

Syllabus
Principles of Biology BIOL 1210
Summer 2018
T,H 3:30-5:30pm; Sandy 201

Course Description: Introduces the workings of life from the molecular to the ecosystem level. Topics include genetics, development, ecological interrelationships, evolution, physiology and behavior. A preparatory course intended for all life and health science students. No prerequisite required.

Instructor: Amanda Hoepfner, Ph.D.

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Office Hours: after class or by appointment, always available via email

Teaching Assistant (TA): Chloe Lim

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Discussion: TBD

Required Materials:

1. **Textbook:** *Campbell Biology: Concepts & Connections* Third Custom Edition for the U of U by Reece, Taylor, Simon, Dickey, and Hogan. Packaged with Mastering biology access code. Available at the University Bookstore. Copies of the text will also be available at the Marriot library and front desk of the Sandy Campus.
2. **Turning Point Cloud Account and Clicker or ResponseWare license.** Please contact the U Bookstore of Teaching and Learning Technologies (801)581-6112 with any questions about clickers. Bring your polling device to class every day. Clickers must be registered by Friday May 18th.

Course Objectives:

1. Develop and practice good academic habits: regular attendance to class, taking notes, and good study habits.
2. Develop and demonstrate critical thinking skills for biological processes.
3. Demonstrate an understanding of the scientific process: being able to read, explain, and understand studies.
4. Develop an understanding for biological processes and principles:
 - a. Evolution and natural selection.
 - b. Diversity of life
 - c. Cell form and function
 - d. Genetics
 - e. Ecology
5. Be prepared to take core biology courses and be familiar with biological terminology.

Course Structure:

- **Course Website:** I will post lecture slides, homework assignments, and announcements on Canvas. Go to <http://www.utah.edu/students/>, click on “My Classes” on the right-hand side, log in, and then click on Biol 1210.
- **Clicker questions/participation:** You must purchase a Turning Point Cloud Account and a Clicker and/or a ResponseWare license for in-class participation. Clickers allow you to respond to questions posed during class. This polling allows me to see if students are comprehending the materials and to take attendance. During every class, questions will be given throughout the lecture. You will receive 5 points a day for coming to class and answering the question, regardless if you are correct or incorrect. Students can miss up to 2 classes during the semester without any negative impact on their grade. Do not send your clicker in for an absent friend! This is considered cheating and you will both receive a zero for participation for the course! **Clickers must be registered through Canvas by Friday, May 18th, and is worth 10 points just for registering.**
- **MasteringBiology assignments:** Every Monday, the Mastering assignment on material from the previous week will be due through the Mastering website, connected to the Canvas course page. The 100 class points that are used toward your final grade are calculated as your total mastering points earned divided by the total mastering points available (minus 100). This allows everyone to miss 100 mastering points out of the approximately 800 available and still get full credit. You have two attempts to answer every mastering question. There are no grade deductions for an incorrect answer in your two-attempt limit or for using a hint. If you want to practice, reworking assignments after submission is allowed without change in original credit. **There is NO credit given for late submissions. No extensions. No exceptions.**
- **Case Studies:** Case study homework assignments will be available on the Canvas class website. Each assignment will have a grading rubric included. Assignments must be turned in by midnight on the due date. Late assignments will lose 10% for each day it is late. Assignments will not be accepted after 10 days past the due date. Assignments must be uploaded directly to Canvas, emailed or hard copies turned in will not be accepted. To upload an assignment to Canvas, click on Assignments on the left-hand side, then click on the underlined title of the assignment (example: Homework 1), On the far right, click on the +Submit Assignment. The preferred file format is **pdf**, but doc, and rtf will also work; docX, jpeg, odt, wps, pages, etc, formats are not accepted. Canvas will compare your work against published literature and previous/current work by students to look for plagiarism. Therefore, avoid quoting materials, even if cited, everything must be explained in your own words.
- **Exams:** There will be 3 exams and 1 final given throughout the semester, each worth 75 points. On the last day of class, the 3rd exam and the final will be given together. The 3rd exam will be on new material covered since the last exam and a comprehensive final. If the score of the final exam is higher than one of the previous exams, the lowest exam score will be replaced by the final score. The final score cannot replace a 0! In other words, you must take every exam and the final score cannot replace a missed exam.

- Students will only be tested on materials covered in class. Exams may consist of multiple choice, short answers, matching, diagrams, and essays. Students may not leave the room during the exam or use their phones. Using a phone during an exam, or any other forms of cheating, will result in a 0 grade for that exam.
- Exam dates are firm and NO makeup exams will be allowed unless given adequate notice of 2 weeks prior to the exam. IF you have an unplanned medical or legal emergency and are unable to make it to an exam you need to contact me immediately (or have someone do it for you). You cannot wait a few days before you talk to me. You will need official documentation saying that it was physically impossible for you to be at the exam. You were too sick and have a note from your doctor to verify, in a car wreck on the way and have a police report, were arrested and have documentation, etc. Unavoidable and documented issues can be made up... not you slept in, had a cold, had a doctor's appointment, weren't ready to take the exam, etc.
- **Re-grading Requests:** Students may request the reconsideration of a grade on an exam within one week of the day that the exam was returned. The re-grade will only be considered if accompanied by a written description of the perceived error in grading and why the answer provided by the student is appropriate. Detail and organization in the request is critical. **Re-grade requests will not be considered after the one-week policy.** If a student is not present to receive their returned work, it does not exempt them from the one-week policy. It is the responsibility of the student to obtain returned work outside of class if they were not in attendance during the class period where a graded assignment or exam was initially returned to students.
- Please review and check all of your assignments and exam scores to ensure they were tallied correctly. Further, check that they were entered correctly into Canvas. You have **one week** after the exams or assignments are handed back to contact me about mistakes in adding or entering scores. Please note, for these issues you do not have to write a response, you only need to show me the mistake after class.
- **Grade Breakdown:** The final grade breakdown is as follows: Cumulative scores of 90%, 80%, 70%, or 60% will guarantee grades of not less than A-, B-, C-, D- respectively. There are 575 points total in this course
 - Exams: 300 points, 3 exams and 1 final at 75 points each, ~52% of final grade
 - Case Studies: 75 points, 3 assignments at 25 points each, ~13% of final grade
 - MasteringBiology homework: 100 points, will earn the points as the percentage that you receive through MasteringBiology, your points = (Total # of points you earned) / (Total # of points available - 100points), ~17% of final grade
 - In class participation (clickers): 100 points, 5 points per day, possible of 110 points but taken out of 90 points, 10 points for registering you clicker on time, ~17% of final grade in class

How to study:

Biology is not suited to rote memorization. "Facts" are meaningless without the context of the procedures and patterns of thought that characterize this science. Thinking scientifically takes practice, and active reading, listening, and problem solving are good practice. Many students learn best in interactive contexts, so please create informal study groups outside of class. You will learn, understand and retain much more if you have good study habits starting NOW. The University recommends 2-3 hours of study outside of class for each credit hour. That means 8-12 hours per week for this class. Keep your notes and handouts in order. Learning biological terms is like learning a new language; keep a vocabulary list and look up definitions promptly. Write questions and look for 'big picture' patterns. Keep asking yourself "What is the main concept?" Chapter summaries will help you identify main concepts. Read them before and after each chapter. Compare and contrast the information. Try outlines and concept maps. Don't get buried in the details-most are meant to support main concepts. This course has amazing breadth; DO NOT TRY TO CRAM!

University Policies:

- **The Americans with Disabilities Act:** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodation in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801)581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.
- **Addressing Sexual Misconduct:** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with disability, veteran's status genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, (801)581-8365, or the Office of the Dean of Students, 270 Union Building, (801)581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, (801)581-7776. To report to the police, contact the Department of Public Safety, (801)585-2677(COPS).
- **Attendance/tardy policy:** The University expects regular attendance at all class meetings. Instructors must communicate any particular attendance requirements of the course to students in writing on or before the first class meeting. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements as defined by the instructor.
- **Wellness statement:** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to

succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or (801)581-7776.

- **Veterans Center:** If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/> Please also let me know if you need any additional support in this class for any reason.
- **LGBT Resource Center:** If you are a member of the LGBTQ community, the U of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Oplin Union Building. Hours: M-F 8-5pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: <http://lgbt.utah.edu/> Please also let me know if there is any additional support you need in this class.
- **Learners of English as an Additional/Second Language:** If you are an English language learner, please be aware of several resources on campus that will support you with your language and writing development. These resources include: the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>) . Please let me know if there is any additional support you would like to discuss for this class.

Schedule for Principles of Biology BIOL 1210 Summer 2018
T,H 3:30-5:30PM; Sandy 201

DATE	TOPIC	READING	DUE DATES
T: May 15	Introduction Biology: Exploring Life	Ch. 1	
H: May 17	Biology: Exploring Life Chemical Basis of Life	Ch. 1 Ch. 2	
M: May 21			MB week 1
T: May 22	Chemical Basis of Life Molecules of Cells	Ch. 2 Ch. 3	Start using TP
H: May 24	Molecules of Cells	Ch. 3	
M: May 28			MB week 2
T: May 29	Molecules of Cells Tour of the Cell	Ch. 3 Ch. 4	
H: May 31	Tour of the Cell	Ch. 4	
M: Jun 4			MB week 3
T: Jun 5	EXAM I – Ch. 1-4 Working Cell	Ch. 5	
H: Jun 7	Working Cell	Ch. 5	
M: Jun 11			MB week 4
T: Jun 12	How Cells Harvest Chemical Energy	Ch. 6	
H: Jun 14	How Cells Harvest Chemical Energy Photosynthesis	Ch. 6 Ch. 7	
M: Jun 18			MB week 5
T: Jun 19	Photosynthesis Cellular Basis of Reproduction and Inheritance	Ch. 7 Ch. 8	
H: Jun 21	Cellular Basis of Reproduction and Inheritance	Ch. 8	Case Study 1
M: Jun 25			MB week 6
T: Jun 26	Patterns of Inheritance	Ch. 9	
H: Jun 28	Patterns of Inheritance	Ch. 9	
M: Jul 2			MB week 7
T: Jul 3	EXAM II – Ch. 5-9 Molecular Biology of the Gene	Ch. 10	
H: Jul 5	Molecular Biology of the Gene	Ch. 10	
M: Jul 9			MB week 8
T: Jul 10	How Populations Evolve	Ch. 13	Case Study 2
H: Jul 12	The Origin of Species	Ch. 14	
M: Jul 16			MB week 9
T: Jul 17	Tracing Evolutionary History	Ch. 15	
H: Jul 19	Communities, Ecosystem	Ch. 37	Case Study 3
M: Jul 23			MB week 10
T: Jul 24	NO CLASS – HOLIDAY		
H: Jul 26	Conservation Biology	Ch. 38	
M: Jul 30			MB week 11
T: Jul 31	EXAM III – Ch. 10, 13-15, 37-38 COMPREHENSIVE FINAL		

*MB = MasteringBiology assignments

*Note: This syllabus is meant to serve as an outline and guide for our course, exam dates and homework due dates are firm, but topics covered in class may change.