

PRAIRIE VIEW A&M UNIVERSITY DEPARTMENT OF PHYSICS

PHYS-2521: UNIVERISTY PHYSICS LAB-II

COURSE SYLLABUS

Spring-2012 - PHYS-2521-P82 (CRN 22978)

Professor: Premkumar B. Saganti, Ph. D.

Office: Room 300-AD, New Science Building

Phone: 936-261-3134

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Lab Sessions: Monday

5:00 – 7:50 PM Room: 301

Office Hours: Monday 11:00 AM – 12:00 PM

Lab Manual: Available On-Line

Supplementary Material and Help:

- 1. A comprehensive set of course material taught and tested will also be made available through WebCT and can be accessed via http://ecourses.pvamu.edu/
- 2. Selected information and material will also be made available through the website http://www.pvamu.edu/pages/2811.asp
- 3. A series of tutorial sessions are also being made available through the physics department for individual problem discussions.

COURSE DESCRIPTION:

Calculus based laboratory exercises will be conducted and some of the physics principles will be evaluated are: (i) Electricity-magnetism with specific topics such as: electric forces, potential energy, circuits, and electromagnetic induction; and (ii) Light with topics such as: reflection, refraction and interference.

PERFORMANCE EVALUATIONS and GRADING:

- A set of ten laboratory exercises will be expected to be completed as group projects during the semester. (50% of the grade)
- A set of four Group Reports based on the laboratory exercises will be expected to be prepared by the students as team projects. (25% of the grade)
- A list of short summaries will be assigned on selected subject areas with emphasis on the current advancements and applications. (15% of the grade)
- Short individual summaries on each lab exercise will be expected to be presented by each student. (10% of the grade)
- GRADES → A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: <60

ATTENDANCE POLICY:

Class will start and end at the prescribed times. Attendance in every class is expected and is the student's responsibility. Absence or tardiness may result in lowered grades. Excessive absenteeism, whether EXCUSED or UNEXCUSED, may result in a student's course grade being reduced or assignment of a grade of "F". Absences are accumulated beginning with the first day of class. More detailed information is available from the **Registration and Term Information Fall 2005** (http://acad.pvamu.edu/content/registrar/files/fall2005_revised.pdf).

ASSISTANCE FOR STUDENTS WITH DISABILITIES:

Lecture class room and additional tutorial session will all be held in New Science building and this building is accessible to people with disabilities. My office is also located in New Science building (Room 330-AD). For any further clarification and requirements, you may contact the Office of Disability Services on campus located in Evans Hall Room 315, Tel: (936) 857-2610.

CONDUCT AND ETHICS:

A strict code of ethics will be imposed in the class room lecture sessions, in all the examinations, and on all homework assignments. It is imperative that the student will make every effort to ensure that he / she will abide by the university standards and expectations and pledge to refrain from any unethical activity and plagiarism.

LABORATORY EXERCISES TIME-LINE

Lab Manual - Available on Line

This schedule may be modified as needed –

| Week | Start | Topic | Comments |
|------|-----------|---------------------------------------|--------------------|
| 1 | 16-Jan-12 | No Labs | |
| 2 | 23-Jan-12 | Introduction to Lab / Procedures | |
| 3 | 30-Jan-12 | Lab 1: Review of Data Analysis | |
| 4 | 6-Feb-12 | Lab 2: Speed of Sound in Air | Group Report - I |
| 5 | 13-Feb-12 | Lab 3: Electric Potential and Field | |
| 6 | 20-Feb-12 | Lab 4: Ohm's Law: Resistivity | |
| 7 | 27-Feb-12 | Lab 5: Series and Parallel Resistance | |
| 8 | 5-Mar-12 | Mid-Term Exams (No Labs) | Group Report - II |
| 9 | 12-Mar-12 | Spring Break | |
| 10 | 19-Mar-12 | Lab 6: RC Circuits | |
| 11 | 26-Mar-12 | Lab 7: Magnetic Field Laboratory | |
| 12 | 2-Apr-12 | Lab 8: Magnetic Induction | Group Report - III |
| 13 | 9-Apr-12 | Lab 9: RLC Circuit | |
| 14 | 16-Apr-12 | Lab 10: Reflection and Refraction | |
| 15 | 23-Apr-12 | Make-Up Labs | |
| 16 | 30-Apr-12 | No Labs | Group Report - IV |
| 17 | 7-May-12 | No Labs | |

PHYS-2521-P82 (CRN-22978) Mondays 5:00 PM – 7:50 PM; NSCI-301

Dr. Saganti
Room-330-AD, New Science Building
e-mail: pbsaganti@pvamu.edu
e-Courses: http://ecourses.pvamu.edu/

University Rules and Procedures

Disability statement (See Student Handbook):

Students with disabilities, including learning disabilities, who wish to request accommodations in class, should register with the Services for Students with Disabilities (SSD) at (936) 857-2693/2694 early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:

- 1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
- 2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
- 3. Fabrication: use of invented information or falsified research.
- 4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy:

Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.