

**PHYS 2111 – GENERAL PHYSICS LAB I**  
**Spring Semester 2012**

<b>Instructor</b>	<b>Dr. Orion Ciftja</b>	<b>Office Hours</b>	<b>MWF: 10 AM-12:00</b>
<b>Office</b>	<b>New Sci. Bldg. 330F</b>	<b>E-mail</b>	<b>ogciftja@pvamu.edu</b>
<b>Phone</b>	<b>936-261-3137</b>	<b>Time &amp; Place</b>	<b>P02: W 2-4:50 PM Room 307</b>

**CATALOG DESCRIPTION:** Semester credit hours: 1. General physics laboratory to include hands-on and computer-based experiments on measurement, vectors-force table, air track, projectile motion, static and kinetic friction, ballistic pendulum, Atwood's machine, blocks and incline, centripetal force, moment of inertia, oscillations-simple and physical pendulum.

**PREREQUISITE:** None

**TEXTBOOK:** Physics 2111 Laboratory manual (available online); Physics Laboratory Experiments, 5<sup>th</sup> Ed., by Wilson, J. D (optional)

**COURSE GOAL:** To enable students to have a hands-on experience with the physical laws especially those dealing with Newtonian mechanics (the focus of this laboratory). This lab will also strengthen student's skills on how to approach and solve a problem, etc.

**COURSE POLICIES:** The lab report will be due on the session in which the lab is performed. Each group will hand in one lab report for each laboratory session, containing the names of the members of the group. Attendance is required therefore is the responsibility of the students to make sure their names appear in the submitted lab reports (NO EXCUSES ACCEPTED!). No grade is given for a missed lab. Students can make up **ONLY** one missed lab by the end of the semester (note the Lab Make-up day scheduled in the final week before the Lab test).

**GRADING:** Each lab will be graded according to a given scale (a max of 5 points). A final theory test (with focus on the concepts mentioned in the lab) not to exceed 20 (twenty) points may be given if chosen so by the professor. The laboratory reports are group projects, but the final theory test (if given) must be an individual endeavor. Other grading schemes as explained by the Instructor of record may also be implemented. Based into a percentage scale of total points earned relative to the maximum of points available, the grading system is as follows:

90 – 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

**ORAL AND WRITTEN COMMUNICATIONS:** Oral or written communication will be given through exams, homework, classroom, individual discussion, and use of optional web-based materials.

**ATTENDANCE POLICY:** Class will start and end at the prescribed times. Attendance at every class is expected and is each 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. The University Undergraduate Catalog provides more detailed information.

**STUDENT ACADEMIC APPEALS PROCESS:** Authority and responsibility for assigning grades 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 University Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

**ADA STATEMENT:** Students with disabilities who believe they may need an adjustment in this class are encouraged to contact the Office of Disabilities Services at (936) 857-2693/2694 as soon as possible. Once you receive a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.

**CHEATING AND PLAGIARISM:** Prairie View A&M University is dedicated to a high standard of academic integrity among its faculty and students. In becoming part of the Prairie View A&M academic community, students are responsible for honesty and independent effort. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit.

**GRADE OF “T”:** A grade of “T” may be given in cases of documented emergencies or tragedies that prohibit a student from completing a course. In order to receive a grade of “T”, approval must be granted by the Department Head and College Dean.

## COURSE OUTLINE

Week (starting on)	Topic	Note
1 (Jan. 16)	<b>No Lab the first week!</b>	
2 (Jan. 23)	<b>Lab 1:</b> Introduction / Measurement / Calculation of density	
3 (Jan. 30)	<b>Lab 2:</b> Vectors on a Force Table	
4 (Feb. 6)	<b>Lab 3:</b> 1D and 2D Motion: Linear Air Track or Free-fall and Projectile Motion	
5 (Feb. 13)	<b>Lab 4:</b> Static and Kinetic Friction	
6 (Feb. 20)	<b>Lab 5:</b> Centripetal Force	
7 (Feb. 27)	<b>Lab 6:</b> Hooke’s Law and Springs	
8 (Mar. 5)	<b>Lab 7:</b> Simple Pendulum	<b>NO LABS DURING THE WEEK BEFORE THE MIDTERMS</b>
9 (Mar. 12)	<b>Lab 8:</b> Conservation of Linear Momentum (Ballistic Pendulum or Air Table)	<b>SPRING BREAK</b>
10 (Mar. 19)	<b>Lab 9:</b> Torque, Equilibrium and The Center of Gravity	
11 (Mar. 26)	<b>Lab 10:</b> Rotational Inertia	
12 (Apr. 2)	<b>Lab 11:</b> Capstone [ Optional ]	
13 (Apr. 9)	<b>Lab 12:</b> Capstone [ Optional ]	
14 (Apr. 16)	<b>Lab Makeup / Lab Test</b>	
15 (May. 23)	<b>Review and Study Days</b>	

**THIS SCHEDULE IS VARIABLE**

## 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) 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.

## Technical Considerations for Online and Web-Assist Courses

### Minimum Hardware and Software Requirements:

- Pentium with Windows XP or PowerMac with OS 9
- 56K modem or network access
- Internet provider with SLIP or PPP
- 8X or greater CD-ROM
- 64MB RAM
- Hard drive with 40MB available space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Netscape Communicator ver. 4.61 or Microsoft Internet Explorer ver. 5.0 /plug-ins
- Participants should have a basic proficiency of the following computer skills:
  - Sending and receiving email
  - A working knowledge of the Internet
  - Proficiency in Microsoft Word
  - Proficiency in the Acrobat PDF Reader
  - Basic knowledge of Windows or Mac O.S.

**Netiquette (online etiquette):** students are expected to participate in all discussions and virtual classroom chats when directed to do so. Students are to be respectful and courteous to others in the discussions. Foul or abusive language will not be tolerated. When referring to information from books, websites or articles, please use APA standards to reference sources.

**Technical Support:** Students should call the Prairie View A&M University Helpdesk at 936-261-2525 for technical issues with accessing your online course. The helpdesk is available 24 hours a day/7 days a week. For other technical questions regarding your online course, call the Office of Distance Learning at 936-261-3290 or 936-261-3282

### Communication Expectations and Standards:

All emails or discussion postings will receive a response from the instructor within 48 hours.

You can send email anytime that is convenient to you, but I check my email messages continuously during the day throughout the work-week (Monday through Friday). I will respond to email messages during the work-week by the close of business (5:00 pm) on the day following my receipt of them. Emails that I receive on Friday will be responded to by the close of business on the following Monday.

### Submission of Assignments:

Assignments, Papers, Exercises, and Projects will distributed and submitted through your online course. Directions for accessing your online course will be provided. Additional assistance can be obtained from the Office of Distance Learning.

### Discussion Requirement:

Because this is an online course, there will be no required face to face meetings on campus. However, we will participate in conversations about the readings, lectures, materials, and other

aspects of the course in a true seminar fashion. We will accomplish this by use of the discussion board.

Students are required to log-on to the course website often to participate in discussion. It is strongly advised that you check the discussion area daily to keep abreast of discussions. When a topic is posted, everyone is required to participate. The exact use of discussion will be determined by the instructor.

**It is strongly suggested** that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.