Office Hours Tuesday 10:30am - noon SCI 262

Course description: Mechanics, energy, electricity, magnetism, optics, atomic and nuclear physics, properties of matter; emphasizes practical applications of physics principles to contemporary problems.

Learning Objectives In this course you will learn to:

1. Use the methods of science and knowledge derived from current scientific inquiry in physical science to question existing explanations.
2. Demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues.
3. Recognize methods of science, in which quantitative, analytical reasoning techniques are used.
4. Develop the ability to recognize the self evident physics in day to day events.

Required Reading: Excerpts from multiple sources to be made available on Canvas.


Required Materials: Access to Canvas, paper, pencils/pens, sometimes your phone will be used for data collection, no need for a calculator, scantrons for midterms and final

Additional Materials: Some diagrams used in this class are best when color coded. A set of colored pencils or pens would be very useful to communicate what you are thinking on an assignment.

Grades: Your grade will be computed by the following recipe: Midterms (20%,20%); Homework (20%); Participation Worksheets (10%); Final Exam (20%); Movie Physics Analysis 10%.

Homework: Every class will have an assignment that follows that you are expected to complete at home. These assignments prepare you for the following class. Homework should be submitted on the canvas site so it can be digitally graded. Bring your hardcopy to class as well as it may be referenced in the lecture for group discussion.

Participation: To ensure attendance and active participation, you will be given worksheets to complete every day in lecture. These will be collected and returned during the next class. They are meant to measure your level of understanding at the start and end of class and guide you through the curriculum. Some worksheets will involve demonstrations and mini labs that we will do in the normal lecture hall.

Midterms: Two midterms. Midterm 1 covers Mechanics (September 28th). Midterm 2 covers Electricity, Magnetism and Light (November 2nd). Both midterms will take the entire class period and combine multiple choice and long form responses as practiced in homework.

Final: The final exam will be similar to the midterms but a little longer and comprehensive (i.e., material from the entire course). December 19th 12:15-2:30pm, regular classroom. (Last day of finals)
Movie Analysis: After we have covered most of the material in class you will be given an assignment to analyze the Physics of 3 movies in a way that shows what you know and what you are still curious about.

Classroom Communication: You will be sharing information in this class in many ways. Although the class is labeled as a lecture, some sessions will seem more like discussion sections and labs. In order to facilitate an orderly classroom please communicate clearly and respectfully for all class activities and assignments.

Ethics: Your own commitment to learning, as evidenced by your enrollment at San José State University, and the University’s Academic Integrity Policy requires you to be honest in all your academic course work. Faculty are required to report all infractions to the Office of Judicial Affairs. The policy on academic integrity can be found on the SJSU website.

Disabilities: If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with DRC to establish a record of their disability.

Emergencies: If you hear a continuous alarm or are told to evacuate the building, walk quickly to the nearest stairway at the end of each hall. Do not use the elevator. Take your personal belongings with you. Be quiet and follow instructions. Move away from the building and do not return until informed by police or coordinators.