Course Syllabus

NOTE: This syllabus is subject to change during the semester. Please check this syllabus on a regular basis for any updates.

Department : Occupational Safety and Health Technology (OSHT)

Course Title : SCIT 1318 Physics

Section Name : Web

Start Date : August 27, 2012

End Date : October 19, 2012

Modality :

Credits :

Instructor Information

Name : Chris Parks

OC Email : cparks@odessa.edu

OC Phone # : 832-495-9115

Course Description

SCIT 1318 is an introduction to physics for students who have limited backgrounds in science and mathematics. Topics include motion, solid mechanics and fluid mechanics, properties of matter, heat and thermodynamics.

Prerequisites/Corequisites

Introductory Algebra (suggested).

Scans

Course Objectives

- Define the basic terminology as related to applied physics.
- Explain and apply the relationship between length, mass, and time.
- Demonstrate problem-solving techniques related to physics principles.
- Solve appropriate physics problems using vector mathematics.
- Summarize the laws of motion.

Required Readings/Materials

- The Cartoon Guide to Physics by Larry Gonick and Art Huffman. ISBN 0-06-273100-9
- The Physics of Star Trek Rev. 7. ISBN 0-465-00204-8 or 978-0-465-0024-7

Course Requirements (Lectures, Assignments and Assessments)

Applied Physics I deals with introductory topics in physics. Topics to be covered include motion, solid mechanics, fluid mechanics, the properties of matter and thermodynamics.

The semester will be broken down into four course topics, or areas of emphasis, to focus on specific elements. Each of these topics will include a reading assignment and a problem set. The problem set will allow for the demonstration of learning in the topic area.

Following are the course topics. Problem sets will be assigned in the Assignments Section.

Topic 1 - Terminology, Units, Vectors
This covers units of measure, physical quantities, and vectors. Motion along a straight line will also be covered.

Topic 2 - Laws of Motion
Covered in this assignment is motion in two and three dimensions, Newton's Law of Motion, and ways to apply Newton's Law of Motion.

Topic 3 - Solid and Fluid Mechanics
This chapter applies to fluid mechanics.

Topic 4 - Thermodynamics
Topics covered include temperature and heat. Additional topics include the thermal properties of matter.

Grading Policy

This course will include:

Completion of a Discussion Topic (15% of Grade)
Completion of 3 problem solving assignments (10% of Grade each)
Completion of a final examination (35% of Grade)
Completion of a 2 page book report (20% of Grade)

Grades & Grading:

Grades will be awarded on the following percentages:

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

This course is broken into three parts: a problem set portion, a final exam and a book report.

The final exam will consist of 10 problems. Each problem will be worth 10 points.

Special Needs

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss our concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Learning Resource Center (Library)

The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian " service provide additional help.

Student E-mail

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. **All correspondence will be submitted using your Odessa College email.**

Student Portal

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. **All correspondence will be submitted using your Odessa College email.**

Technical Support

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk_form.htm.

Important School Policies

For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the Odessa College Student Handbook.

The Odessa College Student Success Coaches will help you stay focused and on track to complete your educational goals. If an instructor sees that you might need additional help or success coaching, he or she may submit a Retention Alert or a Starfish Alert. A Student Success Coach will contact you to work toward a solution.

The SEI process for face-to-face and online courses is scheduled for the week of November 26th.