



# UNITED TRIBES TECHNICAL COLLEGE

## BIO 150 General Biology I Syllabus

### Instructor and Class Information

<b>Instructor Name</b>	Mandy Guinn
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<b>Office Location</b>	Sci Tech 19
<b>Office Hours</b>	Mon-Thurs 3-5

**Additional Instructor Information** The best way to contact me is through e-mail. In your e-mail, please make sure to include your name, e-mail details, and your contact information.

<b>Meeting Times</b>	Tues and Thurs 1-2:30
<b>Location</b>	Sci Tech 231

### Course Information

<b>Course Number</b>	BIO 150
<b>Course Title</b>	General Biology I

### 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

<b>Total Credits</b>	3.00
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### Textbooks

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

### Course Objectives

1. **Communicate effectively using the “language of Biology”.**
2. **Describe the model of Biology and be able to effectively explain the scientific process.**
3. **List basic components/function of organelles within both plant and animal cells.**
4. **Discuss how genetics influence hereditary traits and be able to complete a punnet square and analysis software.**
5. **List the four macromolecules and their defining characteristics.**
6. **Demonstrate basic chemistry skills and apply them to biology concepts.**

7. Compare and contrast animal and plants cells.
8. Diagram and demonstrate the process of Meiosis, Mitosis, Transcription and Translation.
9. Discuss biological trends among Indigenous populations.

### **Instructor Grading Information**

Biology 150 grade is broken up into 4 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:

**Exams:** There are 4 exams that will be given during the semester. Each exam will be worth roughly 75 pts. Exams will be all multiple choice questions. This will be 300 pt of your total grade.

**Quizzes:** There will be 5 quizzes given throughout the semester. Each quiz will be 10 pts. The quizzes will be given in the first 5 minutes of class. Anyone who comes in to class late during a quiz is encouraged to take the quiz even though they missed the first part (it will be better than getting a zero for the entire quiz). Make-up quizzes will not be given. Quizzes are worth a total of 50 pts of your grade.

**Assignments:** Each assignment is due AT THE BEGINNING of the very next class hour unless otherwise stated. There will be a total of 5 assessments worth 125 pts of your grade overall.

**Preparation and Participation:** 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 70 pts of your overall grade. 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. 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.

4 Exams @ 75 pts each = 300 pts

5 Quizzes @ 10pts each = 50 pts

8 Participation @ 2.5pts each = 70 pts (2 per wk at 2.5 per class)

5 Assigns @ 25pts each = 125pts

A total of = 540 pts

### **1. Grading Scale**

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%

Failing	Below 60%
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## **2.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.

## **3.Attendance Policy**

Attendance and completion of assigned readings is the equivalent of participation since your ideas and your work with classmates contribute to everyone's understanding and achievement. Significant tardiness will be considered an absence. If you arrive late, you may be considered absent for that class period.

Every student is responsible for obtaining the necessary information required in the event of an absence. It is the student's responsibility to contact one of their peers to obtain information concerning assignments, handouts, and any changes or announcements.

Student grades will be impacted by the frequency and quality of participation in class.

## **4.Summit Attendance**

All UTTC students participate in the United Tribes Technical College Tribal Leaders Summit & Trade Show in September at the Bismarck Event Center. Students are expected to be at the Summit from 1:00pm to 3:00pm on Tuesday and 9:00am to 3:00pm on Wednesday and Thursday. Transportation 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.

At the conclusion of the Tribal Leaders Summit, the student is expected to write an essay on how the session presentation connected to the "Communities – Stronger Together" theme. Include the title of the sessions attended, the names of the presenters, a brief description of the content presented in each session, the presenter style, and how the sessions connected to the theme. Visiting the exhibit hall can be included as a session. The essay 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.

## **5.Policy for Late Submission**

Each student is responsible for obtaining the necessary information required in the event of an absence. It is the student's responsibility to contact one of his or her peers to obtain information concerning assignments, handouts, and any changes or announcements.

The assignments and course requirements (homework) must be completed by the due date and are collected at the beginning of the class period. If an assignment is not handed in at the beginning of the class period, it is

considered late. Late work will not receive full credit if it is accepted at all. All late work (if prior arrangements have been approved by the instructor) must be personally handed to the instructor. The amount of points deducted for late work is at the discretion of the instructor.

## **6.Cell Phone**

Out of respect for the other students and the instructor, it is advised that cell phones are turned off during class times. If the student is expecting an important phone call (e.g. case worker, Housing, clinic), the instructor must be informed ahead of time and the cell phone set to a silent ring. If such a phone call is received during class time, the student will answer the call by quietly removing him or herself from the classroom. This also includes texting during class; it is not acceptable. Students may not use class time to check social media accounts, voicemail, and/or personal emails.

## **7.Student Behavior**

UTTC students will conduct themselves in a responsible and respectful manner at all times in the classroom, in the hallways, in the Library, the Cafeteria, and any other location on campus. 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.

## **8.Plagiarism and Academic Integrity**

Plagiarism is the term for taking credit for work that is for 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.

## **9.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 Disabilities Services Office coordinates reasonable accommodations, support services, and appropriate referrals for the purpose of removing barriers

and providing an equitable learning environment. If you have a disability, please contact the Disabilities Services (DS) office located in the Education Building Room 123 and speak to the DS Coordinator. The Coordinator can also be reached at (701) 255-3285, ext. 1516.

## Class Schedule

Date/Session	Readings/Lectures	Coursework
Week 1	Aug 22nd--Lecture 1: Introduction to Bio 150: Expectations and Syllabus  Aug 24th--Lecture 2: Chapter 1 (1.1-1.5) Biology and the Scientific Method	
Week 2	Aug 29th--Lecture 3: Chapter 2 (2.1-2.3) Water and Carbon: Essentials for Life  Aug 31st--Lecture 4: Chapter 2 (2.4-2.5) and Chapter 3 (3.1) Building Blocks and Amino Acids	Aug 29th--Quiz 1  Aug 31st--Assignment 1
Week 3	Sept 5th--No Afternoon Classes Required to be at Summit  Sept 7th--Attendance at Summit	
Week 4	Sept 12th--Lecture 5: Chapter 3 (3.1-3.4) Protein Structures  Sept 14th--Lecture 6: Chapter 4 (4.1-4.4) RNA and the Structures of Life	
Week 5	Sept 19th-- <b>Review</b>  Sept 21st-- <b>Exam I</b> (covers material from chapter 1.1-4.4)	
Week 6	Sept 26th--Lecture 7: Chapter 5 (5.1-5.3) Carbohydrates  Sept 28th--Video (Macromolecules)	Sept 26th-- Assignment 2
Week 7	Oct 3rd--Lecture 8: Chapter 6 (6.1-6.4) Lipids and membranes  Oct 5th--Lecture 9: Chapter 7 (7.1-7.3) Cell Structures and Function	Oct 5th--Quiz 2

Date/Session	Readings/Lectures	Coursework
Week 8	Oct 10th--Review for Mid-Term  Oct 12th-- <b>Exam II</b>	
Week 9	Oct 10th--Lecture 10: Chapter 7 (7.4-7.6) Cell structures and systems  Oct 12th--Lecture 11: Chapter 8 (8.1-8.5) Energy and Metabolism	Oct 10th--Assignment 3
Week 10	Oct 17th--Lecture 12: Chapter 9 (9.1-9.3) Cellular Respiration Overview  Oct 19th--Lecture 13: Chapter 9: (9.4-9.6) In-depth Cellular Respiration	Oct 19--Assignment 4
Week 11	Oct 24th--Lecture 14: Chapter 10 (10.1-10.3) Photosynthesis  Oct 26th--Lecture 15: Chapter 10 (10.3-10.4) Photosynthesis	Oct 26th-Quiz 3
Week 12	Oct 31st--Exam III Review  Nov 2nd-- <b>Exam III</b>	
Week 13	Nov 7th--Lecture 16: Chapter 11-12 Cell to Cell Interaction and Cell Cycle  Nov 9th--Video	Nov 9th-Quiz 4
Week 14	Nov 14th-- Lecture 17: Chapter 13 (12.1-12.2) Meiosis  Nov 16th-- Lecture 18: Chapter 14 (14.1-14.3) Mendel and Genes	
Week 15	Nov 21st--Lecture 19: Chapter 14 and Video  Nov 23rd--No Classes (T-Day)	Nov 21st--Assignment 5 and Quiz 5  Nov 23rd--No Classes (T-Day)
Week 16	Nov 28th-- Chapter 17	

Date/Session	Readings/Lectures	Coursework
	Nov 30th-- Chapter 17	
Week 17	Dec 5th-7th-- Finals Week and <b>Final Exam</b>	