

# Conceptual Physics Summer 2015

Section	PHYS-D010-01	CRN: 00894
Lecture Instructor	Lana Sheridan	
Email	sheridanlana@fhda.edu	
Office	S13	
Office Hours	Thursdays 4:30-5:30 am	
Lecture Hours	Mon, Tues, Wed, & Thurs, 5:30-7:45m	
Textbook	Conceptual Physics, 11 <sup>th</sup> Edition, Hewitt	
Prerequisites	Qualifying score on Intermediate Algebra Placement Test or Mathematics 105 or Mathematics 114	
Final Exam Date	(TBC!) Thursday, Aug 6, 5:30-7:30 p.m.	

## 1 Topics

This course is a non-technical introduction to the ideas and principles of physics. We will cover the scientific method, the development of physics, applications of physics, and major theory areas of physics. Those areas are mechanics, kinematics, properties of matter, heat and thermodynamics, electricity and magnetism, light, and waves.

## 2 Homework

There will be homework in the form of reading the textbook and science articles, and questions / problems set from the end of each chapter in the textbook. For the most part this homework will not be collected, however, it will be discussed in class and it is very important to do this homework as part of your study! This will make concrete the ideas discussed in the lectures by allowing you to apply them immediately. If you have difficulty with the homework you can come to office hours, ask me just before or after a lecture, work together with other students, or go to the Math and Science Tutorial Center (Student Success Center). Doing problems from the textbook will help you prepare for the tests.

The set problems should not be viewed as the only problems you can do: you are strongly encouraged to look through all of the problems and questions at the end of each chapter and consider how each should be approached. **You must read the textbook.**

## 2.1 Essay Questions

You will be asked to do two written essay assignments during the term that **will be collected and marked**.

## 3 Participation in Class

You must attend class regularly. If you do not regularly attend, you will be dropped from the class. This course includes class discussions. Part of your final grade will depend on your contributions in class. Make sure you do the assigned reading, so that you are prepared to answer questions.

## 4 Tests

There will be weekly quizzes in class during this course. They will be multiple-choice for the most part.

There will be a midterm set in class time and a comprehensive final exam at the end of the course. Both will count toward your final score, and there will be no make-up tests. In order to do well on the tests, read the textbook, review the quizzes, and do the homework problems. To get credit for the answer on a test, you must make it clear that you understand the reasoning that got you to the answer.

**Note:** If there is any dispute about marking, I will consider it only within two school days of the paper being returned to you. Grades for the final exam are final and not subject to dispute.

## 5 Presentation

Each student in the class will be expected to prepare and present a ten-minute talk to deliver to the class in the final weeks of the course. You should demonstrate that you understand the scientific ideas discussed in this course.

## 6 Evaluation

Quizzes & Incidental HW	25%
Class participation	10%
Essay questions	10%
Midterm	20%
Presentation	10%
Final	25%

Projected Grading Scheme:

88% → 100%	= <i>A</i>
75% → 87%	= <i>B</i>
60% → 74%	= <i>C</i>
50% → 59%	= <i>D</i>
0% → 49%	= <i>F</i>