WILD 2200 Ecology of Our World (Fall 2021)

Lectures are held Tuesdays and Thursdays, 15:00-16:15, in BNR 102.

This is a Breadth (Life Science) course and it counts towards USU’s Sustainable Systems minor

Course Description

The grand goal of this course is for you to gain ecological literacy: the capacity to understand the fundamental relationships that occur among different organisms and their environment, including you and your environment.

Ecology is a branch of science, and so we must first learn:

- What is science and the scientific method?
- How is scientific knowledge different from other types of ‘knowing’?

Once we’ve learned about science, we shall move on to learn about one particular scientific discovery that sets the stage for ecology:

- What is evolution by natural selection and how does it work?
- What are genes? What are species? How do species appear and disappear?

Once we know how science is done and that evolution by natural selection underlies the structure and complexity of life on earth, we are ready to move on to learn about ecology:

- Population growth
- Life history
- Trophic interactions
- Nutrient and energy flows and cycles
- Mutualistic interactions
- Ecological communities and ecosystems
- What do ecologists do?

Course Objectives

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

1. Identify and explain fundamental ecological principles and generalizations.
2. Critically evaluate ecological ideas and perspectives.
3. Effectively communicate scientific information and ideas in writing.

COVID-19 Classroom Safety Protocols

The B.1.617.2 (‘delta’) variant of the SARS-CoV-2 (the virus that causes coronavirus disease; Covid-19), is currently the dominant variant in Utah (and elsewhere). The delta variant is highly contagious, and can cause severe respiratory illness, with long-term side effects, and death. It is moreover transmissible (although likely to a lesser extent) by and among fully vaccinated people, and can sometime result in severe illness and death even in fully vaccinated people. There is a wall-to-wall consensus among epidemiologists and public health experts that wearing face masks substantially reduce the spread of this airborne virus. I am consequently imploring all of you to wear your masks, in any indoor setting, and particularly in the classroom. If, for whatever reason, you rather not wear a mask while in the classroom, please consider attending lectures remotely via a live Zoom link. Masks save lives not so much because they protect the person wearing them from breathing the virus in, but more because they drastically reduce the amount of the virus emitted (by a masked infected person) into the air around us. Masks are inconvenient, and they sometimes make it hard to understand what you are saying (try saying it with a foreign accent...). Masks also, quite literally, save lives; wearing a mask is an act of true kindness and caring towards people around us.

While not mandated, USU encourages and welcomes the wearing of masks in all university building, especially within 6 feet of others. Furthermore, it is strongly encouraged to take measures to mitigate risk as recommended by federal and state public health officials. These measures include getting fully vaccinated, staying home if you are sick (even with mild symptoms), and maintaining good hygiene including frequent hand washing. Testing will be provided, without charge, throughout the semester and the USU COVID Webpage (https://www.usu.edu/covid-19/) will provide up-to-date information. Please remember; COVID can have significant impact on the health and safety of those around you so remain vigilant and respectful.
Instructor

Instructor Name: Tal Avgar
Contact information: tal.avgar@usu.edu
Office (NR 320) Hours: Tuesdays and Thursdays 13:30-14:30, or by email appointment. Note, the best way to talk to me is over Zoom - shoot me an email and we'll set something up.

TA Name: Danielle Berger
Contact information: danielle.berger@usu.edu
Office (BNR 104) Hours: TBD, but please always feel free to email me with questions or to schedule an appointment to meet (in person or over Zoom)

Evaluation Methods and Criteria

We will have a short quiz at some point during most lectures; these quizzes will form 10% of the final grade.

Three written assignments would together form 30% of the final grade:

- The first assignment will be due on September 26 and would form 5% of the final grade
- The second assignment will be due on October 10 and would form 10% of the final grade
- The third assignment will be due on December 5 and would form 15% of the final grade

Mid-term (multiple choice exam on Canvas) on October 26 would form 30% of the final grade

Final (multiple choice exam on Canvas) on December 14 would form 50%

(Yes, if you work hard you can get 120% in this course!)

Grade Scheme

The following grading standards will be used in this class:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>120 % to 93.0%</td>
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<tr>
<td>A-</td>
<td>&lt; 93.0 % to 90.0%</td>
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<tr>
<td>B+</td>
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<td>B</td>
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<td>D+</td>
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<td>D</td>
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<td>F</td>
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</tbody>
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Course Schedule/Outline (subject to change)

August 31
Introduction: What is this course about? What are my expectations? What are yours? What is Ecology?

September 2
Science: What is it and how does it work I

September 7
In-class writing workshop (Kendall Becker)

September 9
Science: What is it and how does it work II

September 14
Science: Human-induced climate change I

September 16
Science: Human-induced climate change II

September 21
Science: Is climate change ‘bad’?

September 23
Evolution by natural selection: What is it and how does it work?

September 26 (midnight)
First assignment due: 150 words (plus/minus 15) composition titled ‘Science and human-induced climate change’

September 28
Evolution by natural selection: What is the ‘unit of selection’? What are ‘species’?

September 30
Evolution by natural selection: Climate adaptation?

October 5
Feedback on first assignment (Dani)
Guest lecture (Dr. Simona Picardi)

October 7
October 10 (midnight)
Second assignment due: 300 words (plus/minus 30) composition titled ‘Evolution by natural selection in the context of human induced climate change’

October 12
Ecology: Population growth II

October 14
Ecology: Life history

October 19
Feedback on second assignment (Dani)
Ecology: Trophic levels

October 21
Mid-term exam

October 26
Feedback on mid-term
Ecology: Trophic and mutualistic interactions I

October 28
Guest lecture (Dr. Erica Stuber)

November 2
Ecology: Trophic and mutualistic interactions II

November 4
Ecology: Nutrient and energy flows and cycles

November 9
Guest lecture (Dr. Kari Veblen)

November 11
Ecology: What is an ‘ecological community’?

November 16
Guest lecture (Dr. Larissa Yocom)
November 18
Ecology: What is an ‘ecosystem’?

November 23
Ecology: What are ‘invasive species’ and are they ‘bad’?

November 30
Ecology (and Evolution): COVID-19

December 2
Ecology: Meat

December 5 (midnight)
Third assignment due: 450 words (plus/minus 45) composition titled ‘If I were to be an ecologist, this is what I would study, and this is why’

December 7
TBD

December 9
Feedback on third assignment (Dani)
Pre-exam Q&A

December 14
Final exam

**Attendance and Excused Absences Policy**

We will have a short quiz at some point during most lectures; these quizzes will form 10% of the final grade.

If you cannot attend class, please email Dani to let her know when and why.

**Mental Health**

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS) (https://counseling.usu.edu/).

Students are also encouraged to download the “SafeUT App” (https://healthcare.utah.edu/uni/programs/safe-ut-smartphone-app) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.

**Library Services**
All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc.

Classroom Civility

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 (https://studentconduct.usu.edu/studentcode/article5) for more information.

University Policies & Procedures

COVID-19 Classroom Accommodations

To ensure that you receive the appropriate accommodation for COVID-19 related challenges, the University requires you to fill out the COVID-19 Questionnaire (https://www.usu.edu/covid-19/questionnaire/index.php). Upon doing so, the University COVID CARE Team (https://www.usu.edu/covid-19/if-you-are-sick/care-team.php) will contact you to determine your needs and how to support you. The CARE Team will also contact your instructors and provide important direction on how best to accommodate your needs. For additional reference, please see USU's Attendance and Excused Absence (https://catalog.usu.edu/content.php?catoid=12&navoid=3160) policy and the COVID-19 Classroom Accommodations (https://www.usu.edu/covid-19/operations/accomodations) page.

Reducing COVID-19 Risk

You can help keep classes, events, and activities happening in person this semester by following these steps:

1. **Get vaccinated if you're able.** Vaccines are the best available tool to help stop the spread of COVID-19. They are safe, free, and easy to access.
2. **If you are vaccinated, let USU know.** Please upload your proof of full vaccination (http://aggiehealth.usu.edu/) to AggieHealth. If you are exposed to COVID-19, USU's case containment will not require you to quarantine if they know you are vaccinated and you do not have symptoms.
3. **Stay home if you're sick** and get tested for COVID-19 if you have symptoms or have been exposed. It’s important to not bring any illness to campus.
4. **Wear a mask indoors.** Public health experts recommend that even vaccinated people wear masks indoors in high COVID-19 transmission areas, which includes most of Utah.

If USU's COVID Case Containment team identifies an uncontained situation in the classroom, you will be notified of any temporary changes to your course delivery method through a Canvas announcement. Please make sure you are receiving immediate notifications of new Canvas announcements. The situation will be handled according to protocols on the COVID Classroom Exposure (https://www.usu.edu/covid-19/students/classroom-exposure) page.

Class Seating Charts (For In-Person Classes)

In classes with more than 10 students, a seating chart will be used to track where you are sitting. After the first week of classes, your instructor will tell you how to enter your seat number in Canvas. **You must sit in the same seat for the rest of the semester.** This is extremely important for tracking cases of COVID-19 and helping classes remain in person.

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 (http://www.usu.edu/hr/files/uploads/Policies/403.pdf) further defines academic freedom and professional responsibilities.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.
**Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined by the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating**: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually;”
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.

- **Plagiarism**: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: ARTICLE VI. University Regulations Regarding Academic Integrity
(https://studentconduct.usu.edu/studentcode/article6)

**Sexual Harassment/Title IX**

Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and USU Policy 339 (http://www.usu.edu/policies/339) address sexual harassment in the workplace and academic setting.

The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU’s Office of Equity (https://equity.usu.edu/) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment (USU Policy 305 (http://www.usu.edu/policies/305/)), and has designated the Office of Equity Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

**Withdrawal Policy and "I" Grade Policy**

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term ‘extenuating’ circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

**Students with Disabilities**

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (http://www.usu.edu/drc/) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu (mailto:drc@usu.edu)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

**Diversity Statement**

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: https://studentaffairs.usu.edu (https://studentaffairs.usu.edu/), (435) 797-1712, studentservices@usu.edu (mailto:studentservices@usu.edu), TSC 220
- Student Legal Services: https://ususa.usu.edu/student-association/student-advocacy/legal-services (https://ususa.usu.edu/student-association/student-advocacy/legal-services), (435) 797-2912, TSC 326,
- Access and Diversity: http://accesscenter.usu.edu (http://accesscenter.usu.edu/), (435) 797-1728, access@usu.edu (mailto:access@usu.edu); TSC 315
- Multicultural Programs: http://accesscenter.usu.edu/multiculture (http://accesscenter.usu.edu/multiculture), (435) 797-1728, TSC 315
- LGBTQA Programs: http://accesscenter.usu.edu/lgbtqa (http://accesscenter.usu.edu/lgbtqa/), (435) 797-1728, TSC 3145
- Provost’s Office Diversity Resources: https://www.usu.edu/provost/diversity (https://www.usu.edu/provost/diversity/), (435) 797-8176
You can learn about your student rights by visiting:
The Code of Policies and Procedures for Students at Utah State University: https://studentconduct.usu.edu/studentcode
(https://studentconduct.usu.edu/studentcode/)

**Grievance Process**

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII (https://studentconduct.usu.edu/studentcode/article7).

**Full details for USU Academic Policies and Procedures can be found at:**

- Student Conduct (http://www.usu.edu/studentconduct)
- Student Code (https://studentconduct.usu.edu/studentcode/)
- Academic Integrity (https://studentconduct.usu.edu/studentcode/article6)

**Emergency Procedures**

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

**Mental Health**

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