

Course Instructor

Dr. Oren Quist, – Office located in CEH 314, Office hours 3:00 to 5:00 daily  
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The statements in this syllabus are specific to the course sections taught by Dr. Quist. General syllabus statements regarding college and university requirements, catalog copy, etc., can be found under the programs/course schedule link on the departmental web site:

[www.engineering.sdstate.edu/~physics/physics.htm](http://www.engineering.sdstate.edu/~physics/physics.htm)

## Catalog Description

**113 Introduction to Physics II ..... 4**

This course is the second course in a two semester algebra-level sequence, covering fundamental concepts of physics. Topics include Electricity and magnetism, sound, light, optics, and some modern physics concepts. Corequisite – Phys 113L. P, 111.

## Textbook

**College Physics** Second Edition, by Giambattista, Richardson, and Richardson, McGraw Hill, 2007. ISBN – 978-0-07-256436-5

## Topics covered Spring 2008:

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|---|---|
| <p>A. Electricity</p> <ol style="list-style-type: none"> <li>1. Electric Charges</li> <li>2. Electric Forces</li> <li>3. Electric Fields</li> <li>4. Electric Potential and Energy</li> <li>5. DC Circuits</li> </ol> | <p>D. Physical Optics</p> <ol style="list-style-type: none"> <li>1. Interference</li> <li>2. Diffraction</li> </ol>   |
| <p>B. Magnetism</p> <ol style="list-style-type: none"> <li>1. Magnetic Fields</li> <li>2. Magnetic Forces</li> <li>3. Magnetic Materials</li> <li>4. Induction</li> <li>5. AC Circuits</li> </ol>                     | <p>E. Modern Physics</p> <ol style="list-style-type: none"> <li>1. Relativity</li> <li>2. Quantum Physics</li> <li>3. Atomic Physics</li> <li>4. Nuclear Physics</li> <li>5. Nuclear Radiation</li> </ol> |
| <p>C. Light and Optics</p> <ol style="list-style-type: none"> <li>1. Geometric Optics</li> <li>2. Optical Instruments</li> </ol>  |   |

The student is responsible for learning, for getting the maximum benefit from academic course work, and for making satisfactory progress towards educational goals.

The professor is responsible for facilitating and enhancing the educational process, as well as guiding and directing the student.

To fulfill these responsibilities, the following attendance and grading policies have been adopted for Physics 113:

The student is expected to be in attendance at all scheduled class and laboratory sessions.

In class, the student is to be alert and prepared to learn.

Homework is to be done neatly and turned in on time.

The course grade will generally be determined on the following basis:

Homework	20%
Laboratory	10%
Tests	40%
Final Exam	<u>30%</u>
	100%

Typically, homework is due on Fridays (or the last class period of the week) at the beginning of the class period. Late homework will have points deducted. Subject to the discretion of the professor, late homework will not be accepted.

Only under extreme circumstances will missed exams or tests be allowed to be made-up.

Although, the laboratory portion of the course carries only 10% of the final grade value, it is to be noted that the laboratory is an integral part of the course. That is, failure in the lab results in a failure in the course.

The student is advised to take note of departmentally posted policies regarding academic dishonesty, course repetition, and laboratory policies, which will be adhered to in this class.

All possible efforts will be made to accommodate students with disabilities. Students should contact the Disability Services Office (SWSC, room 123, 688-4504) for further information.

**NOTE: IN ADDITION TO THE LECTURE PART OF THE COURSE, ALL STUDENTS MUST BE ENROLLED IN A LABORATORY (Physics 113L) SECTION!**