

PHY202-Lab Fall 2015

Time: Thursday 12:00 PM – 1:50 PM; S100
Instructor: Dr. Yeliz Celik
Office: S255
E-mail: celik@marshall.edu
Office Hours: M, 11:00 pm – 12:00 AM; W, 9:00 am – 12:00 PM; F, 9:00 AM-12:00 PM
Required Text: Physics 202 Lab Manual, 4th edition

Catalog Course Description: Required of all students taking PHY 201 or PHY 211, unless exempt by special permission. This lab course emphasizes physical concepts, over techniques of measurement and analysis, so is intended for Natural Science majors. It is a pre-requisite for Physics II and Physics II Lab.

Objectives:

- Each student is expected to learn concepts, experimental procedure and computation steps for each experiment. This process should enhance the learning that takes place in the lecture class.
- Students will learn to think in logical and quantitative ways. Exams will consist of relevant conceptual questions, questions about procedures, and questions involving problem solving ability.

General Instruction on the Lab: Students are encouraged to review physics concepts and principles associated to lab class before class. Students are also encouraged to ask questions during class or after class on any questions that bother them. Science is a process of asking questions to understand nature around us. Please read the Lab Manual before coming to class.

- You will need to finish a lab report after each experiment. Your completed laboratory report should include all lab manual pages on which there is data entered, sample calculations done, questions answered, graphs, conclusion, etc.
- The report should also include any graphs that are requested or relevant to the data.
- The conclusion for every experiment should make a statement about what you have achieved by doing the experiment, what results you have obtained, how the experiment supports the involved physics laws, concepts, and principles.
- Please be specific, discuss numbers and graphs and how they prove, or do not prove, the objectives of the experiment.
- **Lab report is due at next lab session.**

Grading:

Your laboratory grade will be determined by:

Laboratory Report Average	60%
Two Laboratory Exams (20% each)	40%

You must pass at least one exam in order to pass the course! Each student at a laboratory table is expected to contribute to all parts of each experiment. If one laboratory partner is observed to be consistently letting his/her laboratory partners do all or most of the work that person can lose points from the total at the end of the course. If you miss a class with a valid reason you must see the instructor arrange a make-up time as soon as possible. Late hand-in reports will be penalized by as much as twenty percent at the discretion of the instructor.

Grade Scale:

90 ≤ A
80 ≤ B ≤ 89
70 ≤ C ≤ 79
60 ≤ D ≤ 69
F < 60

University Policies: By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <http://www.marshall.edu/academic-affairs/policies>.

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Attendance Policy:

You are expected to be in the laboratory every scheduled day and time. You are to always use data collected by you in an experiment. You are not to use data from someone else. An excused absence or valid reason for absence generally requires a written excuse from another source (physician, school, police, etc.).

**Other Labs Each Week where make-ups should be done:

Tuesday 12:00 PM – 1:50 PM; S100 Yeliz Celik

Other Course Policies:

- If you must miss a class, contact your instructor immediately. Even for an excused absence, if you wait too long to discuss a makeup with your instructor you may be denied to opportunity for a makeup.
- Be sure to let your instructor know at least a week ahead of time if a university activity will require an absence from the lab.**
- Cell phone use is not permitted in the lab. Please turn cell phones to OFF or vibrate while in class.
- The instructor reserves the right to allow exceptions to these policies without incurring any obligation to allow an exception in any particular situation.

Lab Schedule:

Date:	Experiment:
Aug. 24 – 28	Lab 1: Introduction to Motion
Aug. 31 – Sept. 4	Lab 2: Accelerated Motion
Sept. 8 – 11	Lab 3: Mathematical Description of Motion
Sept. 14 – 18	Lab 4: Projectile Motion
Sept. 21 – 25	Lab 5: Force and Motion
Sept. 28 – Oct. 2	Lab 6: Circular Motion
Oct. 5 – 9	Lab 7: Work and Energy
Oct. 12 – 16	Lab 8: Collisions
Oct. 19 – 23	First Lab Exam: Labs 1 – 6
Oct. 26 – 30	Lab 9: Simple Harmonic Motion
Nov. 2 – 6	Lab 10: Periodic Motion of a Pendulum
Nov. 9 – 13	Lab 11: Longitudinal Waves and Sound
Nov. 16 – 20	Lab 12: Temperature and Heat
Nov. 23 – 27	Thanksgiving Break – No Class
Nov. 30 – Dec. 4	Dead Week
Dec. 7 – 11	Second Lab Exam: Labs 7 – 12