

Spring 2021 BIOL-1620-BW3 XL Syllabus

**BIOL
1620**

This Syllabus is a work in progress and subject to change

Course Description

This is part II of a two-semester biology course for science majors. We will start this course with a focus on evolution, and evolution will be the lens through which we examine the subjects that follow, including ecology, animal behavior, and physiology.

Course Objectives

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

1. Understand how evolution has shaped life on this planet, and why "Nothing in biology makes sense except in the light of evolution" (Essay by Theodosius Dobzhansky--required reading, so here it is: [Nothing in Biology makes sense.pdf \(https://usu.instructure.com/courses/643464/files/79839246?verifier=FqkBoxK9BFtpOFIosJglKiCa7q2Uic55JOct3Wc9&wrap=1\)](https://usu.instructure.com/courses/643464/files/79839246?verifier=FqkBoxK9BFtpOFIosJglKiCa7q2Uic55JOct3Wc9&wrap=1))
2. Explain how interactions with the abiotic and biotic environment shape populations (ecology)
3. Explain animal behavior through evolutionary, ecological, and physiological mechanisms
4. Understand how the basic functions of life can be met through various physiological solutions

Instructor

You know me, Kevin, but did you know there is a tutor/TA? Meet Ky Voorhees, kyvoor110@gmail.com. He will try to offer flexible one-on-one sessions over Zoom by appointment in addition to a weekly 1 hour review session on Tuesdays from 5:00-6:00 pm, and an office hour at noon on Wednesdays where he will open a Zoom meeting and be available for student questions.

Course Resources

Biology2e-OpenStax Textbook.pdf (<https://usu.instructure.com/courses/643464/files/79838821?verifier=h2hZU9MuyYk60KJFinviZTshQPxlAta7TKkrxO9x&wrap=1>) OR Campbell Biology OR Campbell Biology Essentials with Physiology

Primary literature as it is provided

Course Requirements

Each student will:

1. Take responsibility for their own learning
2. Work within a group for the benefit of all
3. Challenge other students

4. Help make the class interesting and successful
5. Be awesome!

Evaluation Methods and Criteria

My current grading philosophy (<https://presentio.us/view/d21b4b>) is that I want to teach in a non-coercive, non-punitive manner. Hence, I am taking full responsibility for the teaching while giving you the full responsibility to learn and to grade your learning. I do not expect you to grade yourself on a point-based system. I don't believe learning is well-enough understood to presume that we can measure it with tests. When you understand something you know you get it without someone trying to measure it. When you are confused, you know it, and taking away points gives you no new information. So, measure subjectively, taking into account as many factors as you can. You will report on your grade and provide a portfolio of your learning on three occasions (after midterm tests) and once again during finals week.

Grade Scheme

The following grading standards will be used in this class: F if you drop out early on. D if you give no effort and make no portfolio. C if you meet the objectives in a rather average manner. B if your work has led to a very good understanding of the content. A if you feel you have an excellent understanding of the content and have put in the time to really learn and push yourself. Note: you could walk into the class with an already excellent understanding of the subject matter. If you don't push yourself to learn new things, I don't think that should count as an A. Do you?

Note: Lab is a separate course, with a separate instructor. I anticipate a more traditional grading scheme, but that is up to the instructor.

Course Schedule/Outline

| WEEK | DAY | DATE | TOPIC | Chapter | OTHER |
|--------|-----|--------|--------------------------------------|---------|--|
| Week 1 | Mon | 18-Jan | NO CLASS: Martin Luther King Jr. Day | | |
| | Wed | 20-Jan | Intro to class; intro to evolution | 18 | |
| Week 2 | Mon | 25-Jan | Evolution | 18 | |
| | Wed | 27-Jan | Evolution | 19 | |
| Week 3 | Mon | 1-Feb | Evolution | 19 | |
| | Wed | 3-Feb | Evolution | 20 | |
| Week 4 | Mon | 8-Feb | Evolution | 20 | Test 1 and first portfolio submission and evaluation due by Feb 16 |
| | Wed | 10-Feb | Ecology | 44 | |

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|---------|-----|--------|------------------------------|--------|---|
| Week 5 | Mon | 15-Feb | NO CLASS: President's Day | | |
| | Wed | 17-Feb | Ecology | 45 | |
| Week 6 | Mon | 22-Feb | Ecology | 45 | |
| | Wed | 24-Feb | Ecology | 46 | |
| Week 7 | Mon | 1-Mar | Ecology | 47 | |
| | Wed | 3-Mar | Animal behavior | N/A | OpenStax does not include Animal Behavior we will find other resources |
| Week 8 | Mon | 8-Mar | Animal behavior | N/A | |
| | Wed | 10-Mar | Animal behavior | N/A | Test 2 and 2nd portfolio submission and grade evaluation due by Tues Mar 16 |
| Week 9 | Mon | 15-Mar | Intro to physiology | 33 | |
| | Wed | 17-Mar | Circulation and gas exchange | 39, 40 | |
| Week 10 | Mon | 22-Mar | Circulation and gas exchange | 39, 40 | |
| | Wed | 24-Mar | Animal nutrition | 34 | |
| Week 11 | Mon | 29-Mar | Endocrine system | 37 | |
| | Wed | 31-Mar | Osmoregulation and excretion | 41 | Test 3 and 3rd portfolio submission and grade evaluation due by Tues Apr 6 |
| Week 12 | Mon | 5-Apr | Nervous system | 35 | |
| | Wed | 7-Apr | Senses | 36 | |
| Week 13 | Mon | 12-Apr | Senses | 36 | |
| | Wed | 14-Apr | Motor system | 38 | |
| Week 14 | Mon | 19-Apr | Motor system | 38 | |

Wed 21-Apr Immune system 42

Week
15 Mon 26-Apr Reproduction and Development 43

Wed 28-Apr

Take final exam then submit portfolio and grade evaluation by Tues May 4

Week
16 Mon 3-May

Wed 5-May

Commencement
May 6-7

Attendance and Excused Absences Policy

Attendance is encouraged but not required. Work with your Team to make sure at least 3 people can attend on days when it is your Team's turn to be my "lecture guests."

EVERYTHING BELOW THIS POINT IS STANDARD LANGUAGE FROM THE UNIVERSITY

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. (<http://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 Protocols

In order to continue to provide a high standard of instruction at USU, and to limit the spread of COVID-19 during the pandemic, students are asked to follow certain classroom protocols. These protocols are in place not only for your safety but also the safety of the rest of the campus community. You will be asked to clean your desk area at the start of each class, sit in designated seats, wear face coverings, and follow dismissal instructions. There may be individual medical circumstances that prevent some students from using face coverings. These circumstances will be rare, but if they do exist, we ask that everyone be respectful. It is imperative that we each do our part so that on-campus instruction can continue.

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 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>)
- USU Selected Academic Policies and Procedures (<http://www.usu.edu/provost/faculty-life/syllabus.cfm>)
- USU Academic Policies and Procedures (<http://catalog.usu.edu/content.php?catoid=4&navoid=546>)
- Academic Freedom and Professional Responsibility Policy (<http://www.usu.edu/hr/files/uploads/Policies/403.pdf>)

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

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.