



**Biology 1308**                      **3 Credits**  
**Summer I 2019**  
**Introduction to Biology I (Section 101)**

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

**Instructor Name:** Dr. Emad Tahtamouni  
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**Location and Time:** MAIN/MS/132 **MTWR 1:00 PM-3:10 PM**

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday
	3pm -5pm	3pm -5pm	3pm -5pm	3pm -5pm	

*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):** 3 Credit Hours. A survey course designed to meet the needs of the non-science major. This course is an introduction to the science of biology including scientific method, physical and chemical properties of life, cell biology, genetics, and evolution.

**Required Textbook(s):**

Concepts of Biology, Open Stax ISBN: 10 193816811

**Other Course Requirements:**

Notebook along with pens/pencils for note taking during class. Tests must be taken with a #2 pencil.

**Scantrons for exams**

**Student Learning Outcomes:**

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results. Be able to communicate to others the results of various genetic crosses.
5. Identify the importance of karyotypes, pedigrees, and biotechnology. Working within a team or with a partner, investigate and report on a current topic in biotechnology (GMO's, recombinant DNA, stem cells, cloning and/or transgenic bacteria, plants or animals).
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Apply scientific reasoning to analyze evidence for evolution and natural selection.

## Lectures & Discussions: Tentative Lecture Calendar

Introduction to Biology  
Chemistry of Life  
Organic molecule of life

### Exam 1

Cell Structure and Function  
How Cells Obtain Energy  
Energy for cells

### Exam 2

Photosynthesis  
Reproduction at the Cellular Level  
The Cellular Basis of Inheritance  
Patterns of Inheritance

### Exam 3

Molecular Biology  
Biotechnology

### Final Exam

## Evaluation/Grading Policy:

Evaluation is accomplished as follows:

10 Quizzes, 10 points each =100

3 Exams, 100 each =300

Final Exam = 100

Total .....  
500

Grades will be awarded as follows:

89.5 - 100% = A

79.5 - 89.4% = B

69.5 - 79.4% = C

59.5 - 69.4% = D

Below 59.5% = F

## Tests/Exams:

All exams include both objective (multiple choice, true-false, matching) and subjective questions over notes and text material and any additional outside reading that may be assigned.

## Student Responsibilities/Expectations:

Students are expected to attend regularly, participate fully and take personal responsibility for their learning by doing such things as taking lecture notes and studying outside of class time. I will be available during office hours if you have questions regarding the course or need help understanding something that we are learning.

**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. Such disciplinary action can include a grade of "F" for the assignment or a grade of "F" as a final grade for the course. 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 request accommodations. An appointment can be made with Shannin Garrett, Academic Advisor/Coordinator of Special Populations located in the College Connection. She can be reached at 903-434-8218. For more information and to obtain a copy of the Request for Accommodations, please refer to the [NTCC website - Special Populations](#).

**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.

## **Core Curriculum Purpose and Objectives:**

Through the core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning.

Courses in the foundation area of **life and physical sciences** focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

## **College Student Learning Outcomes:**

### Critical Thinking Skills

CT.1

Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

### Communication Skills

CS.1

Students will effectively develop, interpret and express ideas through written communication.

### Empirical and Quantitative Skills

EQS.1

Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form.

EQS.2

Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

### Team Work

TW2. Students will work with others to support and accomplish a shared goal.