

Physics 11 Syllabus, Spring 2021

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

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Office Hours: **Friday:** after lab; and via email.

Required Texts: Conceptual Physics Fundamentals, by Paul G. Hewitt. ISBN 0321501365 (Paperback)

Required Lab Software: Pivot Interactives (purchase during class)

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. Chapter Homework assignments are due one week after the chapter is covered in class.

Class Assignments: Students will work in small groups on 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 have 1 page (both sides) of notes at 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 done online and due at the end of lab. No labs will be dropped so if you miss a lab you will need to make it up on your own. Not submitting a lab will affect your grade.

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	50%
Final	10%
Assignments (in-class activities, book problems)	20%
Labs	20%

Final letter grades will be roughly based on the following total percentages:

90-100: **A** 80-90: **B** 70-80: **C** 60-70: **D** below 60: **F**

Tentative Schedule:

Friday	Lecture	Lab
Jan 22	Chapters 1 & 2	Measuring Diameter of Sun
Jan 29	Chapter 3	Introduction to Measurement
Feb 05	Chapter 4	Ping-Pong Ball Bazooka
Feb 12	Lincoln's Day Holiday	No class or lab
Feb 19	Chapter 5	Blow Dart Collision
Feb 26	Chapter 6	Momentum and Energy Ratios during Collisions
Mar 05	EXAM 1 Chapters 1 – 6	
Mar 12	Chapter 7	Densities of Precious Metals and Archimedes Principle, Spot the Fake
Mar 19	Chapter 8 & 9	Measuring the Specific Heat of Water
Mar 26	Happy Spring Break	
Apr 02	Chapter 10	Resistivity of Graphite
Apr 09	Chapter 11	Current and Voltage in Conductors
Apr 16	Chapter 12	Measuring the Speed of Sound
Apr 23	EXAM 2 Chapters 7 – 12	
Apr 30	Chapter 13	Standing Waves
May 07	Chapter 14	Light Refraction and optical Lenses
May 14	Chapter 15, 16	Gas Emission Spectra
May 21	EXAM 3 Chapters 13 - 16	
May 28	FINAL EXAM	