of your instructors for accommodations. If you know you are going to miss a meeting or assignment deadline because of a religious holiday, you must contact your instructor within the first two weeks of class to reschedule or to seek accommodation.

A note about laboratory attendance. Students must attend the laboratory section for which they are registered, and you may switch lab sections **ONLY IF** you have received permission from both your TA and the TA of the section you are seeking to join. Most laboratory sections will be full to capacity. Therefore, there will likely be no room in labs to accommodate additional students while maintaining safety and a quality instructional environment. You may seek permission to switch a lab section **ONLY** if you can document an excused absence. However, do not expect that permission to switch into any particular lab will be automatic.

...bottom line...don't miss your regularly scheduled lab section and don't expect to be able to simply join another section.

## **OFFICIAL COMMUNICATIONS**

We will share important business and announcements at the beginning of each lecture and laboratory. Otherwise, email is the best way to contact your instructors. When composing an email, please include a descriptive, accurate subject line, and be sure to review your message for grammatical errors and etiquette before sending. Check your email somewhat regularly to watch for course related announcements.

## GRADING

At the end of the semester, you will be assigned a grade of A, B, C, D or F (including + or - grades). There will be three in-class exams at the end of each section, and a comprehensive final exam. Dates for the first three exams are given in the syllabus; the date & time of the final will be posted on the registrar's page later in the semester. Although some lecture content may change, for your planning purposes I will not change the dates of the exams.

### Allocation of points for your final lecture grade will be as follows:

Laboratory (see lab manual)	200 pts
In-class assignments	50 pts
1 <sup>st</sup> lecture exam	100 pts
2 <sup>nd</sup> lecture exam	100 pts
3 <sup>rd</sup> lecture exam	100 pts
Cumulative Final exam	200 pts
<b>TOTAL</b>	<b>750 pts</b>

<b>Grading Scale:</b>	A ≥ 93%	B+ = 87-89%	C+ = 77-79%	D = 60-69%,
	A- = 90-92%	B = 83-86%	C = 73-76%	F = <60%
		B- = 80-82%	C- = 70-72%	

## STUDENTS WITH LEARNING AND PHYSICAL DISABILITIES

SUNY-ESF works with the Center for Disability Resources (CDR) at Syracuse University, which is responsible for coordinating disability-related accommodations. To learn about and access disability-related resources, please follow instructions on their website: <https://disabilityresources.syr.edu/students/>. Students can also contact CDR at 315-443-4498. Since accommodations may require early planning and generally are not provided retroactively, please contact them as soon as possible. Students may also contact the ESF Office of Student Affairs, 110 Bray Hall, 315-470-6660 for assistance with the process.

## COVID-19 GUIDANCE

Students are required to follow the college's evolving Covid-19 protocols and restrictions, which can be found on the college website at: <https://www.esf.edu/restart/>

## **ACADEMIC INTEGRITY**

Academic dishonesty is a breach of trust between a student and one's fellow students, or the instructor(s). Examples of academic dishonesty includes but is not limited to plagiarism and cheating, and other forms of academic misconduct. By registering for courses at ESF you acknowledge your awareness of the ESF Code of Student Conduct. More information regarding Academic Integrity, including the process for resolving alleged violations, can be found in the Student Handbook (<https://www.esf.edu/students/handbook/>).

I expect that you have read, understand and will abide by the ESF Code of Student Conduct. As members of the ESF community we are all responsible for reporting & enforcing the core values of **integrity, honesty, & decent treatment** of all individuals at ESF. Dishonest actions are inappropriate and I do not tolerate them by my faculty and staff colleagues or by students. You should not tolerate dishonesty either. I (and I expect you) will endeavor to facilitate an open, honest, learning environment. To that end, I will report violations and seek disciplinary action against violators. Such violations include cheating on assignments, quizzes or exams (e.g., looking at others work, turning in work for your friends, allowing others to use your work as their own), and collaborating on assignments in a manner by which you turn in answers or papers that that are fundamentally the same. Unless stated otherwise, all assignments are to reflect your own, individual work. We will explicitly indicate when you may collaborate with one or more peers. If you have any question about whether or not working together on a particular assignment is acceptable, just ask.

## **RELIGIOUS HOLIDAY OBSERVANCE**

All students have a right under NYS law and ESF college policy to observe the religious holidays of their choice, according to their individual faith. If students wish to observe a religious holiday, they should provide written notification to the instructor and/or TA (via email) of their intent to observe a particular religious holiday **within the first two weeks of the semester**, and prior to missing any required course meetings or activities. Reasonable requests for absence from course meetings or activities will be accommodated whenever possible, though students may be responsible for independently making up missed materials or activities on their own time, and in a timely fashion. Please send your request to me directly by email (do not use the system in MySlice – it does not function for ESF students).

## **INCLUSIVE EXCELLENCE**

As an institution, we embrace inclusive excellence and the strengths of a diverse and inclusive community. During classroom discussions, we may be challenged by ideas different from our lived experiences and cultures. Understanding individual differences and broader social differences will deepen our understanding of each other and the world around us. In this course, all people (including but not limited to, people of all races, ethnicities, sexual orientation, gender, gender identity and expression, students undergoing transition, religions, ages, abilities, socioeconomic backgrounds, veteran status, regions and nationalities, intellectual perspectives and political persuasion) are strongly encouraged to respectfully share their unique perspectives and experiences. This statement is intended to help cultivate a respectful environment, and it should not be used in a way that limits expression or restricts academic freedom at ESF.

## EFB 320 General Ecology

### Fall 2021 Schedule

Lecture						Laboratory	
Tue Date	Topic	Ch.	Thur Date	Topic	Ch.	Topic	Due
8/31	Introduction to Ecology	1	9/2	Control on Global Climate	2	No lab	Acquire manual
9/7	Terrestrial & Aquatic Biomes	2	9/9	Physiological Ecology – Aquatic Environments	3	Stats Primer	
9/14	Physiological Ecology – Terrestrial Environments	4	9/16	Adaptations to Variable Environments	5	Soil 1	Stats Primer
9/21	Life Histories	7	9/23	TBD		Soil 2	
9/28	<b>EXAM 1</b>		9/30	Population Ecology – Distributions	10	Soil 3	
10/5	Population Distributions	10	10/7	Population Growth & Regulation	11	Stream 1	Soils Report
10/12	Population Growth & Regulation - Demography	11	10/14	Population Dynamics	12	Stream 2	
10/19	Population Dynamics	12	10/21	Predation & Herbivory	13	Stream 3	
10/26	Predation & Herbivory	13	10/28	TBD		Demography 1	Stream Report
11/2	<b>EXAM 2</b>		11/4	Competition	15	Demography 2	
11/9	Mutualism	16	11/11	Community Structure	17	Ordination 1	Demography
11/16	Community Succession	18	11/18	Movement of Energy in Systems	19	Ordination 2	
11/23	<i>Thanksgiving Recess</i>		11/25	<i>Thanksgiving Recess</i>			
11/30	Phosphorus & Nitrogen Cycles	20	12/2	<b>EXAM 3</b>	21		Ordination
12/7	Biogeography		12/9	TBD			Rewrite; notebook
<b>Final Exam TBD:</b>							