

Spring 2020 BIOL-1620-UT1 Syllabus

Biology II

Biol 1620 & 1625 | Spring 2020 – M, W 5:00 pm to 7:50 pm

Instructor:

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Welcome to BIOL 1620 (lecture) & 1625 (lab)! You will find the principles you learn will help you to gain an understanding of how biology is an integral part of your daily interactions.

Please take the time to review this syllabus thoroughly. It has all the information you need to be successful in this course. After you have read the syllabus, if any part of the course is unclear, please contact me. Remember, what you gain from this course reflects what you put into the course.

Meeting Times:

Monday and Wednesday, Room B120

Lecture/Class Discussion - 5:00 pm to 6:50 pm

Laboratory – 7:00 pm to 7:50 pm

Course Description:

This course is Part II to a yearlong course for biology majors and other students for advanced studies in biology. Part I (1610), focused on major concepts in cell biology, energetics, genetics, and natural selection and how they fit into an evolutionary framework. In Part II, the focus is on evolution, population genetics, speciation, structure, function, and physiology in living systems and ecology.

This course is designed to encourage the student to:

- Explain anatomy, physiology, behavior, ecology and evolutionary biology of life
- Explain variety among animal structure, function, and development
- Apply problem-solving skills in the biological sciences
- Apply base knowledge of general biology to the more advanced study of biology

Course Design:

As described in the course catalog this course consists of two lecture periods and two lab periods each week. The lecture periods will consist of lectures, discussions and other activities designed to encourage student learning of the objectives listed above. More specific learning objectives for each chapter of the text will be posted on Canvas. The objectives consist of terms to define, ideas to explain, and ideas to debate. It is expected that students will study the objectives and the chapter ahead of class so that they can be prepared to ask questions about scientific ideas. Helping students understand these objectives will constitute the focus of each lecture period. The lab period will include hands-on experiences designed to either provide real-world examples of what is discussed in the lecture and/or to provide opportunities for the student to develop and test hypotheses.

Textbook:

Biology: How Life Works; Morris, J. 2013. ISBN-13: 978-1429218702

SimuText course packet from SimBio. This is required for the lab portion of the course. If you are not registered for BIOL-1625 you do not need to sign up for this. Details for signing up will be covered in class and on Canvas but the cost is covered by your lab fees.

Course Fees:

Registration for this course requires payment of a \$95 lab fee. This fee is used to buy SimBio simulations, lab supplies, and equipment for this course that are not covered by your tuition payments.

Lecture Activities: Grades for the lecture portion of the course are separate from the lab portion of the course. You will receive two final grades one for lecture and one for the lab (see below). Your lecture activities will include exams, quizzes, and other items. Completing assigned readings in the text prior to coming to class is expected and will improve your grade in the class. Exams will not include material directly from labs but because of obvious content overlap material from labs will enhance your knowledge for exams.

Lab Activities: Grades for the laboratory portion of the course are separate from the lecture. Labs are designed to investigate lecture material in greater depth and complement the lecture, but grades will be separate. Please go to the BIOL-1625 Canvas page for the Lab Syllabus for a specific discussion of points and assignments

Course Management System CANVAS: You will need to use the course website on CANVAS to access weekly guided study questions (see below), current grade status, course information, link to my email, study guides, links to useful learning resources and more. Go to online.usu.edu and login to CANVAS using your A number and password, click on Courses in the top menu, and then click on the Biology 1620 link. We will also be using the portal website for the textbook and there will be required assignments that you will need to access and complete.

Quizzes & Exams: Quizzes and exams include all lecture material and readings covered since the previous exam. The format includes multiple-choice, fill-in-the-blank, and short essays. You have twenty-four quizzes throughout the semester each worth between 7 to 14 points depending on the chapter. I will drop the lowest two of the nine. There are six Exams. The exams are taken in the testing center and will be offered for multiple days (typically Wednesday through Saturday) to allow students with challenging schedules time to complete exams. I will drop the lowest exam out of the six.

Grading Summary:

Final grades will be given according to the student's final percentage of all graded assignments and exams with the following breakdown.

A = 93-100%

A- = 90-92%

B+ = 87-89%

B = 83-86%

B- = 80-82%

C+ = 77-79%

C = 73-76

C- = 72-70%

D+ = 67-69%

% D = 60-66%

F = below 60%

Quizzes – 24 @ range 7 to 14 points (lowest 2
dropped) 211

Exams –6 @ 100 points (lowest dropped) 500

Total Lecture: 711

Course Policies:

Instructor's Responsibilities: I will help you learn by engaging you in the material and challenging you to think like a biologist. You can expect me to attend all lectures, read the assigned material, and prepare examinations and quizzes that are fair and representative of the reading assignments, lecture activities, and lab activities as they relate to the learning objectives provided. I will also be available by email, telephone, or in my office during the day to answer questions and provide any needed assistance toward the course learning objectives.

Student's Responsibilities: You are expected to attend each lecture and laboratory, participate in activities, take comprehensive notes, and read the relevant material in the text. You should focus your efforts on achieving the learning objectives by doing the appropriate problems in the text and lab manual, reviewing concepts, and practicing problem-solving. In the event that there is any difficulty in keeping up with the pace of the course, it is YOUR responsibility to contact me for advice or assistance. If you cannot take an exam during the scheduled period, you must make other arrangements with me at least 72 hours before the exam is given. If you cannot attend a class, you are still responsible for all content.

Attendance: Attendance is very important to be successful in this course. I will not take attendance for the class but be aware that you are fully responsible for all announcements made and materials covered in class, and that there will be no make-up labs. If you should miss a lab activity, then you are responsible to get the data and discuss the exercise with a lab partner. In some cases, this will allow you to submit the required material and receive credit.

Late submission of assignments: I will deduct 10% of the assignment value for each day it is late. For example, if you turn in an assignment two days late, I will deduct 20% prior to grading.

Late Work:

Late work due to procrastination will not be accepted. Late work due to a legitimate emergency may be accepted.

The due date and time associated with each quiz, discussion, exam, and assignment are stated clearly in Canvas and on the Course Schedule.

University Policies:

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) as early in the semester as possible (University Inn # 101, 435-797- 2444, drc@usu.edu). All disability-related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Withdrawal and Incomplete Grade:

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. If an incomplete grade is to be given, an Incomplete Grade Documentation Form must be filed by the instructor in the department or college office. Students may not be given an incomplete grade due to poor performance or in order to retain financial aid. An incomplete grade may be granted only if the student has completed the majority of the course and is passing the class at the time. More information can be found at <http://www.usu.edu/policies/pdf/Incomplete-Grade.pdf> (<http://www.usu.edu/policies/pdf/Incomplete-Grade.pdf>)

Plagiarism:

Plagiarism includes knowingly "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 the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." To help you learn how to identify and avoid committing plagiarism, go to <http://ocw.usu.edu/English/english-1010/plagiarism.html>

The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling. More about USU policy on plagiarism can be found at <http://www.usu.edu/policies/pdf/Acad-Integrity.pdf> (<http://www.usu.edu/policies/pdf/Acad-Integrity.pdf>)

Honor Pledge:

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish a higher level of conduct expected and required of all Utah

State University students. The University expects that students and faculty alike maintain the highest standards of academic honesty. For the benefit of the students who may not be aware of specific standards of the University with regards to academic honesty, the following paragraph discussing infractions of academic integrity is quoted from the Student Policy Handbook (<http://www.usu.edu/policies/pdf/Acad-Integrity.pdf> (<http://www.usu.edu/policies/pdf/Acad-Integrity.pdf>))

Infractions:

Acts of academic dishonesty include, but are not limited to:

1. **Cheating.** (1) Using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity, including working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually”; (2) depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission; (5) continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity; (6) submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or (7) engaging in any form of research fraud.
2. **Falsification.** Altering or fabricating any information or citation in an academic exercise or activity.
3. **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.

Penalties:

1. An instructor has full autonomy to evaluate a student’s academic performance in a course. If a student violates the Honor System, the instructor may sanction the student as part of the course evaluation. Such sanctions may include: (1) verbally warning the student; (2) giving the student a written reprimand; (3) requiring the student to rewrite a paper/assignment or to retake a test/examination; (4) adjusting the student’s grade—for either an assignment/test or the course; or (5) giving the student a failing grade for the course. A sanction by the instructor is not a disciplinary penalty. If the instructor believes that, in addition to any sanction, the student should be disciplined, and a penalty imposed, the instructor shall refer the student for disciplinary proceedings.

Course Schedule: This schedule is an estimate of what will be discussed each day. Open days will be used to give more time to material in chapters around the open day as needed.

Week	Monday	Wednesday
Jan 6-8	Introductions - Chp. 21 Evolution	Chp. 22 Species & Speciation
Jan 13-15	Chp. 23 Patterns of Evolution	Chp 24 Human Origins & Evolution
Jan 20-22	Martin Luther King Jr. Day - No Class	Exam 1 Ch. 25 Cycling Carbon
Jan 27-29	Ch. 26 Bacteria and Archaea	Ch. 27 Eukaryotic Cells
Feb 3-5	Chp. 28 Being Multicellular	Exam 2 Ch. 29 Plant Structure and Function
Feb 10-12	Ch. 30 Plant Reproduction	Ch. 31 Plant Growth & Development

<i>Feb 17-19</i>	<i>President's Day – No Class</i>	Ch. 32: Plant Defense
<i>Feb 24-26</i>	Chp. 33 Plant Diversity	Exam 3
<i>Mar 2-4</i>	Spring Break - No Class	Spring Break - No Class
<i>Mar 9-11</i>	Chp. 34 Fungi	Ch. 35 Animal Nervous System
<i>Mar 16-18</i>	Chp. 36 Animal Sensory System	Chp. 37 Animal Movement
<i>Mar 23-25</i>	Exam 4	Chp. 42 Animal Reproduction & Development
<i>Mar 30- Apr 1</i>	Ch. 43 Animal Immune Systems	Ch. 44 Animal Diversity
<i>Apr 6-8</i>	Exam 5	Ch. 45 Animal Behavior
<i>Apr 13-15</i>	Ch. 46 Population Ecology	Chp. 47 Species Interactions, Communities & Ecosystems
<i>Apr 20-23</i>	Ch. 48 The Anthropocene	Exam 6

Disclaimer: The schedule and assignments as part of this syllabus are tentative and subject to change.