

# General Physics II

## Physics 011 - Spring 2021

*Instructor:* Chris Ray

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*Office Hours:*

M 12:00 - 1:00

T 12:00 - 1:00

and by appointment.

*Text :* *Physics: Principles with Applications 7th Edition*, by Giancoli.

*Content:* This class will be an introduction to heat, electricity, magnetism, and light. In studying these topics you will practice analytical techniques that are essential to understanding the subject. We will not cover every section of the textbook: the calendar has a complete list of the sections you will be expected to master.

*Evaluation:* Your letter grade will be computed from your performance on the quizzes and final exam.

Quizzes 50 % Nearly weekly

Final Exam 50 % 8:00 section Monday 8:00-10:00

10:30 section Monday 10:30-12:30

*Laboratory:* You will also earn a grade of HP, P, LP, or F in the laboratory. An HP will bump your grade up a notch and an LP will bump your grade down a notch. For example if you earn an LP and you have a B- based on the quiz and exam scores, you would get a C+ in the class. If you earn an F in the lab you get an F in the class.

*Homework:* Physics is learned by working problems unaided, not by studying solutions. My suggestion is that you work the problems in the textbook, acting as if each problem is part of an exam. If you get stuck then reread the associated section of the book and try again. It is fine to fail on a homework problem, indeed it is the best way to find what is not clear in your thinking about the physics. It is not so great to fail an exam problem. So use the homework to get the failing out of the way before it comes time to take the exam. So keep working problems until you can do them without fail. This will make us all much happier.

Reasonable and appropriate accommodations, that take into account the context of the course and its essential elements, for individuals with qualifying disabilities, are extended through the office of Student Disability Services. Students with disabilities are encouraged to contact the Student Disability Services Coordinator at (925) 631-4164 to set up a confidential appointment to discuss accommodation guidelines and available services. Additional information regarding the services available may be found at the following address on the Saint Mary's website: / <http://www.stmarys-ca.edu/academics/academic-advising-and-achievement/student-disability-services.html>

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	8 <i>Kinetic Theory</i> Ch 13:9-10.	10 <i>Heat</i> Ch 14:1-8.	12 <i>Thermodynamics</i> Ch 15:1-2.
Lab 1	15 <i>Electric Charge &amp; Field</i> Ch 16:1-9. Q	17	19
Lab 2	22 <i>Electric Potential</i> Ch 17:1-9. Q	24	26
Lab 3	1 <i>Electric Currents</i> Ch 18:1-7. Q	3	5 <i>Circuits</i> Ch 19:1-8.
Lab 4,5	8 Q	10	12
Lab 6	15 <i>Magnetism</i> Ch 20:1-11. Q	17	19
Lab 7	22 <i>Electromagnetic Induction</i> Ch 21:1-2,4-7. Q	24	26
	29 <b>Spring Break</b>	31 <b>Spring Break</b>	2 <b>Spring Break</b>
	5 <b>Spring Break</b>	7 <i>Electromagnetic Waves</i> Ch 22:1-7. Q	9
Lab 8	12 <i>Geometric Optics</i> Ch 23:1-9. Q	14	16
Lab 9	19 Q	21 <i>Wave Optics</i> Ch 24:1-10.	23
Lab 10	26 Q	28	30
	3 <i>Optical Instruments</i> Ch 25:1-5. Q	5	7
	10 Q	12	14