

## SYLLABUS

### Physics 305: Modern Physics

**I. TEXTBOOK:** Modern Physics (3<sup>rd</sup> ed.). Serway, Moses, and Moyer.

#### **II. COURSE OBJECTIVES:**

- Comprehend the concepts of relativity, nuclear, and quantum mechanics;
- Relate these laws/principles to the modern technological world;
- Read and translate physical data verbally and in the form of graphs/formulas;
- Recognize the influence of science and technology on political/philosophical thought.

#### **III. COURSE STRUCTURE:**

- (a) Lectures: There will be in-class problems assigned to practice the concepts presented in class. These will be collected for grade at the end of the lecture period.
- (b) Exams: There are 2 midterm exams.
- (c) Homework Assignments: There are 6 homework assignments. No late homework.
- (d) Paper and Presentation: There will be a paper and presentation to write on a topic of your choice from the text. The form will be posted on SIU Online ([online.siu.edu](http://online.siu.edu)).
- (e) Final Exam: The final exam will be comprehensive.

Make-up exams will be given, *before the exam*, for properly documented valid reasons:

- Religious Observance;
- Military Service;
- Bereavement;
- Official University business;
- Properly documented medical reason that prevents you from taking the exam. A letter from the doctor treating you is proper documentation; a note from student health services is not.
- Jury duty or appearance in court

In any case in which an absence will occur, you need to use the proper University form (Undergraduate Student Absence Form For University-Approved Activities) to request an accommodation from the instructor. *This form must be presented to the instructor before the absence occurs (except in the medical emergency situation).*

#### **IV. GRADES:**

Grade Breakdown:

Lecture Problems: 5%  
Exams: 40%  
Homework: 15%  
Paper and Presentation: 10%  
Final exam: 30%

Grade Scale:

A: 90-100%  
B: 80-89.9%  
C: 70-79.9%  
D: 55-69.9%  
F: 0-54.9%

#### **V. THE COURSE WEBSITE: SIU Online (<https://online.siu.edu/>)**

You must go to the above website, sign in, and follow the links to the PHYS 305 site. On the site you can get the following:

- (1) Important announcements
- (2) Homework problem sets
- (3) The syllabus
- (4) My office hours.
- (5) Grades!