

Welcome to Honors Biology III: Evolution and Ecology (Remote Version)

About the Course

Instructor: Brendan Bohannan
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Office Hours: Wednesdays from 11:00AM – 12:00PM and by appointment, via Zoom (or another remote platform, as requested).

Laboratory instructor: Laurel Pfeifer-Meister (lpfeife1@uoregon.edu). Laurels's office hours will be posted on our course website.

Graduate Teaching Assistants (GEs): Hope Healey (hhealey@uoregon.edu) and Acadia DiNardo (acadiad@uoregon.edu). Hope and Acadia's office hours will be posted on our course website.

Undergraduate Teaching Assistants (BTUs): Anna Kulawiec (akulawie@uoregon.edu), Frances Conable (fconable@uoregon.edu), Alina Salagean (asalagea@uoregon.edu) and Rach Allison (rallison@uoregon.edu).

Prerequisite: BI 282H is required.

Web Site: Our web site is accessible via the UO Canvas server. Login requires your UO Information Services (Computing Center) email address and the corresponding password.

How I will contact you: All of my communication to you outside of office hours will take place via email.

Specifically, I will use the email registered to you by the University of Oregon. If you use another ISP for your email, make sure you arrange to have your UO email forwarded to it, or arrange to change your registered email address with UO.

Required readings: There is a required textbook for this course: "Biological Science, volume 2" by Scott Freeman et al. (fifth edition, Pearson). This is available at the UO Bookstore.

I will occasionally assign supplementary reading from other sources. Some of the supplementary reading assignments will be available for download from the course website as pdf files. To read these you will need Adobe Acrobat Reader, free software that is installed on UO computers and can be downloaded from the following website:
<http://www.adobe.com/products/acrobat/readstep2.html>.

Course Goals

I have three goals for this course:

Help you learn the central ideas in the sciences of evolutionary biology and ecology — This course is not a panoramic overview of ecology and evolution. These are very broad and integrative sciences. In a 10 week course an overview could only be cursory. I feel strongly that as honors students you will learn more if we take the time to explore in detail some of the central ideas, major controversies and hot topics in ecology and evolution.

Help you become a more sophisticated consumer of science — I would be very happy if all of you went on to become professional biologists. However, this is unlikely to happen. Although most of you will go on to some other occupation, you will all be consumers of science, including biological science. One of my goals this quarter is to provide you with the experience necessary to be a better consumer of science, to know when you are being hoodwinked by the misuse of the scientific method. We will regularly discuss recent scientific studies and ongoing scientific controversies.

Help you continue your transition from student to scholar —A scholar is someone who can think critically, argue logically, write clearly, and read effectively. Most importantly, a scholar understands how to organize and use knowledge, and takes responsibility for their own learning. My goal is to provide you with opportunities to practice all of these skills.

How I Will Evaluate Your Learning

Quizzes (20%) – There will be quizzes each week focused on the readings and the lecture material.

Examinations (40%) – midterm (15%) and final (25%). Exam questions may include questions previously used in the quizzes. The exams will cover material from the reading and the lecture material.

Laboratory assignments (40%) – More information regarding the expectations for laboratory assignments will be provided on our class website.

Important Deadlines

Quizzes: due each Friday, by 6PM.

Midterm: Wed., May 13.

Final exam: Wed.. June 10 (at **10:15AM**).

My Expectations

Responsibility. I expect every one of you to take responsibility for your learning. This means coming to class prepared, working hard on class assignments both in and outside of class, and asking questions regularly.

Courtesy. I expect each of you to arrive to class on time, and to respect the views of others.

Honesty. I expect every one of you to abide by the University's policy on academic misconduct, described at

<http://conduct.uoregon.edu>

Plagiarism, cheating and other acts of academic dishonesty are serious offenses and will be dealt with accordingly.

About Me

I joined the University of Oregon faculty in September of 2006, after 8 years on the faculty at Stanford University. My research group studies the ecology and evolution of microorganisms, in environments ranging from rainforests to the human body. I am particularly fascinated with the diversity of microbial life and much of my research is focused on understanding the causes and consequences of microbial biodiversity.

Tentative course schedule

Week	Date	Topic	Reading*
Generation of biological variation			
1	3/30-4/3	Introduction to course & topic	
1		Introduction to evolution	25.1 – 25.2
1		Natural selection	25.3 – 25.5
2	4/6-10	Evolutionary processes I	26.1 – 26.3
2		Evolutionary processes II	26.4 – 26.6
2		Speciation	27.1 – 27.4
3	4/13-17	Phylogenetics I	28.1 – 28.2
3		Phylogenetics II	28.3 – 28.4
3		Phylogenetics III	TBA
Maintenance of biological variation			
4	4/20-24	Introduction to ecology	52.1 – 52.3
4		Behavioral ecology I	53.1 – 53.3
4		Behavioral ecology II	53.4 – 53.6
5	4/27-5/1	Populations I	54.1 – 54.2
5		Populations II	54.3 – 54.4
5		Populations III	54.5 – 54.6
6	5/4-8	Communities I	55.1 – 55.2
6		Communities II	55.3
6		Communities III	55.4
Classification of biological variation			
7	5/11-15	Bacteria/Archaea	29.1 – 29.3
7		Midterm Exam (May 13)	
7		Protists	30.1 – 30.3
8	5/18-22	Plants	31.1 – 31.3
8		Fungi	32.1 – 32.3
8		Animals	33.1 – 33.3
9	5/25-29	Memorial Day (May 25)	
9		Viruses	36.1 – 36.3
Consequences of biological variation			
9		Energy flow/nutrient cycling	56.1 – 56.2
10	6/1-5	Global change biology	56.3
10		Biodiversity	57.1 – 57.2
10		Ecosystem function	57.3 – 57.4

*Numbered readings refer to sections in Freeman, *Biological Science (5th)*, vol 2 *Evolution Diversity and Ecology*, Pearson; TBA = to be assigned. TBA readings will be posted on the class website.

** Final Exam date/time: **10:15AM Wed., June 10.**

General UO Course Information

Class Courtesy

Class rosters are provided to the instructor with the student's legal name. We will gladly honor your request to address you by an alternate name or gender pronoun. Please advise us of this preference early in the quarter (or before) so that we may address you properly.

Open inquiry, freedom of expression, and respect for difference are fundamental to a comprehensive and dynamic education. We are committed to upholding these ideals by encouraging the exploration, engagement, and expression of divergent perspectives and diverse identities. Courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Our course is a learning environment, and as such should be a safe, inclusive and respectful experience. Being respectful also includes using preferred pronouns for your classmates. Disrespecting fellow students as well as combative approaches, tones and/or actions are not acceptable. Please make us aware if there are dynamics that impede your (or someone else's) full engagement.

Academic integrity

All students will be expected to adhere to the University's guidelines on academic integrity as outlined in the Student Conduct Code: <https://policies.uoregon.edu/vol-3-administration-student-affairs/ch-1-conduct/student-conduct-code>. As detailed in the policy, academic misconduct means the violation of university policy involving academic integrity. This includes cheating ("any act of deception by which a student misrepresents or misleadingly demonstrates that the student has mastered information on an academic exercise that the student has not mastered"), and plagiarism ("using the ideas or writings of another as one's own.") The instructors have a zero tolerance policy for academic dishonesty. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures.

Discrimination and Harassment

Prohibited Discrimination and Harassment

Any student who has experienced sexual assault, relationship violence, sex or gender-based bullying, stalking, and/or sexual harassment may seek resources and help at safe.uoregon.edu. To get help by phone, a student can also call either the UO's 24-hour hotline at 541-346-7244 [SAFE], or the non-confidential Title IX Coordinator at 541-346-8136. From the SAFE website, students may also connect to Callisto, a confidential, third-party reporting site that is not a part of the university.

Students experiencing any other form of prohibited discrimination or harassment can find information at respect.uoregon.edu or aaeo.uoregon.edu or contact the non-confidential AAEO office at 541-346-3123 or the Dean of Students Office at 541-346-3216 for help. As UO policy has different reporting requirements based on the nature of the reported harassment or discrimination, additional information about reporting requirements for discrimination or harassment unrelated to sexual assault, relationship violence, sex or gender based bullying, stalking, and/or sexual harassment is available at [Discrimination & Harassment](#).

Accessible education statement of support

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center at 541-346-1155 or uoacc@uoregon.edu.

Campus resources to support your learning

Tutoring and Academic Engagement Center (<https://engage.uoregon.edu/services/>) Math and writing support in addition to tutoring, study skills support, and Class Encore. (541) 346-3226, engage@uoregon.edu.

Counseling Center Call anytime to speak with a therapist who can provide support and connect you with resources. (541)346-3227.

Accessible Education Center The University of Oregon is working to create inclusive learning environments. The instructor believes strongly in creating inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your participation, please notify us as soon as possible. You are also encouraged to contact the Accessible Education Center. If you are not a student with a documented disability, but you would like for us to know about class issues that will impact your ability to learn, we encourage you to come visit during office hours so that we can strategize how you can get the most out of this course. (541) 346-1155, uoacc@uoregon.edu.

Center for Multicultural Academic Excellence (CMAE) mission is to promote student retention and persistence for historically underrepresented and underserved populations. We develop and implement programs and services that support retention, academic excellence, and success at the UO and beyond. We reaffirm our commitment to all students, including undocumented and tuition equity students. (541) 346-3479, cmae@uoregon.edu.

Reporting

The instructors of this class are Student-Directed Employees. As such, **if you disclose to us, we will respond to you with respect and kindness. We will listen to you, and will be sensitive to your needs and desires. We will not judge you. We will support you.** As part of that support, we will direct students who disclose sexual harassment or sexual violence to resources that can help. **We will only report the information shared to the university administration when you as the student requests that the information be reported** (unless someone is in imminent risk of serious harm or is a minor). Please note the difference between ‘privacy’ and ‘confidentiality.’ As Student-Directed Employees we can offer privacy because we are not required to report certain information to the university. However, we cannot be bound by confidentiality in the same way that a counselor or attorney is. The sharing of information by confidential resources such as these is protected by federal and state laws. Any information that we as student-directed employees receive may still be accessed by university or court proceedings. This means, for example, that we could still be called as a witness or required to turn over any related documents or notes that we keep.

Please note also that we are required to report all other forms of prohibited discrimination or harassment to the university administration. Specific details about confidentiality of information and reporting obligations of employees can be found at titleix.uoregon.edu.

Mandatory Reporting of Child Abuse

UO employees, including faculty, staff, and GEs, are mandatory reporters of child abuse. Child abuse pertains to individuals who are under the age of 18. This statement is to advise you that your disclosure of information about child abuse to the instructor may trigger my duty to report that information to the designated authorities. Please refer to the following links for detailed information about mandatory reporting: [Mandatory Reporting of Child Abuse and Neglect](#).