

# Syllabus

Ecology (BI271) Lecutre B, 4 credit hours, fall semester 2018

Ecology is the study of the spatial and temporal patterns of the distribution and abundance of organisms, including causes and consequences. Studying these patterns provides us with the scientific foundation for understanding natural processes and environmental problems. This course will examine ecological interactions at a wide range of scales from the molecular level, through individuals, populations, communities, ecosystems, and ultimately to the biosphere. We will study how these interactions produce the patterns and processes we observe around the world. In the field-based laboratory we will learn to generate testable ecological hypotheses, develop experimental designs to test our hypotheses, and use statistical inference to quantitatively assess the outcome of our experiments, while gaining first-hand familiarity with local ecological communities.

- TOC { :toc }

## Professor information

Dr. Christopher M. Moore  
Email: [cmmore@colby.edu](mailto:cmmore@colby.edu) (Note I have a 24-hour email policy)  
Office: Olin 216  
Office phone: 207-859-5746  
Laboratory: Olin 214  
Laboratory phone: 207-859-5744  
Calendar:  
## Office hours Mondays, 1–3 PM  
Wednesdays, 10 AM–noon

## Titles, names, and pronouns

Students are often curious about how to address their professors. I am comfortable with Dr. Moore, Professor Moore, or Chris. The pronouns that I go by are he/him. I will be asking for your preferred name and pronoun the first day of class on a notecard. Ultimately, what's most important to me is that we create a culture of mutual respect in the classroom, beginning with how we address one another.

## Ecology Team contact information

Name	Lab section(s)	Email	Office
Justin Becknell	C1	<a href="mailto:justin.becknell">justin.becknell</a>	Olin 224
Abby Pearson	A2, B2	<a href="mailto:abby.pearson">abby.pearson</a>	Olin 242
Sarah Staffiere	A1, B1	<a href="mailto:sarah.staffiere">sarah.staffiere</a>	Olin 305

## Meeting dates, times, and location for Lecture B

MWF, 9—9:50 AM, in Arey 005

## Textbook

*The Princeton Guide to Ecology*, 2012, edited by Simon A. Levin, published by Princeton University Press  
Freely access book through Colby Library: [link](#)

## Website

<http://colbyecology.github.io>

## Learning Goals for Ecology (BI271)

- A. Learn the conceptual framework and vocabulary for the science of ecology.
- B. Mature in ability to assess scientific literature, with a special emphasis on data interpretation.
- C. Apply concepts and principles to topical ecological issues having implications for policy or management.
- D. Gain direct experience with generating hypotheses, developing experimental designs, and applying statistical analyses to ecological data.
- E. Gain first-hand familiarity with local ecological communities.

## Grading

**Lecture: 0.70 of the course grade**

Item	Proportion of course	Proportion of lecture (rounded)
Quizzes	0.05 (0.005 each <sup>†</sup> )	0.07 (0.007 each)
Problem sets	0.20 (0.02 each <sup>†</sup> )	0.29 (0.03 each)
Examination I	0.15	0.21
Examination II	0.15	0.21
Examination III	0.15	0.21

<sup>†</sup> The two lowest scores are dropped

- **Quizzes** are frequent, low-stakes assessments designed to help you learn through recall and help performance on higher-stakes in-class assessments.
- **Problem sets** will include several quantitative and conceptual problems that are designed to help you apply and more deeply understand some of the concepts covered in the lecture material. There will be one problem set per Unit, and they will be distributed in lecture and due at the beginning of lecture, two meetings later.
- **Examinations** are a method used to assess your understanding of the lecture material while simultaneously rewarding those who have mastered it.

## Laboratory: 0.30 of the course grade

Assignment	Proportion of course	Proportion of laboratory (rounded)
Participation	0.02	0.07
Population growth lab	0.04	0.13
Gradient lab	0.04	0.13
Community sampling lab	0.04	0.13
Landscape lab	0.08	0.27
Decomposition lab	0.08	0.27

- **Participation** will evaluate your contribution to lab.
- **Population growth lab** will be a manipulative experiment and report that will assess population growth in a controlled environment.
- **Gradient lab** will be an observational experiment and report that will assess the relationship between abundance along environmental gradients.
- **Community sampling lab** will be an observational experiment and report that will learn how to estimate the number of species in an area.
- **Landscape lab** will be an observational experiment and report that will assess how landscape structure affects community composition.
- **Decomposition lab** will be a manipulative experiment and report that will assess how environmental factors affect the breakdown of organic matter.

## Attendance

Role will not be taken in lecture, but regular attendance is necessary for you to succeed in this course. Attendance in lab is mandatory.

## Academic integrity

Honesty, integrity, and personal responsibility are cornerstones of a Colby education and provide the foundation for scholarly inquiry, intellectual discourse, and an open and welcoming campus community. These values are articulated in the Colby Affirmation and are central to this course. You are expected to demonstrate academic honesty in all aspects of this course. If you are clear about course expectations, give credit to those whose work you rely on, and submit your best work, you are highly unlikely to commit an act of academic dishonesty.

Academic dishonesty includes, but is not limited to: violating clearly stated rules for taking an exam or completing homework; plagiarism (including material from sources without a citation and quotation marks around any borrowed words); claiming another's work or a modification of another's work as one's own; buying or attempting to buy papers or projects for a course; fabricating information or citations; knowingly assisting others in acts of academic dishonesty; misrepresentations to faculty within the context of a course; and submitting the same work, including an essay that you wrote, in more than one course without the permission of the instructors.

Academic dishonesty is a serious offense against the college. Sanctions for academic dishonesty are assigned by an academic review board and may include failure on the assignment, failure in the course, or suspension or expulsion from the College.

For more on recognizing and avoiding plagiarism, see the library guide: [link](#)

## Statment on Diversity

It is my intent that students from diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. I expect you to feel challenged and sometimes outside of your comfort zone in this course, but it is my intent to present materials and activities that are inclusive and respectful of all persons, no matter their gender, sexual orientation, disability, age, socioeconomic status, ethnicity, race, culture, perspective, and other background characteristics.

I have attempted to avoid scheduling exams during major religious holidays. If, however, I have inadvertently scheduled an exam or major deadline that creates a conflict with your religious observances, please let me know within two weeks of the start of classes so that we can make other arrangements. Colby College is supportive of the religious practices of its students, faculty, and staff. The College is committed to ensuring that all students are able to observe their religious beliefs without academic penalty.

## Sexual misconduct/Title IX statement

Colby College prohibits and will not tolerate sexual misconduct or gender-based discrimination of any kind. Colby is legally obligated to investigate sexual misconduct (including, but not limited to sexual assault and sexual harassment).

If you wish to speak confidentially about an incident of sexual misconduct, please contact Colby Counseling Services (207-859-4490) or the Director of the Gender and Sexual Diversity Program, Emily Schusterbauer (207-859-4093).

Students should be aware that faculty members are considered responsible employees; as such, if you disclose an incident of sexual misconduct to a faculty member, they have an obligation to report it to Colby's Title IX Coordinator. "Disclosure" may include communication in-person, via email/phone/text, or through class assignments.

To learn more about sexual misconduct or report an incident, visit <http://www.colby.edu/sexualviolence/>.

## Academic Accommodations

I am available to discuss academic accommodations that any student with a documented disability may require. Please note that you'll need to provide a letter from the Dean of Studies Office documenting your approved accommodations. *Please meet with me within two weeks of the start of the semester to make a request for accommodations so that we can work together with the College to make the appropriate arrangements for you.* Kate McLaughlin, Associate Director of Access and Disability Services ([kmclaugh@colby.edu](mailto:kmclaugh@colby.edu)) is the primary contact for accommodations and any questions related to educational testing and documentation.

Mental health: I care about my students' well-being and understand they may face mental health challenges. Students are encouraged to seek support from the College's available resources, including your advising dean and Counseling Services. (For immediate care, please call 207-859-4490 and press "0" to reach the on-call counselor.) I am willing to discuss reasonable accommodations during a crisis, but to fulfill our educational mission, students are expected to adhere to the attendance policy. Failure to do so because of mental health challenges may require consultation with the Dean of Studies Office.

## Athletic Participation

While Colby College is supportive of athletic participation by its students, academics takes priority over athletics. Both NCAA and Colby rules prohibit missing class for practices. In the case of overlapping

commitments between class and athletic competitions, the student must meet with the professor as soon as possible to discuss these overlaps. The student may request permission to miss class and make up the missed work; the instructor has final authority either to grant or to withhold permission

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