

# General Biology I

Syllabus

## BIO 150-General Biology I

### Course Information

Year / Term: Fall 2016

Class Location / Room: Sci Tech 231

Days / Time: Tues and Thurs 1-2:30pm

E-Mail: [mguinn@uttc.edu](mailto:mguinn@uttc.edu)

### Instructor Information

Instructor: Mandy Guinn

Phone: 255-3285 ext. 1322

Office Location: Sci Tech 19

Office Hours: If I am not in class my door is open.

### **Required Textbooks:**

*Freeman, S. Biological Science. 5th ed. San Francisco, CA: Pearson-Benjamin Cummings, 2011.*

### **Books that may complement class teachings:**

*Siegfried, Donna Rae. Biology for Dummies. New York: Hungry Minds, INC., 2001*

*Alcamo, I. Edward. Biology Coloring Workbook. New York: Random House, Inc., 1998*

### **Course Description:**

This course will focus on the “Study of Life” at a cellular and physiological level. Basic concepts such as cellular components, cellular physiology and genetics will be explored.

Co-Requisite: LAB 150 General Biology I Lab

### **Student Learning Outcomes:**

<b>Candidates will demonstrate the following knowledge and skills:</b>	<b>Assessment</b>
1. Communicate effectively using the “language of Biology”	Vocabulary, Assignments, Quizzes and Test
2. Describe the model of Biology and be able to effectively explain the scientific process.	Vocabulary, Assignments, Quizzes and Test
3. List basic components/function of organelles within both plant and animal cells.	Vocabulary, Assignments, Quizzes and Test
4. List the four macromolecules and their defining characters.	Vocabulary, Assignments, Quizzes and Test
5. Demonstrate basic chemistry skills and apply them to biology concepts.	Vocabulary, Assignments, Quizzes and Test
6. Discuss how genetics influence hereditary traits and be able to complete a punnet square.	Vocabulary, Assignments, Quizzes and Test
7. Compare and contrast animal and plant cells	Vocabulary, Assignments, Quizzes and Test
8. Diagram and demonstrate the process of Meiosis, Mitosis, Transcription and Translation.	Vocabulary, Assignments, Quizzes and Test

9. Discuss biological trends among different populations.	Vocabulary, Assignments, Quizzes, Test, and In Class Participation
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## POLICIES

### Course Attendance Policy

It is extremely important that you come to class. For the purpose of reporting absences, there are no “excused absences.” Excessive absences may result in termination from the course. If you know you will be absent from class you must notify the instructor. If you miss a class, you are responsible for obtaining notes, assignments, handouts, etc. for the session missed. Remember, attendance affects progress, grades, and funding. Last but not least, **come to class on time!** Habitual tardiness is disrespectful to yourself, your classmates and your instructor. If you are more than ten minutes late for class, you will be marked absent.

### Policy for Late Submission

1. Assignments CANNOT be made up. It is your responsibility to come to class and turn assignments in on time.
2. It is your responsibility to check your grades. If you have any concerns, please feel free to make an appointment with me to check your grades and/or missing assignments.
3. Athletics or any extracurricular activities are not excuses to turn in late work. If you know that you will be missing class because of extracurricular activities please make arrangements to have your assignments in **BEFORE you leave or send it to me by e-mail**(by the due time, CST).
4. Computer problems are not an excuse. There are several computers on campus and several printers. If you are having problems printing your assignment send it to me so that you get it in on time. I will not accept late papers because you were having computer problems or because the printer did not work.
5. It is my responsibility to get your work back in a reasonable manner. You take the time to do your homework, and I will try to have your assignments corrected and back to you by the end of the week.

### Student Behavior in the Classroom

UTTC students will conduct themselves in the classroom during class time in a responsible and respectful manner. Student behavior that interferes with learning in the classroom will not be tolerated. This behavior includes chronic tardiness, threatening confrontations, intoxication, inappropriate physical contact, lewd or disrespectful language or gestures directed at the instructor or at fellow students, bullying, direct or indirect intimidation, and conversations with other students that are not related to classroom topics. Faculty are expected to maintain professional management of classroom activities prior to, during and after class times. As such, if a student demonstrates behavior that disrupts or interferes with classroom activities, an instructor reserves the right to ask the student to leave the classroom, to contact campus security, to request mediation by the academic department chair or an academic/personal counselor, or to file a formal complaint subject to a student disciplinary hearing.

### Cell Phones

Out of courtesy to your fellow students and myself, please leave your cell phones on silent during class. If you absolutely must have your phone on, please inform me at the beginning of class. Quietly go to the hallway to take any calls so that it will be less of a distraction to others. Texting is not allowed in class. Mp3 players and iPods are also not to be used during class discussions or lectures. Please remove all headphones before class begins. It is a distraction to others and the instructor.

### **Students with Disabilities**

United Tribes Technical College recognizes its responsibility for making reasonable accommodations to ensure there is no discrimination on the basis of a disability. The Office of Disabilities Services coordinates reasonable support services, accommodations, and appropriate referrals aimed at removing barriers and providing an equitable learning environment. If you have a disability, please contact the Disabilities Services office located in the Education Building Room 123B (first floor). The DS department can also be reached at 701.255.3285 ext. 1516.

### **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, and you cannot copy an assignment from a student who took the same course another semester. Plagiarism is taken seriously because this is a place for learning and new ideas; your assignments are the evidence you provide of your learning, your original ideas.

Providing work that is not your own or that is not unique to the assignment is inappropriate because it is a form of dishonesty. The consequences of plagiarism are severe: 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. Briefly as long as you acknowledge that an idea is not your own, but give the original source, and so long as the assignment contains sufficient original work in addition to whatever is quoted from others, you are generally not going to get into trouble.

Other violations of academic integrity are also inappropriate though they do not generally have the same severe consequences as plagiarism. One example would be 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.

### **Class Cancellation Policy**

In every situation, the decision to cancel classes is taken very seriously. The reputation of UTTC and the integrity of the academic program rely on every class being conducted according to the schedule. On the course schedule for this syllabus, the dates you will not have class are identified. These are circumstances that your instructor is aware of at the beginning of the semester when the campus is closed or the instructor and/or students have other commitments.

On rare occasions, there are unexpected emergencies that require class to be cancelled. If your instructor is not able to come to class, one of the other instructors will cover to make sure you get the educational experience you deserve.

### **Conference Attendance**

To support the UTTC motto, "Leadership Begins Here", all students are required to participate in the United Tribes Technical College Tribal Leader Summit & Trade Show September 6 – 8, 2016 at the Bismarck Event Center. Students are expected to be at the Summit from 1 PM – 3 PM on Tuesday and 9 AM – 3 PM on Wednesday and Thursday. Bussing to and from the campus will be provided. Sign in sheets will be available at the registration tables for all students to sign upon arrival and again at departure. Bussing to and from the campus will be provided.

For each session attended, the student is expected to write 3-4 sentences that connect the presentation to the "Tribal leadership" theme. Include the name of the presenter, a brief description of the content presented, presenter style, and a session-related reflection connecting the theme to something you learned. Visiting the exhibit hall can be included as a session. The reflection paper is considered an assignment for

each one of the students' courses and is recorded as either points or a letter grade. One reflection paper can be submitted for multiple courses.

### Evaluation of Student Performance (Including Grading Policy)

<b>A</b>	<b>90-100%</b>	<b>C</b>	<b>70-79%</b>
<b>B</b>	<b>80-89%</b>	<b>D</b>	<b>60-69%</b>
		<b>Failing</b>	<b>Below 60%</b>

### Description of Assignments and Grading

Biology 150 grade is broken up into **FIVE** grading criteria. Your grade is on a point system and all your work will be totaled to equal your final grade. Grading will be as follows:

1. **Attendance/Participation:** due to the nature of this course attendance and class participation is a key factor to your success. Students are expected to contribute to the learning process and to their classmates through preparation, contribution in class discussion, and regular class attendance. Students will earn 0-2.5 points for participation each class period. This is worth a total of **70pts** of your overall grade.

The learning process requires all members of the class be involved in raising questions, providing information, suggesting alternative ways of thinking about the subjects, in constructive critique of ideas, and in verbal affirmation of the perspectives of others. Diversity of experience and opinion are to be expected, invited and respected in class (by students and the professor). In conversation with others we will have opportunity to reflect on the assumptions that shape our thinking on different subjects.

2. **Exams:** There are 4 exams that will be given during the semester. Each exam will be worth roughly 75pts. Exams will be multiple choice, matching and essay questions. This will be **300 pts** of your total grade. Exams will be graded and returned during the next class period.
3. **Quizzes:** There will be 5 quizzes given throughout the semester. Each quiz will be 10pts. The quizzes will be given in the first 5 minutes of class. Anyone who comes in to class late during a quiz will not be given the quiz. This ensures that the class can move forward with the material for that day and not wait on a late individual. Make-up quizzes will not be given. Quizzes are worth a total of **50 pts** of your grade.
4. **Assignments:** Each assignment is due **AT THE BEGINNING** of the very next class hour unless otherwise stated. There will be a total of 5 assignments worth **125 pts** of your grade overall.
5. **Vocabulary:** You will have a weekly vocabulary list that needs to be completed prior to class on Thursday. This will be a key tool in study for your quizzes and exams. It will also help you understand with your course readings.

4 Exams @ 75 pts each =	300 pts
5 Quizzes @ 10pts each =	50 pts
28 Participation @ 2.5pts each =	70 pts
(2 per wk at 2.5 per class)	
10 Vocabulary @ 5 pts each =	50 pts
<u>5 Assigns @ 25pts each =</u>	<u>125pts</u>
= A total of	= 590 pts

**Reading:** Assigned material is listed in the tentative schedule below. You are responsible to have read your chapter prior to class and be prepared to discuss the assigned reading. Class time is spent discussing and building upon the readings. If you do not do the reading, that day's class will not make sense and you will be unable to participate in class discussion. We will be covering a wide range of material in this class. You are strongly advised to stay on top of the reading assignments.

**Extra Credit Opportunities:** There are points on every exam that can be earned towards the final test grade. This is a great opportunity to bring your test scores above 100 percent. Remember that the Exams make up the largest percentage of your grades and therefore, it will not hurt you to guess...guessing might earn you valuable points. **There will be no other points given for extra credit.**

### Tentative Fall 2016 Schedule

#### Biology 150 Agenda

Wk	Date	Reading/Lectures	Assignments
<b>1</b>	August 23 <sup>rd</sup>	Lecture 1: Introduction to Bio 150: Expectations and Syllabus	Vocabulary
	August 25 <sup>th</sup>	Lecture 2: Chapter 1 (1.1-1.5) Biology and the Scientific Method	
<b>2</b>	August 30 <sup>th</sup>	Lecture 3: Chapter 2 (2.1-2.3) Water and Carbon: Essentials for Life	Vocabulary, Quiz I Assignment 1
	September 1 <sup>st</sup>	Lecture 4: Chapter 2 (2.4-2.5) and Chapter 3 (3.1) Building Blocks and Amino Acids	
<b>3</b>	September 6 <sup>th</sup>	No Afternoon Classes	
	September 8 <sup>th</sup>	Required Attendance at Summit	
<b>4</b>	September 13 <sup>th</sup>	Lecture 5: Chapter 3 (3.1-3.4) Protein Structures	Vocabulary
	September 15 <sup>th</sup>	Lecture 6: Chapter 4 (4.1-4.4) RNA and the Structures of Life	
<b>5</b>	September 20 <sup>th</sup>	<b>Review</b>	<b>Exam I</b>
	September 22 <sup>nd</sup>	<b>Exam I (covers material from chapter 1.1-4.4)</b>	
<b>6</b>	September 27 <sup>th</sup>	Lecture 7: Chapter 5 (5.1-5.3) Carbohydrates	Vocabulary, Assignment 2
	September 29 <sup>th</sup>	Video (Macromolecules)	

<b>7</b>	October 4 <sup>th</sup>	Lecture 8: Chapter 6 (6.1-6.4) Lipids and membranes	Vocabulary
	October 6 <sup>th</sup>	Lecture 9: Chapter 7 (7.1-7.3) Cell Structures and Function	Quiz 2
<b>8</b>	October 11 <sup>th</sup>	Lecture 10: Chapter 7 (7.4-7.6) Cell structures and systems	Vocabulary, Assignment 3
	October 13 <sup>th</sup>	Lecture 11: Chapter 8 (8.1-8.5) Energy and Metabolism	
<b>9</b>	October 18 <sup>th</sup>	<b>Mid Term Review</b>	<b>Exam II</b>
	October 20 <sup>th</sup>	<b>Mid Term Exam</b>	
<b>10</b>	October 25 <sup>th</sup>	Lecture 12: Chapter 9 (9.1-9.3) Cellular Respiration Overview	Vocabulary
	October 27 <sup>th</sup>	Lecture 13: Chapter 9: (9.4-9.6) In-depth Cellular Respiration	Assignment 4
<b>11</b>	November 1 <sup>st</sup>	Lecture 14: Chapter 10 (10.1-10.3) Photosynthesis	Vocabulary
	November 3 <sup>rd</sup>	Lecture 15: Chapter 10 (10.3-10.4) Photosynthesis	Quiz 3
<b>12</b>	November 8 <sup>th</sup>	<b>Exam III Review</b>	<b>Exam III</b>
	November 10 <sup>th</sup>	<b>Exam III</b>	
<b>13</b>	November 15 <sup>th</sup>	Lecture 16: Chapter 11-12 Cell to Cell Interaction and Cell Cycle	Vocabulary
	November 17 <sup>th</sup>	<b>Video</b>	Quiz 4
<b>14</b>	November 22 <sup>nd</sup>	Lecture 17: Chapter 13 (12.1-12.2) Meiosis	Vocabulary
	November 24 <sup>th</sup>	No Classes: T-Day	
<b>15</b>	November 29 <sup>th</sup>	Lecture 18: Chapter 14 (14.1-14.3) Mendel and Genes	Assignment 5
	December 1 <sup>st</sup>	Lecture 19: Chapter 14 and Video	Quiz 5
<b>16</b>	December 6 <sup>th</sup>	<b>Review for Exam</b>	<b>Exam IV</b>
	December 7 <sup>th</sup> -9 <sup>th</sup>	<b>Final Exam</b>	

**SYLLABUS SIGNATURE PAGE**

**Course Title:** General Biology I

**Course Number:** BIO 150

**Credit Hours:** 3 Credits

**Instructor:** Mandy Guinn

My signature below indicates that I have read and understand this syllabus and have been given a copy of my own to keep.

\_\_\_\_\_  
Student's Printed Name

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date