## Physics 11 Syllabus, Spring 2023

Physics 11: Descriptive Physics: Introductory survey of principles of classical and modern physics emphasizing basic concepts of physics while including some problem solving using elementary algebra.

Instructor: Tony Lee, Phone 7078-835-6384
Email: dr_tony_lee@yahoo.com
Office Hours: Friday: after lab; and via email.
Required Texts: Conceptual Physics Fundamentals, by Paul G. Hewitt. ISBN 0321501365.
Required Materials: Please bring to every class: Your book, paper, pencil and a calculator.
Website: See Physics 11 class section on Canvas: https://canvas.santarosa.edu/ The class schedule, syllabus, lab manual, homework assignments, powerpoint lectures, handouts, practice exams, and more are posted weekly on Canvas. Check it often as the schedule and assignments may change.

Homework: Homework is assigned for every chapter. Homework includes reading the chapter assigned before the lecture. We will be covering at least one chapter per week. This is a lot of material so don't get behind. Homework assignments for each week will be due the following week, at the start of class.

Class Assignments: We will occasionally have worksheets that help put concepts to use in a controlled setting. These will be completed and turned in before leaving. Missing class (and these assignments) can affect your grade.

Exams: There will be three exams, and one final. The exams are multiple-choice. You may bring 1 page (both sides) of notes to the exam. No makeups will be given. If unavoidable circumstances lead to a missed exam, collect appropriate documentation and schedule a meeting with me. The exams will be at the normal class times with the final exam taken during the scheduled final exam time

Labs: All labs will be group labs due at the end of lab. You should print out the lab online and read it BEFORE lab and do any prelab work assigned. There are no make up labs. I will drop the lowest score.

Attendance: You are required by SRJC rules to attend class. You are allowed 3 classes to miss. Every 3 absences after that will lower your grade by 10 percent (that's a full letter grade!) This means that if you miss more than 9 classes you cannot earn higher than a $C$ grade in the course no matter what your exam scores are. If you feel you will need to miss class you should take the course CR/NCR.

Grading: Final grades will be based on the following percentages:
Exams ....................................................................................................................................................60\%
Assignments (in-class activities, book problems) ..................... $20 \%$
Labs ........................................................................................................................................................ $20 \%$
Final letter grades will be roughly based on the following total percentages:

$$
\text { 90-100: A } \quad 80-90: \text { B } \quad 70-80: \mathbf{C} \quad 60-70: \mathbf{D} \text { below 60: F }
$$

## Tentative Schedule:

| Friday | Lecture | Lab |
| :---: | :---: | :---: |
| Jan 20 | Chapters 1 \& 2 | Intro to Lab |
| Jan 27 | Chapter 3 | Measuring Gravity |
| Feb 3 | Chapter 4 | Measurement |
| Feb 10 | Chapter 5 | Newton's 2nd Law |
| Feb 17 | Presidents Day Holiday |  |
| Feb 24 | Chapter 6 | Conservation of Energy \& Momentum |
| Mar 3 | EXAM 1 Chapters 1-6 | Earth's Magnetic Field |
| Mar 10 | Chapter 7 | Archimedes |
| Mar 17 | Chapter 8 \& 9 | Calorimetry <br> Data sheet |
| Mar 24 | Spring Break |  |
| Mar 31 | Chapter 10 | Electrostatics |
| April 7 | Chapter 11 | Electric Field and Voltage |
| April 14 | EXAM 2 Chapters 7-11 | Waves on a String |
| April 21 | Chapter 12 | Sound \& Beats |
| April 28 | Chapter 13 | Measuring the speed of sound |
| May 5 | Chapter 14 | Double Slit |
| May 12 | Chapter 15 | Hydrogen Spectra |
| May 19 | Chapter 15 | EXAM Redo |
| May 26 | EXAM 3 Chapters 12-16 |  |

