SEMESTER: Spring 2015
TIME: 2:00-3:50 R [SEC 202]
LOCATION: Science Room 103
COURSE: PHYSICS 101L (Lab) – 1 cr. hr.
PREREQUISITES: Math 120 or Math 121 or Math 123 & concurrent Physics 101
INSTRUCTOR: Dr. Howard Richards
OFFICE: S105 - Ph: 696-6466
OFFICE HOURS:

	Monday	Tuesday	Wednesday	Thursday	Friday
8	PS 110		PS 110		PS 110
9	Office Hours	Office Hours	PS 110 L	Office Hours	Office Hours
10					
11		PHY 201		PHY 201	
12					
1			PS 110 L		
2				PS 101 L	
3					

eMAIL: richardsh@marshall.edu
TEXT: Conceptual Physics 101L Lab Manual 2nd ed.

GENERAL INSTRUCTIONS:

A laboratory report is a complete scientific study in which certain standards are met. This outline will be used for all lab reports written in Physics 101 Lab. Reports will be written in blue or black ink on white regular 8.5 X 11 inch 3-ring filler paper. Reports not following this format will not be graded, will have to be written over, and will be counted as late. Reports will be written in third person, using correct spelling and grammar. Each section of the report is to be separated by one line using the following format.

Title: (First Page)
The title is to be placed at the center of the top of the first page of the report, and the first letter of each word should be capitalized.

Objective: (Second Page)
The objective is stated in a short paragraph explaining the purpose of the experiment.

Procedure: (Second Page)
This will be a step by step explanation of what was done in the experiment. The details must be clear enough for any person to follow and rerun the experiment. The procedure is to be written in paragraph form not in numbered sentences.

Data: (Third Page or Handouts)

This section will be a presentation of the observations. Observations may be collected in charts or tables.

Analysis: (Handouts or Additional Pages)

This section should include calculations, graphs, and any labeled diagrams.

Conclusion: (Last Page)

This is the most important and difficult part of the investigation. It explains what was concluded from the observations. The conclusion will be written in paragraph form and will include three parts. In the first part, the objective of the experiment will be restated. Part two of the conclusion will be a brief discussion of the methods used in the procedure. Part three will contain an analysis of the possible errors in the experiment, and a discussion of whether or not the experiment data supported the objective.

You must read the experiment before coming to the lab, keep your lab station clean. Clean up any debris. Work in pairs, if possible. Feel free to discuss procedure or questions with lab partners or me, but entries in your lab report must be your own work. **Identical observations or responses to questions will not be accepted and treated as though not done. All identical lab reports will be given an automatic zero.** Any evidence that you are using work done by someone else could lead to an "F" in the course and filing of academic dishonesty charges. The answers to questions and the "Conclusion" must be your own work entirely without consultation with any other person.

Lab reports should be stapled with no loose sheets. You must enter your name, the time, date, and section number on the front page. Your lab partner's name must be on the report. Write legibly. Your work will not be graded if I have difficulty understanding what you have written. Messy or poorly organized work will be penalized.

DEADLINES:

Each experiment report is due at the end of the lab period.

ABSENCES:

Absences will be excused only if I am notified ahead of time and you have a good reason for being absent. Missed work must be made up before the next lab period. If you do not have an excused absence, you will get a score of zero for that lab. Note that each lab is worth one-half a letter grade. At the discretion of the instructor, excessive absences, even if you make up your missed work, may result in a reduction of your final grade by one letter grade.

GRADING:

Your grade for the course will be determined from:

Lab reports	50%
Mid-Term & Final Exams	50%

An "A" is 90% or more, a "B" is 80% or more, etc.

Note: In order to pass this course you **must** pass at least one of the two written exams and must have a minimum 60% of the total points from the lab reports and the exams. The exams are not easy so prepare for them properly. Do not expect a good grade in this class unless you consistently hand in good work. Also, if you depend on your lab partner and don't really know what is going on you will not do well on the critical exams.

Policy for Students with Disabilities: Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304 696-2271 to provide documentation of their disability. Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit http://www.marshall.edu/disabled or contact Disabled Student Services Office at Prichard Hall 11, phone 304-696-2271.

Cell Phone: All cell phones must be turned off and out of sight when in class.

PHYSICS 101L
"Schedule"

1 cr. hr. **Spring 2015**

DATE	**EXPERIMENT #**
Jan. 15	**1. LAB CANCELLED DUE TO PRES. KOPP'S MEMORIAL**
Jan. 22	**2. Velocity & Acceleration [Inclined Plane]**
Jan. 29	**3. Measurement of "g" [Free Fall]**
Feb. 5	**4. Simple Harmonic Motion [Simple Pendulum]**
Feb. 12	**5. Conservation of Momentum**
Feb. 19	**6. Wave Motion [Vibrating String]**
Feb. 26	**7. Velocity of Sound [Resonance Column]**
Mar. 5	**8. Ohm's Law & Simple Circuits**
Mar. 12	*Mid-term Exam [Experiments 2 - 7]*
March 16 – 21	*Spring Break - Classes Dismissed*
Mar. 26	**9. Magnetic Fields**
Mar. 27	*Last day to drop a full semester individual course with "W"*
Mar. 30 – May 1	*Complete Withdrawals Only*
Apr. 2	**10. The Simple Lens**
Apr. 9	**11. Spread of a Laser Beam**
Apr. 16	**12. Measurement of Wavelength [Laser]**
Apr. 30	*Final Exam [Experiments 8 - 12]*
Apr. 27-May 1	*Dead Week*
May 1	*Last class day and last day to completely withdraw for Spring Semester*
May 8	*Spring Term Ends*