

BIOL 1010: Biology and the Citizen

Utah State University Eastern

Spring 2020 - 3 credits

Meeting Times: MWF, 10:30-11:20, Reeves 187 and Broadcast sites

Instructor: Dr. Wayne Hatch

Office Hours: Th 10-12pm; F 1-4pm; by appointment

Contact: Reeves 264, wayne.hatch@usu.edu, 613-5393

Catalog Description:

Principles and methods of biology and how they impact the daily life and environment of the individual.

Learning Objectives:

Students completing this course will:

- Explore the nature of science (How does science work?)
- Evaluate the credibility of scientific claims
- Explore the basic characteristics of life
- Describe the evolution of life
- Classify the diversity of life on earth
- Describe how organisms interact with one another and their environment
- Identify how humans impact life on earth

Prerequisites:

Biology and the Citizen is a general education course for non-majors with no pre-requisites.

Textbook:

Good news: your textbook for this class is available for free online! If you prefer, you can also get a print version at a very low cost.

Your book is available in web view and PDF for free. You can also choose to purchase on iBooks or get a print version via the campus bookstore or from OpenStax on Amazon.com.

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

Concepts of Biology from OpenStax, Print ISBN 1938168119, Digital ISBN 1947172034, www.openstax.org/details/concepts-biology

Course Design

It is expected that students will read the assigned text before attending class and work to complete the learning objectives for each chapter in the text. This will help the student be

prepared to come to class ready to ask questions and discuss the ideas presented. If students have prepared for class ahead of time, they will be able to ask deeper questions and learn more about the subject than if they are not prepared. Class time will then consist of lectures, discussions, or group activities designed to help students reach the learning objectives.

OneNote: During class, the program OneNote will be used by Dr. Hatch to present material and provide notes. Students may access this through Canvas and clicking on Class Notebook or by signing in directly with the OneNote program on their electronic device. To login students must put their a#@aggies.usu.edu. Doing so will direct them to the USU login page where they will again put in a#@aggies.usu.edu along with their USU password.

Class Recording: Each class period will be recorded using the software Kaltura. This will then be uploaded to Canvas and found in the Media Gallery section in Canvas.

Poll Everywhere: To help facilitate participation in class, the online polling service, Poll Everywhere, will be used. This will be free for students. Students can access in-class polls on any electronic device that can send text messages or access the internet. Instructions will be given in class as to where to go online for each poll.

Assessments:

Quizzes

Quizzes will be given regularly in Canvas. These will be worth 5 points each. Quizzes will be open for 2 days. Missed quizzes for other reasons will be counted for zero points.

Exams

Six exams will be given throughout the semester opening on the day scheduled on the syllabus and be available to schedule in the testing center for two days. To schedule an exam go to: <https://rcde.usu.edu/mats/>

Each exam will count for up to 50 points; this will vary slightly for each exam depending on the material. The lowest exam score will be dropped.

Other Assignments

Throughout the class other assignments will be given. These will be introduced in class and either turned in on Canvas or on paper. Each assignment will be tied to the lecture material and give the student opportunity to demonstrate understanding of a particular concept. These will be worth 5-10 points each.

Grading:

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% B+ = 87-89% C+ = 77-79% D+ = 67-69%
A- = 90-92% B = 83-86% C = 73-76% D = 60-66%
B- = 80-82% C- = 72-70% F = below 60%

- 7 exams - 50 points each (lowest score dropped) up to 300pts
- Quizzes - 5 points each 50pts
- Other Assignments - 5-10pts each ~100pts

Total points ~450pts

Extra Credit:

Few opportunities will provide extra credit opportunities for students, which includes completing the course evaluation at the end of the semester for 5 points and other to be announced assignments.

Classroom Behavior:

Students will avoid disrupting the class in general as well those immediately surrounding you during lecture. Many actions such as texting may seem to only affect yourself but generally also annoy and discourage the learning of the students around you. Please only use electronic devices for academic purposes during class.

ADA Services:

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 (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. USU Eastern Students may also schedule a therapy appointment with an on campus therapist by contacting the AAC at 435-613-5337.

Policies on attendance and make-up work:

Generally, students who attend class regularly and are attentive perform better in the class. Specifics about assignments, changes in the schedule/assignments/exams will typically only be announced in class. Quizzes and assignments will be submitted in Canvas and should be completed by their respective due date but no penalty will be assessed for late submissions. If circumstances cause a student to miss an exam, the student will need to discuss a possible solution to taking the exam with Dr. Hatch.

Academic Dishonesty:

Cheating and/or plagiarism are illegal and will not be tolerated. If a student is found guilty, the student may immediately fail the course and possible expulsion from the college. Any suspicion of an academic integrity violation (AIV) may be reported by the instructor to the university. As stated in student code Section VI-1 “Whenever an instructor reasonably suspects that a student has committed an academic integrity violation, the accused student shall be notified by the instructor of the violation and its consequences through use of the academic integrity violation form (AIVF) within seven days that a violation has occurred and that a sanction is appropriate.”

Schedule:

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

Week	Monday	Wednesday	Friday
<i>Jan 6-10</i>	Introduction	Nature of Science	Nature of Science
<i>Jan 13-17</i>	Chemistry	Chemistry	The Cell
<i>Jan 20-24</i>	<i>Martin Luther King Jr. Day - No Class</i>	The Cell	The Cell
<i>Jan 27-31</i>	Review - Exam 1	Energy	Cellular Respiration
<i>Feb 3-7</i>	Cellular Respiration	Photosynthesis	Photosynthesis
<i>Feb 10-14</i>	Review - Exam 2	Cell Division	Sexual Reproduction
<i>Feb 17-21</i>	<i>President's Day - No Class</i>	Inheritance	Non-Mendelian Inheritance
<i>Feb 24-28</i>	Review - Exam 3	Molecular Biology	Molecular Biology
<i>Mar 2-6</i>	<i>Spring Break - No Class All Week</i>		
<i>Mar 9-13</i>	Biotechnology	Biotechnology	Review - Exam 4
<i>Mar 16-20</i>	Evolution	Evolution	Evolution
<i>Mar 23-27</i>	Diversity-Microbes, Protists, Fungi	Diversity - Plants and Animals	Review - Exam 5
<i>Mar 30-Apr 3</i>	Animal Body Systems	Animal Body Systems	Animal Body Systems
<i>Apr 6-10</i>	Immunity	Animal Reproduction	Review - Exam 6
<i>Apr 13-17</i>	Population Ecology	Community Ecology	Ecosystems and the Biosphere
<i>Apr 20-24</i>	Conservation and Biodiversity	<i>Interim Day - No Class</i>	Exam 7
<i>Apr 27-30</i>	Exam 7	Exam 7 - Last Day of Finals	