Syllabus

Instructor: ***Sheng-Chiang (John) Lee***
SEB 244, 478-301-2599
Classroom: SEB 110 (auditorium)
Office Hours: MF 3~4pm, W 3~4:30pm, or by appointment
Co-requisite: PHY 121L; Pre-requisite: MAT 133 or equivalent
(Students who withdraw from PHY 141/161 must also withdraw from PHY 121L)
Textbook:
College Physics: A Strategic Approach with Mastering Physics, 2nd Edition, by Knight, Jones, and Field

Course Description:

This course is the first of a 2-semester algebra-based introductory physics sequence. It serves as an introduction to the field of physics, which is a foundation of other scientific disciplines. Although physical principles can/will be demonstrated in the class conceptually, they are all formulated through mathematical expressions. Therefore, students' performance in this aspect will influence the grades significantly. Students who take this course should be fluent in algebraic manipulations, trigonometry, and power/logarithmic functions.
The topics covered in this class include:
Newton's laws of motion, momentum, work, and energy; gravity; fluid dynamics and thermal physics.
Students should also take PHY121L, which is the laboratory counterpart of this course.

Objectives:

After taking this course, you are expected to

- Be familiar with the common scientific terminologies.
- Develop reasonable physical intuitions and be able to qualitatively understand simple physical systems and predict their behaviors.
- Be able to apply scientific logic to solve physical problems analytically and quantitatively.

Grading Methods:

Grading Scale:

Score:	90+	85~89	80~84	75~79	70~74	60~69	59-
Grade:	A	B+	B	C+	C	D	F

Grading Components:

	Reading Quizzes	In-Class Quizzes	On-line Homework	Exams (3 mid-terms + 1 final)	Work Book
Weight:	5%	15%	10%	(10+15+20+25=70)%	< 2%

Reading Quizzes are given before or at the beginning of a chapter through BlackBoard. Taking the quizzes counts for 60% of the quiz grades. The scores of the quizzes determine the rest 40%.

In-Class Quizzes are working problems taken almost directly from the textbook content of assigned readings or homework problems. All quizzes will be announced in the previous class, and **NO** make-up quizzes are available for unexcused absence or late for a class.

On-line Homework will be submitted and graded through the on-line homework/tutor system, *Mastering Physics*. You may find more information below. Due date of each assignment will be announced in the class. No late submission will be accepted.

Exams are inevitably **accumulative**, since physics is an accumulative knowledge. You can not master more advanced topics without being fluent with the basics. However, exams will concentrate on the content covered in the corresponding periods, unless otherwise specified. All exams will be close-book. **A formula sheet will be provided**, and you should only bring your pen/pencil, calculator, blank paper for calculation, and your knowledge of physics to the exams. **No** make-up exams are available unless you are legitimately excused.
Your grades will be posted on BlackBoard immediately after your work is graded. If there is any concern about your grades, you should discuss with me within **ONE** week after they are posted.

Student Workbook Assignments are *NOT* mandatory and usually will *NOT* be graded. However, the instructor has found that students who exercise thinking and solving physics problems regularly usually handle the class materials a lot better. Therefore, due dates for the assignments will be announced and students are STRONGLY ENCOURAGED to turn in the assignments by the announced times. Doing so through out the semester may lead to a couple more points at the end of the semester that you just need to move to the next letter grade.

Class Evaluation
In an ongoing effort to improve the quality of instruction, each student enrolled in this course is required to complete an end-of-semester course evaluation, to be administered through ***BlackBoard*** during the last week of the semester. Students failing to submit the evaluation by 12/10 will be assigned the grade of "Incomplete," which will automatically turn into an "F" if the evaluation is not submitted by the midterm of the very next semester.

More Information about *Mastering Physics*
Mastering Physics is an on-line course management system that provides various services to students and instructors. In order to have access to this on-line system, you need to purchase a textbook with the access code (only comes with new books), or purchase the access code separately from the publisher. The instruction of using this system will be given in the first class.
Two features of Mastering Physics will be used in this course: on-line homework assignments and tutorial services. You will submit your homework assignments on-line, and they will be graded for 10% of your semester grade.
Though you are always welcome to my office, there are times when you have conceptual questions and I am not in your immediate reach. Mastering Physics hosts a rich collection of "tutorial problems" and "Active Physics" interactive activities for you to explore those concepts. This collection of tools is designed to clarify commonly confused concepts. You will have access to this resource at your convenience (with internet access, of course).

Important Dates:

Last Day for Course Withdrawal: 10/29!!!!
Final Exam: 12/13, 2pm ~ 5pm

Class Policies:

Attendance Policy: Attendance is not mandatory. However, students are solely responsible for learning the materials covered in the missed classes.

Class Etiquette: You are expected to conduct yourself in a respectful manner to your fellow classmates and the instructor. The instructor may ask you to leave the classroom/lab if your behavior is disturbing to the instructor or other students.

Honor Code: You are bound by the Mercer honor code. The College's academic misconduct policy will be followed. All work, for which a grade is received, must be the **original** work of the **student** without aid or assistance of another party, or any printed and or electronic data/information. Academic misconduct cases will be referred to the honor council and the student will automatically receive a grade of incomplete (IC) pending a ruling by the honor council.

Cell Phone and Pager Usage: Out of courtesy for all those participating in the learning experience, all cell phones and pagers must be **kept in your pocket/backpack with power/ringer off** before entering any classroom, lab, or formal academic or performance event. Warning will be given for the first-time violation. One semester credit will be taken for each following violation up to three times. If a student keeps violating the policy, one may be asked to leave the room by the instructor.

Documented Disability Statement: Students requiring accommodations for a disability should inform the instructor at the close of the first class meeting or as soon as possible. The instructor will refer you to the Disability Support Services Coordinator to document your disability, determine eligibility for accommodations under the ADAAA/Section 504 and to request a Faculty Accommodation Form. Disability accommodations or status will not be indicated on academic transcripts. In order to receive accommodations in a class, students with sensory, learning, psychological, physical or medical disabilities must provide their instructor with a Faculty Accommodation Form to sign. Students must return the signed form to the Disability Services Coordinator. A new form must be requested each semester. Students with a history of a disability, perceived as having a disability or with a current disability who do not wish to use academic accommodations are also strongly encouraged to register with the Disability Services Coordinator and request a Faculty Accommodation Form each semester. For further information, please contact Carole Burrowbridge, Disability Services Coordinator, at 301-2778 or visit the Disability Support Services website at http://www.mercer.edu/studentaffairs/disabilityservices.

Tentative Course Schedule: may vary according to class progress

Week	Topic	Required Reading
08//24 – 08/27	Ch1	Ch1
08/30 – 09/03	Ch2	Ch2
09/07 – 09/10	Labor Day; Ch3	Ch3
09/13 – 09/17	Review & 1st Exam	Ch1 – Ch3
09/20 – 09/24	Ch4	Ch4
09/27 – 10/01	Ch5	Ch5
10/04 – 10/08	Ch6	Ch6
10/11 – 10/13	Ch7; Fall Break	Ch7
10/18 – 10/22	Ch7; Review and Midterm	Ch4 – Ch7
10/25 – 10/29	Ch8 – Ch9	Ch8 – Ch9
11/01 – 11/05	Ch9 – Ch10	Ch9 – Ch10
11/08 – 11/12	Ch10 – Ch11	Ch10 – Ch11
11/15 – 11/19	Ch11; Review	Ch11
11/22 – 11/23	3rd Exam; Thanksgiving Break	Ch8 – Ch11
11/29 – 12/03	Ch12	Ch12
12/06 – 12/10	Ch13	Ch13
12/13	Final Exam; 2pm – 5pm	