



PHYS 1115 – Introduction to Physical Science I Lab Online

Course Syllabus: Spring 2020

“Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed.”

Instructor: Larry Russell

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

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description: (1 hour credit) This laboratory-based course accompanies PHYS 1315 Physical Science I. Laboratory activities will reinforce survey topics from physics, chemistry, geology, astronomy, and meteorology. This course will not satisfy a core curriculum requirement, but may satisfy a degree requirement.

Prerequisite(s): MATH 0305 or its equivalent

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.

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.

Required Instructional Materials: esciencelabs kit code 2070 (available at NTCC Store)

Publisher:

ISBN Number:

Optional Instructional Materials: None

Minimum Technology Requirements: A scientific calculator is required for this course.

Required Computer Literacy Skills: Ability to access internet and navigate learning systems (ie Blackboard).

Course Structure and Overview: This course requires students to complete experimental procedures investigating principles of physical science. The materials and equipment for the experiments are purchased in a kit from the college bookstore. The lab experiments are divided into three units that cover similar scientific principles. Assignments for the course consists of lab reports that are completed after performing the experiments and quizzes that are taken at the conclusion of the units. All assignments are completed and submitted through Blackboard. The due dates for the completion of experiments and quizzes are shown below.

Communications:

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

Institutional/Course Policy:

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.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

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 the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

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.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

Week	Lab Topic	<i>Due Dates*</i>
1/2	Lab 1 : Introduction and Laboratory Safety Procedures	1/31/20
3	Lab 2 : Thinking Like a Chemist : The Scientific Method	2/7/20
4	Lab 3 : Measurements and Uncertainty	2/14/20
	Quiz #1	2/14/20
5/6	Lab 9 : 1-D Kinematics	2/28/20
7/8	Lab 7 : Friction	3/13/20
<i>Spring Break 3/16/20 – 3/20/20</i>		
9/10	Lab 8 : Newton's Laws	4/3/20
	Quiz #2	4/3/20
11/12	Lab 10 : Conservation of Energy	4/17/20
13	Lab 11 : Latent Heat and Specific Heat	4/24/20
15	Lab 12 : Properties of Waves	5/8/20
	Quiz #3	5/8/20

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