

Course Syllabus -- Objectives, Expectations, Policies and Procedures

Biology 201 - Ecology and Evolution
Spring 2019

Time and Place: Tuesday and Thursday 9:30-10:45am, Genome Science Building Room G200

Instructors:

Dr. Mara Evans

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Office Hours: Mon 2:30pm-3:30pm

Or by appointment at

maraevans.youcanbook.me

Dr. Christina Burch

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Office Hours: Weds 2:30pm-3:30pm

Or by appointment at

christinaburch.youcanbook.me

****Please register for office hours using the Sign-up feature on our Sakai website.** We are happy to meet with you by appointment outside of our scheduled hours if necessary.

Teaching Assistants:

Jeeyun Lee

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Email: jeyn978@live.unc.edu

Office Hours: email for appointment

Sections: 703, 704, 705

Andrew Isdaner

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Sections: 701, 702, 707, 708

Jeff Plumlee

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Section: 706

Welcome to BIOL 201 - Ecology and Evolution! With worldwide concerns like global warming, population growth, food and water security, and emerging diseases, it is particularly important for you to understand how your decisions affect the ecosystems around you. In order to make informed decisions you will need a basic understanding of the principles of evolution and ecology. Evolution is the most fundamental concept in biology; it provides the basis for understanding the origin of *all* biological phenomena. Ecology can be viewed as the theater within which the evolutionary play takes place. Evolution cannot be understood in the absence of ecology and ecology cannot be understood without evolution. Both are essential for a complete understanding of virtually all facets of biology, including how the incredible diversity of life around us originated and is maintained.

By the end of this course you will be able to do the following:

1. **Explain** the origin of species in the context of natural selection;
2. **Explain** how natural selection is one mechanism of evolution, and contrast it with other mechanisms of evolution;

3. **Explain** how the interactions between organisms and their physical environments result in changes over evolutionary time (by natural selection), leading to the organismal diversity we see today.
4. **Explain** how the interactions between organisms and their environment are related to tradeoffs, feedback, networks at a variety of different scales

Prerequisites: BIOL 101 and CHEM 101, with grades of C or better. We assume that each of you has had the equivalent of a semester course in biology wherein you learned Mendelian genetics and enough basic biology to know the major groups of organisms and the terms used for describing them. We also assume a solid background in high school algebra.

Course Website: <http://sakai.unc.edu>

This syllabus, the lecture outlines, guided reading questions, and other useful materials will be posted on the course website throughout the semester. *It is your responsibility to check it and your UNC email account regularly.*

Required Textbooks:

1. SimUText Ecology electronic textbook. Available for purchase from UNC Student Stores and from the SimUText website:
<https://www.simutext.com/student/register.html#/key/UAGw-kTWx-xFvh-ffBq-aHWN>
See instructions for how to register under Sakai Announcements.
2. Bergstrom C.T. and Dugatkin, L.A. 2016. *Evolution*, 2st Edition. WW Norton and Company (Editors). Available anywhere textbooks are sold (including UNC Student Stores).

Reading: Reading assignments are listed on the lecture schedule, and will be drawn either from the course textbooks or they will be posted on the course Sakai site. Readings should be completed ***prior*** to the lecture for which the reading is assigned.

Guided Reading Questions (GRQs) are provided for readings from the Bergstrom and Dugatkin textbook. GRQs are meant to help you read more efficiently by focusing your attention on the material that is most relevant for our class. ***GRQs are not graded.*** You will find the GRQs in the Resource folder on the Sakai site. Note that SimUText provides GRQs embedded inside the readings.

READING ASSIGNMENTS/QUIZZES (10% of your grade): Accompanying every reading assignment will be either a **Sakai Reading Quiz** (for textbook readings) or **SimUText Graded Questions** (for Simutext readings) that test your comprehension of the reading. These reading quizzes are required, must be completed by 9:30am the day of class, and will be graded for correct answers. Please see the lecture schedule for more details. The purpose of these activities is to help you practice using your knowledge and ensure that you come to class prepared to engage more actively with the material you have read. No late assignments or quizzes will be accepted.

CLASS PARTICIPATION (8% of your grade): We will be using *Learning Catalytics (LC)* as our classroom response system. There is a small fee to use this service, unless you already have an active LC account within the last 6-12 months.

Please be sure you are registered with LC before the first class: www.learningcatalytics.com. **You must register using your official UNC email address as your login name and your UNC PID as your student ID. No exceptions!** Complete instructions for LC registration can be found on our Sakai website in the Resources folder. The file is called “Instructions to Register for Learning Catalytics.” If you already have an LC account from a previous class you do not need to create a new account, just make sure you can log in successfully.

You can access LC on any mobile device that has wifi access. We recommend a phone or a tablet, but you may bring your laptop to class if you wish (*but see the Digital Etiquette section below*). Remember that when using a web browser to respond to poll questions, you need to log into your LC account first.

GROUPS

Students learn more when they work in small groups of peers to discuss issues and solve problems. By Tuesday, January 29, you will be assigned to a group of 2-3 students. ***If you have a seating request a Sakai announcement will be posted with instructions for how to file that request before January 25th.*** In every class meeting, you will sit with your group in a designated area. We encourage you to get to know your group members because you will work with them throughout the semester. Collaborating with others is an important skill in all professions, and we are available to help you to solve interpersonal problems that may arise within your group.

If you are experiencing conflict with your group members, you may decide to invoke the “Terminator Clause.” When you work in a group, it is possible that some team members will contribute more than will others. Over time, this can be a critical problem if one person demonstrates a lack of commitment to the team (e.g., failing to contribute to group assignments). In such an instance, we reserve the right to “fire” that member. Firing involves a two-step process: First, the team (in consultation with us) gives the wayward member a warning that includes the wayward teammate negotiating with the entire team about how he or she is going to be a better teammate. Second, if the member continues to behave inappropriately, they will be terminated from the group. Assignments from the point of termination to the end of the semester will be completed as an individual. Bad teammates usually show their tendencies early, so let a problematic group member know his or her behavior is not acceptable early.

There will be many opportunities for participation throughout the semester. You will be given 12 “freebie points” to account for technical difficulties and any kind of absences. In other words, you will receive up to 12 points for questions that you did not answer. We will not make any other accommodation for missed questions and will not provide opportunities to make up missed poll questions. Each point earned for participation is 50% participation and 50% correct answer (some questions may have multiple correct answers). There will be opportunities during the semester when you can earn double participation points for a question (aka “Double Days”). These “Double Day” questions will not be asked via LC, but as written activities. Double days will not be announced prior to class. **Note: if we determine that you are not physically present in class while answering poll questions, you will automatically forfeit all participation points for the semester (8% of your grade) and your case will be reported to the UNC Honor Court (see Upholding the Honor Code below).**

EXAMS (72% of your grade): There will be 3 midterms (16% each) and a final exam (24%). The midterm exams are not cumulative, except that the advanced material at the end of the course builds on the basic material taught in the beginning. The final exam is cumulative (details below). Exam questions will be taken from lectures, recitation material, and assigned readings.

Exams will consist of a variety of question types including: true-false, multiple choice, fill in the blanks, and short answer. Exam style questions will be given for practice during many lectures. Your final exam will be cover 50% material from the last portion of the class, and 50% material you had been previously tested on.

Permission to miss a midterm examination will be granted only in extreme circumstances (e.g. severe illness), must be certified as University excused by the UNC Dean of Student's office , and permission to miss an exam must be obtained *in advance* (at least two hours before the exam starts, but the sooner you let us know, the better!). Please note that unless you are an athlete or affiliated with UNC athletics, missing an exam to spectate at a sporting event does not constitute an extreme circumstance. In the event that you obtain permission to miss one midterm examination, you will be offered the option of 1) taking a makeup exam, or 2) of not taking the exam, in which case your overall exam grade will be based on the remaining three exams (midterms 21% each and the final will be 30%). Midterm exams that are missed without advance permission will be given a score of zero points. Students who miss two exams or fail to take the final exam, will fail the course.

RECITATION (10% of your grade): Ten percent of your grade will come from work done in and for your weekly recitation section. Refer to the separate recitation syllabus for details.

GRADE CALCULATION: Your letter grade will be based on the sum of your performances on quizzes, in-class participation, exams, and recitation according to the following scale:

A:	93-100%	C+:	76-79.9%
A-:	90-92.9%	C:	73-75.9%
B+:	86-89.9%	C-:	70-72.9%
B:	83-85.9%	D:	65-69.9%
B-:	80-82.9%	F:	<65%

In order to achieve a fair grade distribution, at the end of the semester, the instructors may *adjust* grade thresholds class-wide to improve your letter grades; the thresholds will under no circumstances be adjusted to lower your grades. **There will be absolutely NO appeals regarding the final grading scale (e.g. We will not round a score of 89.9 to a 90.0).**

Grading disputes: Scores and final course grades will be changed **ONLY** in the event that an exam question was mis-graded or if exam points were totaled incorrectly. If your exam points were added incorrectly, please see your TA and we will be happy to make a correction. All other requests for exam re-grading must be in the form of a **WRITTEN** appeal to the professor teaching that material justifying why your answer should be accepted. This appeal should be submitted via Gradescope (the online exam grading platform we use). For every regrade request we reserve the right to re-grade your entire exam, therefore a regrade request could lead to an increase, decrease, or no change in your exam score. All appeals for changes must be made within 7 days after the exam is returned. We will not re-grade any question or exam after the 7 days have elapsed, but will still work to correct exam point totals if you find an error.

Communicating with your instructors: This semester we will have supplemental instructors and multiple peer mentors assisting our class. These are former BIOL 201 students who are

volunteering their time to assist you both in and out of the classroom. Supplemental Instructors will hold 1-2 hours of supplemental instructions outside of class each week (time and locations will be posted to Sakai, and Course.Care). These sessions will host 20-40 people. Peer Mentors will host one-on-one or tutoring sessions often in Wilson 230, but check Piazza or the website Course.Care for more details about time and location. Please make use of these wonderful people. You will see them in class each week as they will be circulating and helping you address problems in class.

Piazza: This semester we will be hosting class discussions on Piazza! The quicker you begin asking questions on Piazza, the quicker you will benefit from the collective knowledge of your classmates and instructors. We encourage you to ask questions when you are struggling to understand a concept—you can even do so anonymously. We, your instructors, view Piazza largely as a forum where students help each other. The teaching staff will weigh in occasionally, but only after we see solid effort to tackle a question. Rather than ask, “What is the answer to question 2?” please tell us what you think the answer is, and why you think it’s correct (or not), or tell your colleagues where you are stuck! This approach sparks conversation, which leads to learning. Also, please make sure to re-read the syllabus and lecture schedule **before** asking a logistics question! If you have any problems or feedback for the developers, email team@piazza.com.

Find our class page at: <https://piazza.com/unc/spring2019/biol201007spring2019>

We are **BIOL 201.007 Spring 2019: Evolution and Ecology (Burch-Evans)**

Digital Etiquette:

This course will require you to use your laptop and/or cell phone during class time. Please be respectful of your classmates and restrict your use of digital devices to course content. Despite what you may know about yourself, multi-tasking is actually a myth and the brain cannot perform two or more tasks simultaneously. Please be respectful of your own learning and those around you who will be distracted as you scroll through Instagram, or catch up on basketball highlights.

If we see that you or your peers are distracted, we will ask you to put your devices away and you may forfeit your ability to earn participation points that day. There will be times when you have completed your work or answered a poll question, but your peers have not. We ask that you assist your peers when appropriate or use the time to review your notes while you wait. We understand that your devices connect you to your friends and family, but the classroom should be a place apart, however briefly, from the outside world and distractions. You will learn more if you concentrate on the course while you are here, and your classmates will thank you for not impeding *their* ability to learn. If you have to answer a text or a phone call, please step out of the room and return once you have completed your conversation.

Students needing accommodations: Please contact an instructor within the first two weeks of class if you will need special accommodations.

HOW TO BE SUCCESSFUL IN BIOL 201:

Attendance in lectures is essential for success in this course. If you must miss a lecture, obtain a set of notes from a friend (we will also post some lecture slides on the course website). Do the reading and assignments carefully before the lecture because it will be much easier for you to understand the lectures and to participate in the discussions. After class, go back to the book and

study the points we have stressed. There is more in the books than we can cover in class. You are not responsible for the subjects we do not cover. However, reading the entire chapter (indeed the entire book) will improve your understanding of the subject. While we will only test subjects that we have covered in class or recitation, additional examples from the texts may prove very helpful on the exams!

Take hand written notes using the lecture outlines. Research shows that students who take handwritten notes learn more (research paper posted to our Sakai site). Print out the lecture outlines before coming to class. The slides will be posted after class, and comparing your handwritten notes to the slides will be a great way to study. Use a non-laptop device to answer your Learning Catalytics questions.

Ask for help early and often. Attend Supplemental Instructions sessions or visit with a Peer Mentor regularly. Visit your TA or your professor during office hours. Office hours are a great opportunity to discuss matters *unrelated* to class (e.g. your research and career interests).

Uphold the Honor Code. Academic honesty means that we respect each other and the work that we do; this means we behave with integrity in and out of the classroom, and do not lie, cheat or steal (e.g. plagiarism is a form of stealing). The University of North Carolina at Chapel Hill has had a student-led honor system for over 100 years. It is our responsibility to report any instances of academic dishonesty and violations of the Honor Code. The student-led Honor System is responsible for adjudicating any suspected violations of the Honor Code. *All suspected instances of academic dishonesty will be reported to the Honor System and students will receive a zero on the assignment or exam in question.* Your full participation and observance of the Honor Code is expected. Please report any violations that you observe. Information, including your responsibilities as a student is outlined in the Instrument of Student Judicial Governance (here: <https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf>).

Academic Honesty and Learning Catalytics: In order to earn your participations points you must be physically in the classroom and answer questions during class time. If it is determined that you are not physically present while answering poll questions you will automatically forfeit all participation points for the semester (8% of your grade) and your case will be reported to the UNC Honor Court (see Upholding the Honor Code above). We believe that honesty is important, and we know that you will learn more by being physically in class and problem solving with your classmates. If you have to miss class, remember that we give you some “freebie points” to accommodate rare unavoidable absences.

College can be challenging in unexpected ways. It is possible that at some point this semester your multiple competing personal responsibilities and interests may get in the way of your academic success. It is also possible that you may get sick or have other personal emergencies. The bottom line is this: asking for help is a sign of strength and self-care! **Please ask for help early and often!** Small problems are easier to cope with than escalated issues, or waiting until the end of the semester. While we sincerely hope that you will let us know when things are not going well, here are other campus resources you can turn to, as well:

- **Dean of Students:** If at any time during the semester you experience a personal or family illness, loss, financial stress, academic access, living issues, interpersonal violence response, alcohol or similar substance related issues, and other forces that may interfere

with your well-being and success and/or academic retention please contact the Dean of Students immediately (or contact your professor and we will do so for you).

Website: deanofstudents.unc.edu

- **Academic Advising:** Your academic advisers are familiar with all of the campus policies, procedures and requirements.
Website: advising.unc.edu
- **Counseling and Psychological Services (CAPS):** If you are experiencing any distress please speak with a medical professional in a confidential setting. The CAPS office has daily drop in hours or you may call them for an appointment (919-966-2281) or schedule online (healthyheels.unc.edu).
Website: campushealth.unc.edu/services/counseling-and-psychological-services.
- **LGBT Center:** Provides educational services, resources and advocacy.
Website: lgbtq.unc.edu
- **Carolina Women's Center:** Aims to provide an equitable working and educational environment regardless of gender. Provides assistance to all individuals regardless of gender orientation.
Website: womenscenter.unc.edu
- **International Student and Scholar Services:** offers services to help international students adjust to life in North Carolina and UNC.
Website: iss.unc.edu

We reserve the right to make changes to the syllabus, including the scheduled dates for exams or lecture topics and the assignment of additional readings. These changes will be announced as early as possible so that students can adjust their schedules.