



Biology 1108.001 Introduction to Biology I Lab

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

Instructor Name: Stacie Yarbrough

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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): One Credit Hour. Three hours of lab each week.

This laboratory-based course accompanies [BIOL 1308](#), Biology for Non-Science Majors I. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

Required Textbook(s):

Biology 1108

Intro to Biology I Laboratory Manual

Version 1

Other Course Requirements:

Notebook along with pencils for completing labs and taking notes during class.

Tests must be taken with a #2 pencil.

Scantrons for exams

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 and scientific problem solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection.

Labs:

Week 1: The Meaning and Process of Science – 8/28

Week 2: Labor Day – 9/11

Week 3: Experimental Design and the Scientific Method and Properties of Water – 9/18

Week 4: Biological Molecules - 9/25

Week 5: Lab Practical I - 10/2

Week 6: The Microscope and the Cell - 10/9

Week 7: Osmosis and Dialysis - 10/16

Week 8: Enzymes – 10/23

Week 9: Lab Practical II – 10/30

Week 10: Photosynthesis and Respiration (handout) – 11/6

Week 11: Cell Division – Mitosis & Meiosis – 11/13

Week 12: Patterns of Inheritance -11/20

Week 13: DNA lab – 11/27

Week 14: Lab Practical III – 12/4

Evaluation/Grading Policy:

Evaluation is accomplished as follows:

Lab Reports = 30%

Lab Practicals = 70%

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

< 59.5% = F

Tests/Exams:

Lab Exams will be over the labs covered and will be in fill in the blank / short answer / multiple choice format.

Assignments:

Lab Reports are included with each lab and will be turned in the week following the lab assignment to allow time for fully answering all questions.

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.