



PHYS 1115 – Introduction to Physical Science I Lab

Course Syllabus: Spring 2019

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

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Online	Online	Online	Online	Online	4:00-6:00 pm

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: This course emphasizes scientific principles that are taught at a non-science major level. Basic concepts are presented in physics and astronomy. Each topic is discussed in the context of everyday life.

The course consists of online lab experiments for a total of 1 credit hour. Prerequisite: MATH 0305 or its equivalent, or an appropriate placement score.

Required Textbook(s): None required

Required Lab Kit: esciencelabs kit code 2070 (available at NTCC Store)

Recommended Reading(s): *An Introduction to Physical Science* (14th Ed.), Shipman, Wilson, Higgins, Torres, 2018, Cengage Learning

Student Learning Outcomes:

Upon successful completion of this course, students should (1) *understand simple qualitative concepts*, and (2) *solve algebraic problems* of physics and astronomy relating to:

1. Linear motion (displacement, velocity, acceleration, force, and Newton’s Laws).
2. Energy, work, power, and the Law of Conservation of Energy.
3. Momentum and the Law of Conservation of Momentum.
4. Heat and thermodynamics.
5. Electricity and Magnetism.
6. Electromagnetic (transverse) waves and sound (longitudinal) waves.
7. The solar system, stars, and universe.

SCANS Skills: N/A

Course Outline:

Week	Lab Topic	Due Dates*
1/2	Lab 1 : Introduction and Laboratory Safety Procedures	2/1/19
3	Lab 2 : Thinking Like a Chemist : The Scientific Method	2/8/19
4	Lab 3 : Measurements and Uncertainty	2/15/19
	Quiz #1	2/15/19
5/6	Lab 9 : 1-D Kinematics	3/1/19
	Spring Break	3/11/19 – 3/15/19
7/8	Lab 7 : Friction	3/22/19
9/10	Lab 8 : Newton's Laws	4/5/19
	Quiz #2	4/5/19
11/12	Lab 10 : Conservation of Energy	4/19/19
13/14	Lab 11 : Latent Heat and Specific Heat	5/3/19
15	Lab 12 : Properties of Waves	5/10/19
	Quiz #3	5/10/19

**This calendar will be adjusted to the needs of the course. Changes will be based on the course progress.*

Evaluation/Grading Policy:

Quizzes (3 @ 100 pts each)	25%	300 pts
<u>Labs (9 @ 100 pts each)</u>	<u>75%</u>	<u>900 pts</u>
Total	100%	1200 pts possible

Grading Scale:

A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = 0-59%

The lab experiments completed using the esciencelabs kit will represent 75% of your grade. The unit quizzes will be available on Blackboard beginning three calendar days before the listed due dates. These quizzes are based on the concepts and procedures addressed in the labs included in the particular unit.

Other Course Requirements: A scientific calculator is required for this course.

Student Responsibilities/Expectations:

Attendance: Students are expected to check in to the class daily on Blackboard to find the assignments and communications from the instructor. Students are also expected to check their email daily in case there is a communication from the instructor that needs a timely response.

Email: The college's official means of communication is via your campus email address. Make sure you keep your campus email cleaned out and below the limit, so you can receive important messages. Students are expected to monitor their email regularly (daily) to check for important announcements

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 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.

6 Drop Rule:

"Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of "W") from more than six courses. This six-course limit includes courses that a transfer student has previously dropped at other Texas public institutions of higher education if they fall under the law. Students should be sure they fully understand this drop limit before they drop a course. Please visit the admissions office or counseling/advising center for additional information and assistance."

Other Course Policies:

The college's official means of communication is via your campus email address. I will use your campus email address and Blackboard to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages