Biol 1406 General Biology 1

Course Syllabus: Summer 2017

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

Sadonna Parker

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Before or after class	Before or after class	Before or after class	Before or after class		Through Email/Bb

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (include prerequisites): This course is a study of the biological sciences for students who plan to major or minor in biology or pre-professional studies or to fulfill the laboratory science requirement of other majors. The course utilizes an integrated approach and emphasizes the molecular basis of life, cellular organization, bioenergetics, Mendelian and molecular genetics. 3 hours of lecture and 3 hours of laboratory each week.

Required Textbook(s):

Foundations of Life, Volume 1 with Connect Plus/Ebook ISBN 0077805925

-OR-

Foundations of Life Volume 1 with Text with Connect ISBN 0077805941

Publisher: McGraw-Hill

Required Lab book:

General Biology I Lab Hearron, Semrau, and Carruth ISBN 997005242X

Publisher: NTCC

Recommended Reading(s): Chapters 1-15 in textbook

Student Learning Outcomes:

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking, scientific problem-solving, and teamwork to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Describe the characteristics of life.
5. Explain the methods of inquiry used by scientist.
6. Identify the basic properties of substances needed for life.
7. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
8. Describe the structure of cell membranes and the movement of molecules across a membrane.
9. Identify the substrates, products, and important chemical pathways in metabolism.
10. Identify the principles of inheritance and solve classical genetic problems.
11. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
12. Describe the unity and diversity of life and the evidence for evolution through natural selection.

Lectures & Discussions:

Week 1:	The Science of Biology
Week 1:	The Nature of Molecule and Property of Water
Week 1:	The Chemical Building Blocks of Life
Week 2:	Cell Structure
Week 2:	Membranes
Week 2:	Energy and Metabolism
Week 3:	Cellular Respiration
Week 3:	Photosynthesis
Week 3:	Mitosis
Week 4:	Meiosis
Week 4:	Mendelian Genetics
Week 4:	Chromosomal Genetics
Week 5:	Molecular Genetics: DNA
Week 5:	Molecular Genetics: Gene Expression and Control
Week 5:	Biotechnology and Genomics

Evaluation/Grading Policy:
There will be 4 major exams and 1 comprehensive final exam during the course of the semester. The test average (40%), quizzes and homework grades (15%), and final exam (15%) will be weighted and averaged to produce your lecture grade, which accounts for 70% of the total course grade. Laboratory work accounts for 30% of your course grade.

Tests/Exams:
The lecture exams may include both objective (multiple choice, true-false, matching) and subjective questions over notes and text material and any additional reading that may be assigned. Scantrons (and possibly bluebooks) will be required for exams. If you miss a major exam, you will be allowed to take the comprehensive make-up exam that will be scheduled for the week before finals. If you arrive to class late on a test day, you will be required to take the makeup exam later in the semester. If you are aware of a pending absence from class, notify me as early as possible. THERE IS NO MAKEUP FOR MISSED QUIZZES or HOMEWORK. Attendance and punctuality is crucial for success in this course.

Assignments:
Homework is assigned for each chapter in McGraw-Hill Connect. You must use your access code to log into Connect. Each homework assignment will have an accompanying due date. Late submissions on online homework will be penalized.

Other Course Requirements:
All students will need a notebook and pens or pencils. Tests must be taken with a #2 pencil. You will need scantrons and bluebooks for lecture exams and scantrons for lab practicals.

Student Responsibilities/Expectations:
Northeast Texas Community College is a "community of scholars". Please remember that you and all of the students in this class are pursuing very important goals in your lives. As scholars, I expect every student to be courteous to other students and the instructor in both lecture and laboratory experiences. My expectations are that you will be on time for class and stay the entire period.
As your instructor, I will attend all scheduled classes on time and prepared to cover the assigned objectives. I will make a conscientious effort each class period to teach to the best of my ability and to provide you with a variety of teaching and learning formats to help you in your efforts to be successful in biology. I

deeply care about your learning experience and your success in this course, however that ultimate success does depend largely on YOU.

The use of any electronic devices (cell phones, laptops, iPADs, iPODs, etc.) that prevent engagement in the learning process in the classroom/laboratory are prohibited. The instructor retains the right to require that all electronics are turned OFF during class and lab periods. My expectations include that you will engage yourself in the material being presented each day. The ability to listen carefully, summarize information, and record that information in note form is an important skill in higher education. By practicing those skills during the class period, you will have made an important step forward towards learning the course material.

The last day to drop the course with a grade of W is **(see catalogue)**. If circumstances require you to withdraw from this course, you must do so by that date. Failure to officially withdraw will result in your receiving a grade of F.

NTCC Academic Honesty Statement:
"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

Academic Ethics
The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the NTCC Catalog or Student Handbook.

Family Educational Rights And Privacy Act (**Ferpa**):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.