



UNITED TRIBES TECHNICAL COLLEGE

BIO 150 OL Fall 2017

Instructor and Class Information

Instructor Name	Julie Stock-Porter
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Phone	701-255-3285, Ext. 1408
Office Location	SCITC 225 office
Office Hours	See instructor's office schedule under handouts.
Section Number	A
Start Date	8/23/2017
End Date	12/8/2017
Meeting Times	Online
Location	

Course Information

Course Number	BIO 150 OL
Course Title	General Biology

Course Description

BIO150 is the first in a two-semester course sequence. It is an introductory course intended for science and non-science majors that require basic knowledge of biology, the study of life. This course explores basic chemistry and molecular concepts such as the cell, its components and physiology, metabolism, genetics, and development. Content is designed to give the student a solid background, essential to understanding that will be built upon in future courses. Therefore, it is critical to be proficient in language and models of biology upon completion of the course. Some topics will be explored in lab sessions.

Career Cluster	General Education
Level	Associate Degree
Total Credits	4.00

Textbooks

Course Objectives

1. Communicate effectively using the “language of biology”
2. Understand the model of biology and be able to effectively explain the scientific process
3. Compare and contrast the basic components/function of organelles within both plant and animal cells
4. Evaluate the four macromolecules and their defining characteristics
5. Effectively demonstrate basic chemistry skills and apply them to biology concepts
6. Demonstrate the process of meiosis, mitosis, transcription and translation, and genetic Punnet square

Instructor Grading Information

- Grades are a combination of blogs (discussion forum), papers, exams, and labs.
- The same grade is given for both lab and lecture.
- The grade will be broken down as follows:

Lab: (12 total) 15%

Blogs (discussion forums): (13 total) 40%

Papers: (7 total) 20%

Exams: (12, plus one comprehensive final) 15%

Assignments: (9 total) 10%

There are five types of assessments for this course:

1. Blogs (discussion questions) – These questions are the largest percentage of your overall grade, which means there must be considerable attention paid to them. Discussion questions are designed to do just that – discuss, talk, collaborate among your classmates. In the discussion questions, it is expected that you will answer the questions posed, as well as continue the conversation by posting IN DEPTH answers and pushing the topic further by thinking about illnesses, physiology, things that effect you or your communities, thoughts or ideas you may find by googling the topic, et al. I am expecting you to show that you have learned this topic and are capable of verbalizing that knowledge and asking your classmates deeper questions to which they are obligated to respond. Do not expect to pass this course if you are not actively engaged and stimulating further conversation from classmates. You must begin discussion immediately (when the module is scheduled to open) and continue the discussion throughout the week. There is a big difference. Entering the forums and giving short answers will result in failing grades. I expect the boards to be filled with activity, almost daily. I hope it is clear, discussions require many entries per person. These entries cannot be “good job Mary” or “I agree with you Tim”. Each post must be reflective of your knowledge and each post must contain questions that you ask to further conversation on the topic. This is referred to as

“threaded discussion”. I will jump in for support, but expect information to come from each of you. *Discussions are worth 40% of the overall final grade.*

2. Labs: there will lab assignments that accompany topics. Each lab will be listed in individual modules . *Labs are worth 15% of the overall final grade.*
3. Exams: You will take several exams throughout this course. The exams will cover the vocabulary, terms and concepts for each chapter. Exams are to be completed by each due date given. No points will be given for an exam that is submitted after the due date. You will be allowed to take the exam one time, that means one time only, and each exam will be timed.

In the past, there have been students who do not study for the exams and rely on open book to take them. If you choose to do this, your exam will time out and you will accept the grade you get. Exams are meant to test your knowledge, not to see how well you can look things up in a textbook. Do not expect to be given enough time to do that. You will not have time to look up each answer to the test. I will not reopen an exam under any circumstances. Let me make this completely clear, I do not reopen any exam under any circumstances. Do not attempt to take an exam until you understand the information. *Exams are worth 15% of the overall final grade.*

4. Papers: Aside from the textbook, there are many current biological issues concerning the sustainability of our earth. These topics will be covered in this course. You will research assigned topics and write papers about them. You will be asked to think critically. You will write information about the topic, however, it is required that give your thoughts on them. We will discuss this more in the individual modules. *Papers are worth 20% of your overall final grade.*
5. Assignments: There will be homework assignments listed in individual modules. *Assignments are worth 10% of the overall final grade.*

Policy For Late Submission

This is an online course. It requires motivation and desire to succeed. There are no late submissions accepted as each module is open for an entire week. Please plan your schedules accordingly.

The assignments and course requirements must be completed by the due date and must be submitted before the assignment closes. In the event that you have been given permission to submit a late assignment, the student will receive a 50% deduction.

UTTC Grading Scale

Grading Scale:

Grade	Percentage
A	90-100%

B	80-89%
C	70-79%
D	60-69%
Failing	Below 60%

UTTC Policies

Communication

All students are required to regularly check their MyUTTC account to obtain information on course assignments, detailed instructions, and announcements. Students are expected to check their student account regularly for any updates or coursework changes.

It is important to provide the instructor and/or academic advisor with your current email address, phone numbers and alternate contact information. Class cancellations, emergency information, or other announcements can be conveyed in a timely manner if we have your current contact information.

Participation Policy:

Participation is mandatory for this class. This means you will be required to log on a minimum of four times per week that class is in session. (You will not have to logon during the days that we have a break unless you are behind schedule.) This is in-class time only. This is not the amount of time required for you to study and complete lessons. The amount of time you are required to put into this class off line is a minimum of 8 hours. Your weekly work in this course is 12 hours. Please be mindful of that. Your submissions will be graded accordingly. Remember, just logging on is not enough. You must post to the discussion area and complete other assignments as required by the designated DUE DATES.

I will not support students who do not actively engage. If you can't get online to complete the course requirements, then you will need to rethink online classes. They are not easy, and they do not require minimal effort on your part. This is a four credit course, and you are required to apply yourself. This course is time consuming and you will be asked to perform to that limit. Set aside a minimum of 4 hours per week "in class" (as on campus students are required to do), as well as a minimum of 8 hours for studying and writing. Writing is crucial as this is my way of assessing your understanding. I understand that we all have families, jobs, and other challenges. Some of you want to experience vacations and take off with friends for a few days. None of these are an excuse to not complete your assignments. You can access your MyUTTC from anywhere in the world that offers internet. If you do not have the time or equipment to be actively engaged in this class, as required, it may be an option for you to take the course at a time more conducive to your lifestyle.

Plagiarism and Academic Integrity

Plagiarism is the term for taking credit for work that is not your own. This means you cannot take material from articles, books or websites you find in the library and present it as your own work; you cannot let your friends prepare your assignments for you; and you cannot copy an assignment from a student who took the same course in another semester. Plagiarism is taken seriously because this is a place for learning and new ideas; your assignments are evidence of your learning, your original ideas.

Providing work that is not your own, or that is not unique to the assignment, is inappropriate as a form of dishonesty. The consequences of plagiarism are serious: you will be given an F on the specific assignment, or the entire course, at the instructor's discretion. If you need advice on how to appropriately cite the work of

others, please ask. As long as you acknowledge an idea is not your own, and provide the original source, it is generally not plagiarism.

Examples of violations of academic integrity are lying about the reason for an absence, or signing someone else's name to a sign-in sheet when they were not present. Please keep in mind that students generally ask their instructors for recommendations, whether for jobs or for scholarships.

Instructor's policy:

I play FAIR. No one will be given "special" treatment – I am not going to do anything for one student that I am not willing to do for EVERY student in my class. Please don't embarrass us both by asking.

Treat all other students and instructors with dignity and respect.

We are a team. I, as the instructor, am committed to facilitating the course in such a way to support your optimal learning opportunities. I need you, as the learner, to actively engage in the learning.

Getting an education is a responsibility shared by instructor and student. 50% of that responsibility is mine and 50% is yours.

Class Schedule

Date/Session	Topic	Assignments
Week 1	<u>Orientation:</u>	
Week 2	<u>Basic chemistry concepts:</u> Atoms, bonds, molecules	Chapter 2: read pages 18-24 Blog 1 Assignment 1 and 2
Week 3	<u>Basic chemistry concepts cont.:</u> Water, pH, and functional groups	Chapter 2: read pages 25-39 Blog 2 Lab 1 Exam 1: Basic chemistry concepts Paper 1 assigned
Week 4	<u>Organic/Inorganic compounds:</u> Proteins and nucleic acids	Chapters 3 and 4: read pages 41-69 Blog 3 Lab 2 Assignment 3 and 4 Exam 2 Paper 1 due
Week 5	<u>Organic compounds:</u> Carbohydrates and lipids	Chapters 5 and 6: read pages 72-87 Blog 4 Lab 3 Assignment 5 and 6 Exam 3

Date/Session	Topic	Assignments
		Paper 2 assigned
Week 6	<u>Organic compounds:</u> Lipids and the plasma membrane	Chapter 6: read pages 87-101 Blog 5 Lab 4 Exam 4 Paper 2 due
Week 7	<u>The cell:</u> Structure and function of plant and animal cells and their components	Chapter 7: read pages 106-133 Blog 6 Lab 5 Exam 5 Paper 3 assigned
Week 8	<u>Energy, Enzymes, and Cellular Respiration:</u> ATP, enzymes, respiration, fermentation, glycolysis, Krebs's cycle, electron transport	Chapters 8 and 9: read pages 136-173 Blog 7 Lab 6 Exam 6 Paper 3 due
Week 9	<u>Metabolism: Photosynthesis:</u> Light and dark reactions	Chapter 10: read pages 176-195 Blog 8 Lab 7 Exam 7 Paper 4 assigned
Week 10	<u>The cell cycle:</u> Mitosis, meiosis	Chapters 12 and 13: read pages 219-254 Blog 9 Lab 8 Exam 8 Paper 4 due
Week 11	<u>Genetics:</u> Mendelian genetics and Punnet square	Chapter 14: read pages 256-279 Blog 10 Assignment 7 Lab 9 Exam 9 Paper 5 assigned
Week 12	<u>DNA: synthesis and repair:</u> Nucleotides, structure, replication	Chapter 15: read pages 284-301 Blog 11 Assignment 8 Lab 10 Exam 10

Date/Session	Topic	Assignments
		Paper 5 due
Week 13	<u>Gene structure and Expression:</u> Central dogma, mutations, genetic code	Chapter 16: read pages 304-315 Blog 12 Lab 11 Exam 11 Paper 6 assigned
Week 14	<u>Transcription and translation:</u> Making proteins	Chapter 17: read pages 317-332 Blog 13 Assignment 9 Lab 12 Exam 12 Paper 6 due
Week 15	<u>Review and Prepare for Final:</u> Study!	Paper 7 assigned and due
Week 16	<u>Final:</u> Comprehensive exam	Final exam