

Welcome to BIOLOGY 10!

Laney College Spring 2020

Instructor: Riva Bruenn e-mail: rbruenn@peralta.edu Office Hour: Wednesday and Thursday 5:30-6pm

BIOL 10 Lecture
Tuesdays (L1-LEC, Class #: 21537)
6:00 – 8:50 pm
Room: B210

BIOL 10 Lab
Wednesdays (Section L1LA, Class #: 21538)
OR
Thursdays (Section L1LB, Class #: 21539)
6:00 – 8:50 pm
Room: B202

Class resources and assignments will be posted on Canvas at: <http://web.peralta.edu/portal/>

Course Description

This class is an introduction to the science of biology for non-majors. We cover the fundamentals of biology for the non-majors: Scientific inquiry, biological chemistry, cell structure and function, DNA and genetics, evolution and ecology, and an overview of living organisms. This class also includes laboratory exercises designed to complement lectures. As a beginning course, we will also be addressing skills for biology and biological thinking.

Student learning outcomes (SLOs) for the course

- Differentiate between a hypothesis and a theory
- Discuss the principles of biology as the study of living things including biological hierarchies, classification of living things, chemical processes of the cell and organisms.
- Improve confidence in scientific knowledge and ability to apply knowledge to related situations.
- Read and discuss articles related to current issues in biology. Form opinions on these issues and express and defend those opinions biologically in discussions and written essays.
- Cooperate with others working as a group, delegate work to others, collaborate with group.
- Use microscopes and other equipment correctly and care for them properly.

Required texts/resources

Essential Biology with Physiology Campbell 6e (Pearson Publishing) Simon Dickey Reese (authors)
ISBN-13: 978-0134711751 **ISBN-10:** 0134711750 – can purchase and/or use library and classroom copies

Laney College Biology 10 Lab Manual – will be provided (do not purchase)

Biology 10 Lecture workbook - will be provided (do not purchase)

3 Scantron (882E or equivalent) forms. Bring 1 form to each lecture exam. - available from bookstore

Communication

Check Canvas and your email regularly for class announcements or messages. Make sure your Peralta email and Canvas notifications are on and correct. The best way to contact me is through Canvas. It is your responsibility to register for Canvas and stay updated with course details and deadlines.

Access for students with disabilities

It is our goal to make our courses as accessible as possible to students all of our students. I encourage you to communicate with me by the second week of the course regarding any accommodations that will improve your experience in this course. You can also contact the Disability Services and Programs for Students at 464-3428 <https://laney.edu/dsps/> for assistance. See also <https://laney.edu/biology/about/>.

**** You are responsible for your enrollment.**

You will receive a grade for this course if you do not drop before the deadline.**

Grades Your final letter grade will be calculated based on the following (descriptions on p.4):

Assessment	# of points	
3 lecture exams (50 each)	150	
3 lab exams (25 each)	75	
13 lab notebook checks (5 each)	65	
12 quizzes (5 each)	60	
2 Essays (25 each)	50	A ≥ 405 pts
2 Study guides (hand in 1 for credit)	20	B ≥ 360 pts
2 Lab study guides (hand in 1 for credit)	20	C ≥ 315 pts
10 Lecture Participation activities (2 each)	20	D ≥ 270 pts
3 Scientist Spotlights (5 each)	15	F < 270 pts
2 grades assignments (5 each)	10	
2 self-assessments (5 each)	10	
Calendar assignment	5	
Total:	500	

I will use **raw points to calculate your grade. I will round up if you are between points (404.3 \rightarrow A)**

Notice that there are 50 extra points built in – this gives you the opportunity and responsibility to prioritize some assignments/assessments over others. No other “extra credit” – all possible points are listed.

My tips for how to be successful in this course

- Regularly check Canvas, especially the course schedule, and plan at least a week ahead.
- Bring snacks to lecture. In labs, only water in sealed containers is allowed.
- Plan to spend 5-8 hours on this class outside of lecture and lab hours.
 - Make a schedule for yourself with reachable, prioritized goals for each study/work period.
 - Review lecture notes after each class (especially participation activities and other questions)
 - Review and prepare for each lab. Read labs ahead of time and answer some questions.
 - If you miss a question on a quiz or activity, figure out why your answer was not correct, what the correct answer is, and why.
- Use the student services. <https://laney.edu/biology/resources-for-supporting-students/>
- If you have a question or are confused, *please speak up!* Other students are almost certainly confused as well but may not want to ask.
- Every class and every student is different – work with me to make this the most effective learning environment it can be by communicating your needs and giving me feedback.

On the last exam, I ask students to give advice to next semester’s students. Here are responses I got with the most common themes:

Advice from Fall 2019 students

- “complete the study guide questions each week – you will thank yourself so much!”
- “always look at the module page for important information”
- “build connections with other students” & “join a study group”
- “remain calm and have faith in your ability to complete the course”
- “don’t miss class”
- “ask a lot of questions when confused”
- “pick a solid lab group to work with”
- “be prepared to take in a lot of information. Have an open mind and keep a positive attitude”

Academic Conduct

- For all written assignments, each student must write their own answers in their own words. Exams must be completed without notes or aids including electronic devices (unless specified by DSPS).
- Using the words, work, or ideas of others without proper attribution, or using study materials during exams may result in receiving a 0 on the work, a subtraction of points, an “F” in the course, and/or referral to the Dean of the Division. Please ask for help instead of resorting to plagiarism or deception. I want you to succeed! <https://laney.edu/biology/about/a-culture-of-academic-honesty/>

Attendance

I know that Biology 10 may not be your top priority and that you likely have many other life responsibilities. If you choose not to attend a class (an unexcused absence), you will not be able to make up the points you missed, but know that I respect the decisions you need to make based on your priorities and that I will still work with you to help you catch up on the material.

The following charts describe reasons for an excused absence and when to contact me.

Allowable reasons for excused absences from a regular lecture or lab	Email me or send me a Canvas message
A personal or dependent illness/injury (physical or mental)	Within 24 hours of the missed class
A death in your family	As soon as you reasonably can
A college-recognized religious holiday	As soon as you know, at least 1 week in advance
A college-sponsored event	As soon as you know, at least 1 week in advance
A job or school interview	As soon as you know, at least 1 week in advance
A scheduling conflict with your job or with responsibilities related to a dependent	As soon as you know, at least 1 week in advance
*all other reasons, including other travel plans, will result in unexcused absence	
*it is your responsibility to get notes/announcements from classmates – I can help you get in contact if you ask	

Allowable reasons for a makeup lecture exam	Email me or send me a Canvas message
A personal or dependent illness/injury (physical or mental) severe enough to require a doctor's visit	Within 24 hours of the missed class, include some type of documentation (doctor's note, receipt)
A death in your family	As soon as you reasonably can
A college-recognized religious holiday	As soon as you know, At least 2 weeks in advance
A college-sponsored event	As soon as you know, At least 2 weeks in advance, include documentation from the sponsor
A job or school interview	As soon as you know, or at minimum 1 week in advance, include your interview invitation
*Lecture exam makeups must take place within 1 week of the scheduled exam.	
*Lab exams cannot be made up (they require setups that cannot be duplicated outside of lab hours).	

Late Assignment Policy

All assignments are posted on Canvas with a date they are "due" and a date the assignment is "closed." Once an assignment is closed on Canvas, I cannot accept it (see "Extensions" for exceptions). Each exam week marks the end of a unit – all assignments for that unit will close on the day of the lecture exam. Essay assignments will close the week before an exam to give me time to get you meaningful feedback.

It is your responsibility to communicate with me and get me your late assignment. For paper assignments, you can email me a scan or picture of each page of the assignment and deliver the paper copy when possible. If the digital file is unreadable, I cannot accept it; check before you send and use pdf format.

I will accept late work up to the date the assignment closes for full credit. If you do not turn in an assignment, I will assume that you have planned ahead according to your goals so will not necessarily remind you. Keep track of due dates and grades using Canvas.

Extensions

If asked, I can grant extensions on Essays, Scientist Spotlights, and Self-assessments. All other assignments will not be meaningful after the unit has ended, so are ineligible for extensions. If you need an extension, email me by 12 noon at least 3 days before the due date (if possible) or as soon as possible in emergency situations. I cannot grant an extension once the "closed" date is passed except in emergencies. These policies are due to my own time constraints – I schedule grading time in advance.

Descriptions of assessments and assignments

Lecture Exams There will be 3 non-cumulative exams designed to test your understanding of lecture topics.

Lab Exams There will be 3 non-cumulative exams designed to test your knowledge of experimental procedures hypotheses and concepts. The exams consist of stations with questions you need to answer within a limited time. Plan on the exam taking 1-1.5 hours. Late students will not receive extra time.

Lab Notebook Checks There are 13 labs. All labs will be completed in groups. To receive full points, the group will show me their completed labs (all questions including the summary questions) and answer verbal check out questions with me. These questions will help you identify areas to focus on when studying. I expect you to read the labs ahead of time and come prepared to contribute to your lab group. I suggest that you check your lab report answers with me at the end of the lab period or during office hours – correct lab reports are a great study tool!

Quizzes 12 quizzes on Canvas. These quizzes are open book, and you have 2 attempts (best attempt counts). The purpose is to gauge for yourself how well you understand the material, identify areas you may need to study more, and prepare you for the multiple-choice section of the lecture exams.

Current Events Essays Two essays. A 2-page analysis of a current article, video news story, or podcast about recent scientific research in 5-paragraph form. In the essay, include the names of the researchers, the institution where the research was conducted, explain what the research is, explain what we learned in class and how it relates to the research, and why the research is important or interesting from your perspective. Guidelines, grading rubric, and submission link will be provided on Canvas. These essays are an opportunity to apply what you learn in class to cutting edge research that interests you.

Lecture and Lab Study Guides I will post a study guide for each lecture and lab exam. Turn in 1 lecture study guide and 1 lab study guide for credit. For full credit, write out each question and answer fully and in your own words. I will not collect the study guides for the final exams because I will not have time to grade them. I hope completing the guides helps you organize your knowledge and study efficiently.

Lecture Participation Activities 10 activities during lectures. As long as you come to class on time and fully complete each activity, you will earn full credit. Participation activities will not be graded for correctness. Lecture activities may include written questions to help you assess your own understanding of course materials. Lecture activities may also include feedback for me about the course, group written questions, charts, tables, or drawings. Some activities may require preparation before class.

Scientist Spotlights 3 >350 word reflections about the life, career, and research of a person you will choose each time from a list of scientists. These will be scientists working in areas relevant to the class unit. The reflections will be open (you choose what to write), but I will give you a few optional prompts to get you started. The purpose is to help you learn about career paths in science as well as about the diversity of people involved in scientific research.

Grades Assignments You will turn in the grades assignment on p. 6 twice (directions will be posted on Canvas). I hope these assignments help you stay organized throughout the semester and help you set goals if you'd like to improve your grade.

Self-assessments Twice during the semester you will have the opportunity to reflect on how you are progressing towards your course goals, what you are doing that is working, what you plan to do to improve, and what resources you may need to reach your goals.

Calendar Assignment Complete the calendar posted on Canvas and included in your syllabus on p. 5 with the due dates of assignments and exams for **other** classes, and any events or responsibilities (family, work, etc.) that might impact your work for this course. The purpose is to make sure you are aware of all deadlines and events for biology 10, and to help you plan ahead by identifying any conflicts you have.

Course Calendar (may change)

Includes readings, deadlines, lecture topics, and labs.

If this schedule needs to change, I will update the calendar on Canvas and send a Canvas course announcement

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1/20/20	21-Jan	22-Jan	23-Jan	24-Jan
HOLIDAY	Introduction to Science	inquiry (lab 1)	inquiry (lab 1)	
<i>Chapters 1&2</i>				
27-Jan	28-Jan	29-Jan	30-Jan	31-Jan
	Chemistry & Life	chemistry (lab 2)	chemistry (lab 2)	Quiz 1 due
<i>Chapters 2 & 3</i>				
3-Feb	4-Feb	5-Feb	6-Feb	7-Feb
	Application of Chemistry	microscope (lab 3)	microscope (lab 3)	Quiz 2 due
<i>Chapters 3 & 4</i>	Calendar due			
10-Feb	11-Feb	12-Feb	13-Feb	14-Feb
	Chemistry, The Cell	molecules (lab 4)	molecules (lab 4)	Quiz 3 due
<i>Chapter 4 & 5</i>	Scientist Spotlight 1 due			HOLIDAY
17-Feb	18-Feb	19-Feb	20-Feb	21-Feb
	Essay 1 due	cells (lab 5)	cells (lab 5)	Quiz 4 due
HOLIDAY, <i>Chapters 5&6</i>	The Cell, How Cells Work			
24-Feb	25-Feb	26-Feb	27-Feb	28-Feb
	Lec Exam 1	Lab Exam 1	breathing oxygen (lab 6)	
<i>Chapters 1-5</i>	Lec study guide due	Lab Exam 1	breathing oxygen (lab 6)	
	Lab Exam 1 for Thurs lab	Lab study guide due	Lab study guide due	
2-Mar	3-Mar	4-Mar	5-Mar	6-Mar
	Cellular Respiration	breathing oxygen (lab 6)	making new cells (lab 7)	Quiz 5 due
<i>Chapters 7 & 8</i>	Photosynthesis			
9-Mar	10-Mar	11-Mar	12-Mar	13-Mar
	Cellular Reproduction, DNA	making new cells (lab 7)	DNA (lab 8)	Quiz 6 due
<i>Chapters 8 & 10</i>	Grades 1 due	Self assessment 1 due	Self assessment 1 due	file deadline AA/AS
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar
	DNA, Mendel, Chromosomes	DNA (lab 8)	PD DAY - no class	Quiz 7 due
<i>Chapters 10 & 9</i>	Scientist Spotlight 2 due			
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
	Chromosomes, Genes	changing DNA (lab 9)	changing DNA (lab 9)	Quiz 8 due
<i>Chapters 11 & 12</i>	Essay 2 due	Mini lecture: Evolution	Mini lecture: Evolution	
30-Mar	31-Mar	1-Apr	2-Apr	3-Apr
	Lec Exam 2	Lab Exam 2	Lab Exam 2	
<i>Chapters 7-12</i>	Lec study guide due	Lab study guide due	Lab study guide due	
6-Apr	7-Apr	8-Apr	9-Apr	10-Apr
	History of Life, Diversity	natural selection (lab 10)	natural selection (lab 10)	Quiz 9 due
<i>Chapters 13 & 15</i>				
13-Apr	14-Apr	15-Apr	16-Apr	17-Apr
Spring Break	Spring Break	Spring Break	Spring Break	
20-Apr	21-Apr	22-Apr	23-Apr	24-Apr
	Microbes, Plants & Fungi	plants and fungus (lab 11)	plants and fungus (lab 11)	Quiz 10 due
<i>Chapters 16 & 17</i>	Grades 2 due	Self assessment 2 due	Self assessment 2 due	Last day drop w/W
27-Apr	28-Apr	29-Apr	30-Apr	1-May
	Animals	animal survey (lab 12)	animal survey (lab 12)	Quiz 11 due
<i>Chapters 18 & 19</i>				
4-May	5-May	6-May	7-May	8-May
	Ecology	human evol (lab 13)	human evol (lab 13)	Quiz 12 due
<i>Chapters 20 & 21</i>	Scientist Spotlight 3 due			
11-May	12-May	5/13/20	5/14/20	15-May
	Review	Lab Exam 3	Lab Exam 3	HOLIDAY
				Malcolm X
18-May	19-May	20-May	21-May	22-May
<i>Chapters 13, 15-21</i>	Lecture Exam 3			

GRADES PAGE - You'll turn in this assignment twice (Grades 1 and 2). If you are not earning at least a C, please meet with me to go over an Action Plan.

ASSIGNMENT TYPE	SPECIFIC ASSIGNMENT	YOUR SCORE					
LECTURE EXAMS (50pts each)	#1						
	#2						
	#3						
LAB EXAMS (25pts each)	#1						
	#2						
	#3						
LAB NOTEBOOK CHECKS (5pts each)	#1 - 6						
	#7 - 13						
QUIZZES (5pts each)	#1 - 6						
	#7 - 12						
ESSAY (25pts each)	#1 and 2						
STUDY GUIDES (20pts each) (turn in 1 of each for credit)	Lecture Exam 1 or 2 study guide						
	Lab Exam 1 or 2 study guide						
PARTICIPATION (2pts each)	#1 - 5						
	#6 - 10						
SCIENTIST SPOTLIGHTS #1 – 3 (5pts each)							
GRADES ASSMT (5pts each)	#1 and 2						
SELF ASSESSMENTS (5pts each)	#1 and 2						
CALENDAR ASSIGNMENT (5pts)							
FOR GRADES ASSIGNMENT 1	TOTAL #1 (add all)						
FOR GRADES ASSIGNMENT 2	TOTAL #2 (add all)						

Now, figure out where you are at in class by filling in this section:

	Your % so far	Your letter grade so far	Your goal letter grade	Min. class points for goal letter grade	How many more class points do you need to get that grade?	Are there enough points left in the class? (give # of pts left)
	$\left(\frac{\text{Your Score Total}}{\text{Possible Points}}\right) \times 100$	A (90+) B (80+) C (70+) D (60+) F (<60)	A B C D	A= 405 B= 360 C= 315 D= 270	Ex. If goal is B: 360 – your score total = ?	500 - possible points = ?
Grades 1: Possible points = 211						
Grades 2: Possible points = 374						

Ask for help figuring this out if you need it!!