

<b>Instructor:</b>	Dr. Jessica Kintner
Office hours:	<b>Gal 106 B</b> F 1-2pm, TBA, and by appointment
Phone:	631-4416, E-mail: <a href="mailto:jkintner@stmarys-ca.edu">jkintner@stmarys-ca.edu</a>
<b>Meetings:</b>	Sec 01: Lecture MWF 10:30-11:35 am; Galileo 202 Sec 02: Lecture MWF 11:45am-12:50pm; Galileo 202
<b>Text:</b>	<b>Physics: Principles with Applications</b> (7 <sup>th</sup> Edition) by Giancoli.
<b>Online Homework:</b>	<b>Mastering Physics</b> , the url is: <a href="https://www.pearsonmylabandmastering.com/northamerica/masteringphysics/">https://www.pearsonmylabandmastering.com/northamerica/masteringphysics/</a>
<b>Class Key:</b>	MPKINTNER17770

### Course Description

This course is intended as a general introduction to physics. Topics that will be covered are classical mechanics, fluids, waves, and thermodynamics. Fundamental physical concepts will be emphasized using algebra, geometry, and calculus. It is assumed that students in the course have had the equivalent of Math 27-28.

### Attendance:

Although attendance will not be taken each day, it is strongly recommended that you come to class. There will be days where activities are graded, see below. As a general rule, you cannot make up exams either, but you may replace one low (or missing) exam score with your score from the Final Exam. If you must miss an exam due to an emergency, you must contact me as soon as reasonably possible to make arrangements.

Each student is responsible for any assignments or information given during class time.

### Homework

Problem solving will constitute a large part of this course. Homework problems will be assigned to go with each lecture. We will use Mastering Physics for online homework. I may grade some problems separately, and we will do problems in various ways in class.

The best way to understand the course material is to do the assigned homework, as well as to work **additional** problems from the text.

### In Class Work

During most course meetings, we will do some sort of activity. My favorite things are

asking you to work in groups, asking you to work examples, and asking you to work or present problems on the board. We may also use clickers or do in class written work that you turn in.

### **Laboratory**

Lab work is an integral part of the course, in much the same way that homework is. Your lab instructor will send your lab grade to me, and I will include it as part of the course grade, much like homework. (You will receive an “L” on your transcript for this lab.) The activities in the laboratory are designed to demonstrate physical phenomena discussed in lecture and will give you an opportunity to better understand the physical concepts you are expected to master in the course; so pay attention in lab!

### **Exams**

There will be two hour long midterms during the course of the semester. The first will be Friday, October 7, and the second will be Friday, November 10. They will consist primarily of problems that are similar to problems you’ve done as homework, in class work, and/or lab. There may also be some short-answer questions to test concepts.

The final exam will be two hours long and cumulative. The final exam for section 1 (10:30am section) will be Monday, December 4 at 10:30am. The final exam for section 2 (11:45am section) will be Wednesday, December 6 at 10:30am.

### **Course Evaluation**

Your grade will be computed using the following percentage values for each category described above:

Homework:	10%
In Class Work:	10%
Lab:	10%
Hour Exams:	40%
Final Exam:	30%

### **Special Effects:**

**Low (or missing) Exam Score:** Your lowest Hour Exam score can be replaced by your Final Exam score if the Final Exam score is greater than your lowest Hour Exam score (the inverse is not true!).

### **College Policies**

We will all agree to abide by all College policies including things like the Honor Code, Student Disability accommodations, and all the rest. Please see the Student Handbook for more details.

**Tentative Schedule** I will maintain a more up-to-date schedule on the course webpage.

Week	Mon	Topic
Week 01	Aug 28	1D motion, vectors
Week 02	Sep 4	(Labor Day) Vectors, start 2D
Week 03	Sep 11	Projectile motion, intro forces
Week 04	Sep 18	Newton's Laws with circular motion
Week 05	Sep 25	Gravitation and Work
Week 06	Oct 2	Work, Energy and Exam 1 (Fri Oct 6)
Week 07	Oct 9	More energy, Momentum
Week 08	Oct 16	Collision problems, Rotations (Fall break)
Week 09	Oct 23	Torque, rotational kinematics
Week 10	Oct 30	SHM
Week 11	Nov 6	Waves, Exam 2 (Fri, Nov 10)
Week 12	Nov 13	Sound and pressure
Week 13	Nov 20	Fluids (Thanksgiving)
Week 14	Nov 27	Thermodynamics
Week 15	Dec 4	Final Exam

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