PHYS 1315 – Introduction to Physical Science I Online

Course Syllabus: Spring 2020

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

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	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: (3 credit hours) This course, designed for non-science majors, surveys topics from physics, chemistry, geology, astronomy, and meteorology.

Prerequisite(s): MATH 0305 or its equivalent, or an appropriate placement score.

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.

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.

Teamwork

TW.2 Students will consider different viewpoints as a member of a team and work with others to support and accomplish a shared goal.

Evaluation/Grading Policy:

Exams (3 @ 20% each)	60%	300 pts	
Final Exam	20%	100 pts	
Homework from Webassign	20%	100 pts	
Total	100%	500 pts	possible

Homework will represent 20% of your grade. Online assignments are graded homework exercises posted on Webassign. Homework problems can be reworked an unlimited number of times. The last grade earned for each homework assignment will be posted for the final grade. The homework assignments for a unit are due on the dates listed above. The exams will become available in Webassign three calendar days before their due date. There are no make-up assignments.

There will be 3 Unit Exams and a comprehensive Final Exam. Online exams are each available on the Webassign website opening three calendar days before the listed exam due date. The Unit 2 and Unit 3 Exams as well as the Final Exam will be administered in a proctored facility of your choice. Testing centers at other colleges and universities may access a fee. Only one attempt is allowed for each online exam. Course averages will be updated in Blackboard after each exam.

Grading Scale:

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

Required Instructional Materials:

This course will utilize Webassign online resources for homework and exams. Access to the assignments and the electronic copy of the textbook, *An Introduction to Physical Science* (14th Ed.), Shipman, Wilson, Higgins, Torres, Cengage Learning, Stamford, CT, 2018 is provided by access to Webassign on the internet. This course is participating in the Inclusive Access program this semester. Please refer to the instructions found in the "Start Course Here" folder in Blackboard to obtain your access code to Webassign.

Publisher: Cengage Learning **ISBN Number:** 978-1-305-07913-7

Optional Instructional Materials: None

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

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

Course Structure and Overview: This is a 16 week course where students are required to read the textbook available in Webassign and watch internet videos available on links in Blackboard in order to learn the principles of physical science included in the course. All assignments for the course including homework and exams are completed in Webassign. The course is divided into four units of study that cover multiple chapters of related concepts. An exam is taken at the end of each unit with the fourth unit included on the comprehensive final exam. Assignments in Webassign are organized by textbook chapter and are due according to the course outline shown below. Exam 2, Exam 3, and the Final Exam are to be completed in a proctored setting of the student's choice.

Communications:
Email: The college's official means of communication is via your campus email address. The email address in Webassign should be 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 and Webassign 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):

Chap.	Title	*Week*	*Key Due Dates**
	Course Navigation	*1*	*1/25/20*
1	Measurement	*1 & 2*	*2/1/20*
2	Motion	*2 & 3*	*2/8/20*
3	Force and Motion	*4 & 5*	*2/22/20*
	Exam 1	***5***	***2/23/20***
4	Work and Energy	*6 & 7*	*3/4/20*
5	Heat and Temperature	*7 & 8*	*3/13/20*
	Exam 2	***8***	***3/13/20***
Spring Break 3/16/20 – 3/20/20			
6	Waves and Sound	9 & 10	*4/3/20*
8	Electricity and Magnetism	*11 & 12*	*4/17/20*
	Exam 3	***12***	***4/17/20***
16	The Solar System	*13 & 14*	*4/29/20*
18	The Universe	*14 & 15*	*5/8/20*
	Final Exam (Comprehensive)	***16***	***5/13/20***

**This calendar will be adjusted to the needs of the course. Changes will be based on the course progress. The exam dates could be moved one or two days up or down. The Final Exam date is fixed and will not change.*