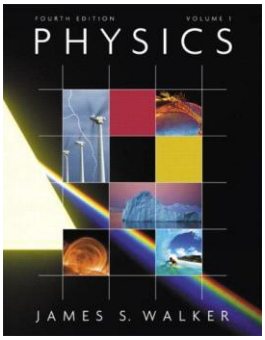
PHYSCS 203: *College Physics I*

Spring 2011 **Course Schedule** Online Syllabus: **www.uwsp.edu/physastr/kmenning/Physics203.pdf**
MCAT practice WebAssign: **www.webassign.net/login.html** **WebAssign Hints**

Instructor:	Dr. Ken Menningen	**Office hours:**	M	T	W	R	F
Office:	B101 Science Building	9:00am – 9:50am	X	X		X	X
Phone:	(715) 346-4871	10:00am – 10:50am					X
email:	Ken.Menningen@uwsp.edu	2:00pm – 3:50pm	X				
		By appointment	X	X	X	X	X

Course Prerequisites: 1 year of high school algebra and 1 year of high school geometry, or equivalent.

Required text: *Physics*, Walker, 4th edition (available at Text Rental)



Other required materials: Scientific calculator (graphing capability is **not** necessary), a **WebAssign** access code (purchase online $23 or bookstore $14), and a TurningPoint response unit ("clicker") that requires an $8 lease.

Course Objectives: *College Physics I* is the first of the algebra-based course sequence designed for pre-professional and general education students. The principle objectives are:

- Understand the fundamental concepts of mechanics, waves, sound, and thermodynamics.
- Use algebra to explain measurements and make predictions.
- Understand the usefulness and limitations of applying problem-solving methods to realistic examples

Attendance: Attendance is required only for the laboratory sessions and midterm examinations 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 will often 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 assignments are not accepted. Late exams are not allowed, but in special cases, and with my permission, you may take an exam early.

Grading policy: The grade you earn in this class will be based upon the five 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 quiz grades will be dropped at the end of the semester.

Grading Scale

Letter	Score
A- → A	90 - 100
B- → B → B+	75 - 89
C- → C → C+	60 - 74
D → D+	50 - 59
F	0 - 49

Grade Breakdown

Assignment	Weight
Midterm exams	30%
Final exam	20%
Homework	20%
In-class work	10%
Labs	20%

In-class work: During nearly every lecture I will present some **response questions** for which you may earn points by using the TurningPoint system. The TurningPoint clickers are available for an **$8 rental fee.** This semester lease fee will be automatically added to your UWSP student bill. You will need your UWSP Student ID to lease a clicker. Clickers are available through UWSP's Help Desk, located in the basement of the LRC, room 023 (hours), or through ResNet, located in the basement of Debot, room 068 (hours).

On many days there will be a short **written quiz** covering material that you have recently learned. I treat these as a collective learning experience rather than as an assessment. Regard them as a "safe" practice experience for the exam and as some measure of how well you understand the material. In addition, some "class quizzes" may be given in which you may confer with other students and vote as a class on the answer. These "class quizzes" might improve your quiz grade but will not hurt it.

Labs: The labs are designed to illustrate and expand upon the topics we cover in the lecture portion of the course, and provide valuable hands-on experiences. You must complete all 10 of the laboratory exercises to pass the course. You may miss one lab and make it up during the last week of class. The lab grades will be determined from a combination of lab quizzes and lab exercise sheets that you hand in. You may wish to purchase a laboratory notebook (quadrille ruled, spiral bound is best) but I will not collect or grade these.

Homework: Two types of assignments go into the homework category. The **chapter assignments** can be handed in using a web-based system that allows multiple submissions and gives instant feedback but will not allow late entries. The WebAssign system requires a **$23 fee** that can be paid online or **$14** at the bookstore. There will also be questions about occasional **news articles** that I will ask you to read. 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, and review the in-class questions that are posted on the internet.

Exams: Midterm exams are scheduled to occur on the evenings of **February 9**, **March 9**, and **April 20**. These dates may change but it's not likely. The comprehensive final exam is scheduled for Tuesday, May 17, at 5:00pm. Late exams are not allowed, but in special cases, and with my permission, you may take an exam early.

Tentative Course Schedule:

[For a detailed course schedule with links to lecture content, see the online course schedule]

Week	Chs.	Topics	Laboratory
1	2	Motion in one dimension	Lab 0: Spreadsheets
2	2-3	Freefall, vectors	Lab 1: Acceleration of gravity
3	4-5	Projectiles, Newton's laws	No Lab - **Exam I 6:30 pm Wed Chs. 1-3**
4	5-7	Circular motion, work	Lab 2: Newton's 2nd law
5	8-9	Energy and momentum	Lab 3: Motion in a circle
6	9-11	Collisions, rotation	Lab 4: Conservation of energy
7	11	Rotational motion and equilibrium	No Lab - **Exam II 6:30pm Wed Chs. 4-10**
8	12-13	Gravitation, oscillations	Lab 5: Building structures and the body
9	14	Waves and sound	Lab 6: Sound waves and effects
10	14-15	Waves and fluids	Lab 7: Stringed instruments
11	15-16	Fluids and thermal physics	Lab 8: Fluid dynamics and the Bernoulli eq.
12	16-17	Ideal gases, kinetic theory, elasticity	No Lab - **Exam III 6:30pm Wed Chs. 11-15**
13	17-18	Phase changes, thermodynamic laws	Lab 9: Measurement of specific heat
14	18	Heat engines, refrigerators	Lab 10: Automobile efficiency
15	18	Entropy	Lab quiz and exam review

Community Rights & Responsibilites:

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.)