

Biology 1308Introduction to Biology I

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

Instructor Name: Stacie Yarbrough

Office: Adjunct office

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	9 – 11 a.m.		9 – 11 a.m.			

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:

Week 1: Introduction to Biology

Week 2: Chemistry of Life

Week 3: Exam 1(Ch. 1 and 2)

Week 4: Cell Structure and Function

Week 5: Exam 2 (Ch. 3)

Week 6: How Cells Obtain Energy

Week 7: Photosynthesis

Week 8: Exam 3 (Ch. 4 & 5)

Week 9: Reproduction at the Cellular Level

Week 10: The Cellular Basis of Inheritance

Week 11: Exam 4 (Ch. 6 & 7)

Week 12: Patterns of Inheritance

Week 13: Molecular Biology

Week 14: Biotechnology

Week 15: Exam 5 (Ch. 8-10) and Research Reports due

Week 16: Final Exam

Evaluation/Grading Policy:

Evaluation is accomplished as follows:

Quizzes = 10%

Biotechnology Report = 10%

Unit Exams = 60%

Final Exam = 20%

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.

Assignments:

Quizzes over lecture and a research report on a topic in biotechnology.

Other Course Requirements:

Information regarding the research report will be given as a handout.

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.

The last day to drop the course with a grade of W is **Tuesday**, **Nov. 21, 2017.** If circumstances require you to withdraw from this course, you must do so by that date. It is the **student's responsibility** to initiate the withdrawal with the registrar's office. **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. 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 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.