

BIO 191: GENERAL BIOLOGY I
Summer Quarter 2008

Instructor: Mallon Harris
Credit Hours: 5
Class Hours: 4
Laboratory Hours: 3

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I. Prerequisites: Regular Associate Level Admission, ENG 191 and College level Algebra is recommended.

II. Texts & Materials:

Starr, Cecie and Ralph Taggart. (2006). *Biology, the Unity and Diversity of Life*, Eleventh ed. Albany, NY: Brooks /Cole.
Bridges, Ron. *Laboratory Manual: Cells and Cellular Processes*, 1st ed.

III. Course Description:

This course provides an introduction to basic biological principles with a focus on living cells. Topics include: cellular chemistry; structure and functions of cells; energetics and metabolism; genetics; and an introduction to the classification of living things. Hands-on laboratory experiences support classroom learning.

IV. Competency Areas:

- A. Cell theory.
- B. Cell structure and function.
- C. Energy and metabolism.
- D. Cellular division.
- E. Genetics
- F. Protein synthesis.
- G. Classification living organisms.
- H. Laboratory equipment and procedures.

V. Course Goals/Objectives: To successfully complete this course the student will:

- A. Describe the structures and functions of cells and their components.
- B. Describe the energetics of cells and cellular metabolism.
- C. Describe genetics in terms of observable traits and chromosomes.
- D. Describe the process of protein synthesis.
- E. Classify living organisms in the five kingdoms.
- F. Demonstrate proper use of laboratory equipment and knowledge of laboratory safety procedures.

VI. Course Requirements:

- A. To successfully complete this course the student must fulfill the following:
 - 1. Complete all reading assignments prior to class meeting times.
 - 2. Complete all examinations with a minimum average for all of 70%.
 - 3. Participate in and complete all laboratory exercises.

B. Course attendance requirements:

Students who miss examinations may make up those examinations if they can provide a verified valid excuse. Excused absences are at the discretion of the instructor. Valid excuses may include serious illness, death in the family etc. An excused absence only allows the student to make up the missed examination, it does however, count toward your total absences.

VII. Testing Procedures and Final Examinations:

- A. There will be 4 tests given over lecture material, each worth 100 points. None of these are

comprehensive or cumulative. The format of these tests will be multiple choice or matching. The schedule for these tests is subject to change.

B. There will 2 laboratory tests, each worth 100 points. Neither is comprehensive or cumulative. The format for these tests is short answer or labeling. The schedule for these tests is subject to change.

C. All tests must be taken on the day they are given. An exception will be made for students that have submitted an acceptable excuse prior to or by the next class after a given test. Failure to make the test up within one week's time will result in a grade of F.

D. No extra credit is given in this class. Work must focus on attendance and test grades only.

VIII. Evaluation Procedures:

A. Each lecture test and laboratory test is worth 100 points.

B. An academic performance grade will be given as an average percentage of total points, equal to the following grades according to Chattahoochee Technical College policy: 100 - 90% (A), 89 - 80% (B), 79 - 70% (C), 69 - 60% (D), and less than 60% (F).

C. A work ethics grade will also be given as ascribed by Chattahoochee Technical College. This grade will reflect evaluation of **attendance**, character, teamwork, appearance, attitude, productivity, organizational skills, communication, cooperation, and respect. The grading scale is as follows: exceeds expectations (3), meets expectations (2), needs improvement (1), and unacceptable (0).

IX. Disability Accommodations:

Students who need accommodations are asked to arrange a meeting during office hours during the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with office hours, an alternate time can be arranged. To set up this meeting, please contact me. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with Disability Services at 770-528-4529.

X. Notice to Students Who Stop Attending Classes:

A. STUDENTS must initiate withdrawal from a course(s) by completing the appropriate form through the STUDENT SERVICES OFFICE.

B. Instructors WILL NOT initiate withdrawal for students who stop attending any course(s). Withdrawal is a STUDENT option.

C. STUDENTS withdrawing from a course(s) after the drop/add period (July 1-3) through the end of the 5th week of the quarter (August 06) will receive a grade of a W

D. STUDENTS withdrawing from a course(s) during the 6th, 7th, or 8th week of the quarter (August 27) will receive a grade of a WP or a WF.

E. STUDENTS who have not withdrawn or do not attend class after the end of the 8th week of the quarter (August 27) WILL NOT be withdrawn by the instructor and WILL receive the appropriate letter grade (A, B, C, D, F, S, or U).

XI. Academic Dishonesty:

A student is subject to disciplinary action by the institution which may include suspension or expulsion for academic dishonesty including cheating, plagiarism, and providing false information to the institution. Note: all forms of academic dishonesty including, but not limited to, cheating on a test, plagiarism, collusion, and falsification of information will be cause for discipline.

Cheating on a test is defined to the following:

A. Copying from another student's test paper.

B. Using materials during a test not authorized by the person giving the test.

C. Collaborating with any other person during a test without permission.

D. Knowingly obtaining, using, buying, selling, transporting, or soliciting, in whole or in part, the contents of any unadministered test.

E. Bribing any other person to obtain information about tests.

F. Substituting for another student or permitting any other person to substitute for oneself.

XII. Plagiarism:

Plagiarism is defined as the appropriation of any other person's work and the unacknowledged incorporation of that work in one's own work offered for credit. Collusion is defined as the unauthorized collaboration with other person in preparing work offered for credit.

XIII. Attendance Policy:

Students are expected to be punctual and attend all classes for which they are registered. Each student should recognize at the beginning of his/her postsecondary career that a mature acceptance of his/her responsibilities is a requisite for reasonable accomplishment in postsecondary work; this applies particularly in the area of class attendance. Students anticipating an absence or tardiness should contact the instructor in advance or provide notification as soon as possible. It is the responsibility of the student to account for instructional time missed and to make arrangements for make-up work at the convenience of the instructor. If the student does not attend classes, submit assignments, or, when applicable, contact instructors in a timely manner (either in person or by telephone), a failing grade(s) may be issued.

All tests must be taken on the date that they are given. The only exception will be for students who have submitted an

acceptable excuse prior to the date of the test or provided an acceptable excuse on the next class. The missed test must be taken by the end of the following week. Failure to take the missed test within one week will result in a grade of F.

XIV. Offensive Statements:

Offensive statements regarding one's race, sex, creed, national origin, physical disability or mental stability are not appropriate and will not be tolerated. These statements will be considered a violation of the standards of conduct as stated in the current Chattahoochee Technical College catalog.

XV. Electronic Devices:

Electronic devices such as cellular phones, pagers etc., with audible ringers will not be tolerated in the classroom.

XVI. Warranty:

Any graduate of Chattahoochee Technical College who is deficient in a competency identified in state program standard shall be retrained at the request of the employer at no cost to the employer or the employee for tuition or instructional fees. This warranty is valid for two consecutive years following the student's date of graduation.

XVII. Tentative Lecture, Laboratory & Test Schedule: (Schedule is subject to changes.)

Date	Chapter/Laboratory Exercise/Test Schedule
07/02	Chapter 1: Concepts and Methods in Biology Laboratory 1: The Scientific Method
07/07	Chapter 2: Chemical Foundations for Cells Laboratory 2: Measurements and Basic Chemistry
07/09	Chapter 3: Carbon Compounds in Cells Laboratory 3: Organic Chemistry
07/14	Chapter 4: Cell Structure and Function Laboratory 4: Cells and Their Structures
07/16	Chapter 5: A Closer Look at Cell Membranes Laboratory 5: Movement Through Cells

07/21	Review for Chapters 1-5. TEST 1 Chapter 6: Ground Rules of Metabolism
07/23	<u>Test 1: Chapters 1 - 5</u>
07/28	Chapter 6, continued. Ground Rules of Metabolism Chapter 6 Lab: Enzymes
07/30	Chapter 7: Energy-Acquiring Pathways Laboratory 7: Photosynthesis
08/04	Chapter 8: Energy-Releasing Pathways Laboratory 8: Respiration and Fermentation
08/06	Review Chapters 6 - 8 Laboratory Test 1: Laboratories 1 - 8
08/11	<u>Test 2: Chapters 6 – 8 Test will begin at 6:15. Do not be late. Material given after test.</u> Chapter 9: Cell Division and Mitosis Laboratory 9: Mitosis and the Cell Cycle
08/13	Chapter 9: Cell Division and Mitosis (Con=t) Chapter 10: Meiosis Laboratory 10: Meiosis
08/18	Chapter 11: Observable Patterns of Genetics Laboratory 11: Observable Genetics
08/20	Chapter 12: Chromosomes and Human Genetics Laboratory 13: Genetics Problems
08/25	<u>Test 3: Chapter 9-12</u> Chapter 13: DNA Structure and Function
08/27	Chapter 14: From DNA to Proteins Laboratory 15: Protein Synthesis: Transcription/Translation
09/01	NO CLASS LABOR DAY HOLIDAY
08/03	Chapter 15: Controls Over Genes
08/08	Laboratory Test 2: Laboratories 9 - 15 Test 4: Chapters 13 - 15