Introduction to Physics II, the syllabus

Course	Physics 003, Introduction to Physics II. Spring 2018
Text	*Physics for Scientists and Engineers: a strategic approach, 4th ed*, Knight (Pearson 2016)
Online hw	Mastering Physics. `MPROSARIO04853`
Website	`physics.stmarys-ca.edu`
Instructor	Mari-Anne M. Rosario
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what are we doing in this class? course description

Physics 3 is the second course in a two-course introductory physics sequence intended for students in physics, chemistry, mathematics, and the 3+2 engineering program. Topics include electricity, magnetism, circuits and optics.

This course is an opportunity to (1) gain an understanding of electricity, magnetism and optics, (2) use these principles to describe the world around us, and (3) develop problem solving and mathematical skills.

Concurrent enrollment in Physics 4 is required. Prerequisites: Physics 1,2. Math 38 (may be taken concurrently).

how do i determine what you understand? assessment

The final grade will be based on

Problem sets	15%
In-class work	6%
Three in-class exams	54% (18% each exam)
Final exam	25%

Problem sets will be due at every meeting. *Use homework as a way to understand the material.* Don't do the homework just to get it done. If you're working with other people, make sure you can the problem on your own at some later time.

The problems due in class will be on material you already know (geometry, trigonometry, calculus, first-year physics) or on material to be covered in class that day. You'll have to read the book in advance of the class to do assignment. The weekly problem sets on Mastering Physics will be more involved and based on material we've already discussed in class.

Ninety percent (90%) of the total possible problem sets points will count towards your grade. For example, if the total possible points by the end of the semester is 190 points, 171 points will be needed to get the full 15%.

A significant part of our meeting time will involve you actively working on problems. **In-class work** will be graded on quality of effort, correctness and completion. Ninety percent (90%) of the total possible in-class points will count towards your grade.

Three exams will be given during the semester. Each exam will focus on material covered since the last exam. They will assume an understanding of previously covered material. A **final exam** will be given during finals week. The final will be comprehensive, but will emphasize material from the latter part of the course.

Extra credit will be offered to attend specific School of Science events. Extra credit can tip your final grade if it's on the edge between grades. From example, a B can become a B+ due to extra credit. It will not increase your grade between the different letters. For example, a B+ will not become an A- due to extra credit.

Physics 4, Introduction to Physics II Laboratory, will be given a separate final grade.

go to class or not? attendance, late assignments and make-up exams

There's no way to make up in-class work if you're absent, not even if you have a good reason.

The daily problems sets (hardcopy submissions) won't be accepted late, not even if you have a good reason. The point of the daily problems is to be ready for the class meeting. Turning it in late defeats that purpose. Mastering physics assignments may be submitted late.

Conflict or make-up exams will be given if you (1) provide an acceptable and documented excuse and (2) contact me before the exam. If before isn't possible, then as soon as is reasonable.

Talk to me and your academic advisor if there are severe or extended circumstances that affect your performance in class.

this grade doesn't look right? grading policies

Solutions will be graded on correctness and clarity. Include text or diagrams to briefly explain assumptions and steps. Begin solutions with definitions of physical quantities (*e.g.* $\vec{v} \equiv \frac{d\vec{x}}{dt}$), physical principles (*e.g.* Newton's laws), or commonly used equations (*e.g.* kinematics equations). A correct answer with no justification will earn no credit; an incorrect answer with correct justification will earn partial credit.

If you believe that there has been an error in grading, request a regrade. Resubmit the original, unaltered work within one week, along with a written explanation of what I should consider when regrading.

we take this seriously... the academic honor code

This course operates under the premises of the SMC academic honor code. It's expected that everyone will work to uphold high standards of integrity. More information can be found at: www.stmarys-ca.edu/academics/academic-honor-code

It's great to work with others, and it's okay if your work is *similar* to someone else's. However, give credit where credit is due and include a note giving credit to the person(s). In the end, even if you give proper credit, **there is no acceptable reason for your work to look exactly like someone else's**.

you might find these useful

STEM Center: Assumption Hall 2nd floor, Sunday to Thursday afternoon and evenings. More info? 925.631.6282 athompson@stmarys-ca.edu

Student Disability Services: Filippi Academic Hall FAH190 925.631.4358 sds@stmarys-ca.edu

Student Engagement and Academic Success: Filippi Administrative Hall 925.631.4349 seas@stmarys-ca.edu