PHYS 181L

Engineering Physics II Lab

Spring 2010

Instructor: Dr. Thomas Herring  Phone: 445-4277
Office: CED 310  Email: herrin32@wnc.edu

Office Hours:  M 1:30 - 3:30 pm
T 5:00 - 6:00 pm
W 1:30 -3:30 pm
Th 5:00 - 6:00 pm


Prerequisites: Phys 180  Co-requisite: Phys 181

Meeting Times:  T  7:00 – 9:45 pm

Grading:  Lab Assignments (10)  60%
Formal Lab Reports (4)  40%

95% – 100%  A  73% - 75%  C
90% - 94%  A-  70% - 72%  C-
86% - 89%  B+  66% - 69%  D+
83% - 85%  B  63% - 65%  D
80% - 82%  B-  60% - 62%  D-
76% - 79%  C+  Below 60%  F

Note that there is no “W” grade on the scale. A “W” will only be given when requested by a student due to extreme circumstances and at the discretion of the instructor.

Lab Assignments: Lab assignments will be handed in at the end of each lab session and will be graded on a 10 point scale.

Formal Lab Reports: Four experiments throughout the semester will require a formal lab report. Details on how to write a formal lab report will be covered in class. An example lab report will also be provided.

Makeup Policy: The last lab session of the semester will be reserved for making up any one missed lab. If you must miss more than one lab let me know in advance and I will try to make special arrangements for a makeup session but it may be difficult to schedule.

Extra Credit: There is no extra credit available.
**Dishonesty in Class:** I don’t anticipate any problems but here’s the policy anyway. Any dishonesty/cheating will result in an F in the course.

**Class Conduct:** Please be respectful of the learning environment, your fellow students, the instructor, and any visitors. This includes entering and leaving the room quietly (especially if arriving late or leaving early), silencing cell phones during class (just leave the room if you need to take the call), and engaging in side conversations not relevant to the course material.

**Disability Statement:** WNC supports providing equal access for students with disabilities. Susan Trist (DSS Coordinator) is available to discuss appropriate academic accommodations that students may require. Please meet with me and contact Susan (445-3278) if you might require any accommodation.

**I: Catalog Course Description**
Explores electric fields, potential, current, dielectrics, circuits, magnetic fields, electromagnetic oscillations, thermodynamics and kinetic theory of gases. Students must co-enroll in both lecture and lab to receive credit.

**II: Course Objectives**
Upon successful completion of PHYS 181L, the student will perform with a minimum accuracy of 80 percent, the following objectives:

- Apply the scientific method to experiments in the laboratory.
- Develop procedures and observational skills as data is taken and gain a fundamental understanding of simple and complex apparatus used in the experiment.
- Apply analytical techniques, statistical analysis, graphical analysis, spread sheet data/recording to the experiments.
- Verify the theoretical ideas and concepts covered in lecture by completing a host of experiments.
- Take the time to discuss the procedure, the data, and the results of the experiment with the lab partner.

**III: Course Linkage**
*Linkage of course to educational program mission and at least one educational program outcome.*

**General Education Mission:** PHYS 181L is a general education class that promotes the development of knowledge, skills, and attitudes that will benefit students in their personal and professional endeavors.

**General Education Student Learning Outcome:** Students who successfully complete PHYS 181L satisfy the general education learning outcome of having problem solving, creative, and critical thinking skills. In addition, students will understand the methods of science and the role of science and technology in the modern world.

**Program Mission for AA/AS degree:** PHYS 181L satisfies the A.A. /A.S. degree mission by providing academic knowledge and skills for successful transfer to meet higher educational goals.

**Program Student Learning Outcomes for AA/AS degree:** Students who successfully complete PHYS 181L will know the subject matter appropriate to the emphasis of the degree.