

PHYSICS 300: *Modern Physics*

Spring 2008 [Schedule](#)

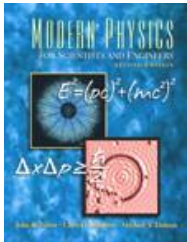
Online Syllabus: <http://www.uwsp.edu/physastr/kmenning/Physics300.pdf>

Instructor:	Dr. Ken Menningen	Office hours:	<u>M</u>	<u>T</u>	<u>W</u>	<u>R</u>	<u>F</u>
Office:	B101 Science Building	10:00am -11:00am	X	X		X	X
Phone:	(715) 346-4871	2:00pm - 3:00pm	X	X	X	X	
email:	Ken.Menningen@uwsp.edu	3:00pm - 4:00pm			X		X
		By appointment	X	X	X	X	X

Course Prerequisites: PHYSICS 250.

Required text: [Modern Physics for Scientists and Engineers](#), Taylor, Zafiratos, & Dubson, 2nd edition (available at Text Rental)

Other materials: You'll need a scientific calculator (graphing capability is **not** necessary). You may purchase a table of integrals from the bookstore. You may order a larger math handbook like the one I use or you may choose a smaller, less expensive [Pocket Book of Integrals](#) by CRC press.



Course Objectives: *Modern Physics* is an investigation into the two great theories that revolutionized 20th-century physics, relativity and quantum theory, together with other fields of study that can be understood properly only with the help of these two theories. The principle objectives are:

- Understand the fundamental concepts of the special theory of relativity, nuclear particles and radiation, and the quantum mechanical description of particles and atoms.
- Use algebra and calculus to explain measurements and make predictions.
- Understand the usefulness and limitations of various problem-solving methods.

Attendance: Attendance is not required but it is a disadvantage to miss any lectures because the lectures, demonstrations, and in-class activities will greatly enhance your ability to understand the material. There may be quizzes or assignments done in class that are worth points. If you are ill, please contact me **before class** to make arrangements. Otherwise late quizzes are not allowed, but I drop the lowest quiz grade. Late exams are not allowed, but in special cases you may take an exam early.

Grading policy: The grade you earn in this class will be based upon the three assignment types listed below. A grading scale is also given for your reference. Grades are not curved, encouraging you to work together, but I expect each student to hand in their own work. The lowest lab, homework and in-class grades will be dropped at the end of the semester.

Grading Scale		Grade Breakdown	
<u>Letter</u>	<u>Score</u>	<u>Assignment</u>	<u>Weight</u>
A- → A	90-100	Midterm exams	45%
B- → B → B+	75-89	Final exam	25%
C- → C → C+	60-74	Homework	30%
D → D+	50-59		
F	0-49		

Exams: Midterm exams are scheduled to occur on the evenings of February 20, March 26, and April 23. These dates may change but it's not likely. The comprehensive final exam is scheduled for Wednesday, May 14 at 12:30 pm.

Homework: Homework assignments will be due on the days I indicate. To avoid a zero for late homework you must warn me by phone or email **before they are due** and make special arrangements. If you are too ill to complete the assignment, please see a doctor, and have the doctor write an excuse. You should not believe that the homework problems are sufficient practice for the exam. Instead, I recommend that you work out at least five additional problems for each chapter from the text. The answers to odd problems are provided in the text and I have the solutions to even problems as well.

Community Rights & Responsibilities:

Students with special needs should contact the [Office of Disability Services](#) during the first two weeks of the semester in order to request accommodation. An [Exam Accommodation Request Form](#) is available online. Religious beliefs will be accommodated according to UWS 22.03 as long as the student notifies the instructor about the conflict within the first three weeks of class. Students are expected to maintain the highest standards of academic integrity for their work in this course. The University of Wisconsin-Stevens Point dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all students to familiarize themselves with University policies regarding special accommodations, misconduct, religious beliefs accommodation, discrimination and absence for university sponsored events. (For details please refer to the [Community Rights & Responsibilities](#) documents, including the [Student Academic Standards and Disciplinary Procedures](#) document.)