



**PRAIRIE VIEW A&M UNIVERSITY
DEPARTMENT OF PHYSICS**

**PHYS-2523-P02: UNIVERSITY PHYSICS II
CRN 20663
COURSE SYLLABUS, SPRING 2012**

Professor: Kevin Storr, Ph. D.

Office: NSCI-330H

Phone: 936-261-3132

E-mail: kastorr@pvamu.edu

Lecture Sessions: MWF, 11:00 – 11:50 AM, Room NSCI-301

Office Hours: MWF 12:00 – 1:00 PM

Text Book: **University Physics with Modern Physics**

by Bauer and Westfall

ISBN: 978-0-077-35479-4 (Pearson/Addison-Wesley)

Homework Website: <https://quest.cns.utexas.edu/student>

Course ID HW: 37534

COURSE DESCRIPTION:

This is a calculus-based introductory course in general physics with topics from electricity, magnetism and light. Specific topics include: electric force and fields, electric potential, electrical circuits, magnetic force and fields, electromagnetic induction, reflection and refraction of light, interference and diffraction of light.

COURSE OUTCOMES: Upon completion of this course, students should be able to demonstrate:

- Familiarity with the physics concepts in the field of mechanics as measured by problem solving on exams
- Familiarity with scientific & quantitative methods of thinking
- Ability to apply calculus in a real-world physical setting

PERFORMANCE EVALUATION and GRADING:

- This course uses the lecture format. Selected materials in each chapter will be covered in lecture. You should read the entire assigned chapter & work some of the problems before class. The lecture will not replace reading the materials but to amplify and explain the materials in the textbook.
- It is expected that you will need to spend at least two hours studying outside the class for each hour spent in class. This means you should plan to devote a minimum of nine hours per week for this class. You should also be currently enrolled in Phys 2521 laboratory.
- **Lectures:** Attendance of lectures is required, and students are expected to arrive on time, stay for the entire class period, and actively participate. (See the University attendance policy below.) The lecture does not replace reading the materials. The lecture is intended to expand, explain, and offer a different perspective on the material in the textbook.
- **Project:** Students will work in groups to create a YouTube style video based upon an approved topic.
- **Homework:** Online homework problems will be assigned on a timely basis. It is the responsibility of the student, individually or within a group, to complete each homework assignment by the due date. The instructor is available during office hours to assist students, and tutors are provided by the Physics Department. It is essential that the student understands the solution to problems if he/she is to succeed in this course; failure to understand homework problems will likely result in a disastrous outcome on exams.
- **Homework Journal:** Students are to keep a neat, orderly journal of all homework problems completed. These are to be turned in the day of each exam, before each exam.
- **Exams:** Four unit exams, a multi-part oral exam, and a final exam are scheduled. Examinations will consist of solving quantitative physics problems. All examinations are closed book and the Final may be comprehensive. Only calculators and no other electronic equipment are permitted during the exams. Phones are to be turned off.
- **Oral Exams:** Students will meet with instructor individually at designated times to solve problems on the board.
- **Grading:** A cumulative performance of 60% is required for a “D”, 70% for a “C”, 80% for a “B”, and 90% for an “A” as the final grade in the course.
- **Late Homework or Missed Tests:** Late homework will not be accepted unless the student demonstrates exceptional circumstances. A unit exam may be excused or made-up at the instructor’s discretion and only in the case that the student has a valid excuse. The exam must be made up within one week of the exam’s date. The instructor must be informed in advance of an exam if there is a valid schedule conflict to schedule an acceptable time. In the event that an emergency occurs that causes an exam to be missed, it is expected that the student provide written evidence and schedule a make-up exam for as soon as possible following the emergency. There may be no opportunity to take the final exam before or after the scheduled time.

GRADING SCHEME

Assignment	Percent	Grade	Scale (%)
Exams	45	A	90 – 100
Final	20	B	80 – 89.99
Homework	15	C	70 – 79.99
Group Project	10	D	60 – 69.99
Journal	5	F	Below 60
Oral Exam	5		
Total	100 points		

GRADE OF “I”:

A grade of “I” 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 “I”, approval must be granted by the Department Head and College Dean prior to the final examination time.

Supplementary Material and Help:

1. Tutorial sessions are available in room NSCI-324 through the Physics Department for individual problem discussions.
2. Additional reference textbooks are **Physics for Scientists and Engineers, 6th Edition**, by Serway and Jewett, ISBN: 0-534-40842-7 and **Physics for Scientists and Engineers, 4th Edition** by Giancoli, ISBN 0-13-227359-4 (Pearson/Prentice Hall).

CLASS SCHEDULE
(Schedule Subject to Change)

<u>Week</u>	<u>Topic</u>	<u>Note</u>
1 (Jan 17 – Jan 20)	Ch. 21: Electrostatics	Late Registration & Drop/Add Ends on Jan 21 for Undergrad. & on Jan 21 for Graduate Students
2 (Jan 23 – 27)	Ch. 21: Cont'd Ch. 22: Electric Fields and Gauss's Law	Jan 26: General Student Assembly
3 (Jan 30 – Feb 3)	Ch. 22: Cont'd Ch. 23: Electric Potential	Feb 1: Last day to withdraw from course without academic record
4 (Feb 6 – 10)	Ch. 23: Cont'd Ch. 24: Capacitors	
5 (Feb 13 – 17)	Ch. 25: Current and Resistance	
6 (Feb 20 – 24)	Ch. 26: Direct Current Circuits	
7 (Feb 27 – Mar 2)	Ch. 27: Magnetism	
8 (Mar 5– 9)	Ch. 28: Magnetic Fields of Moving Charges	Mid-Term Exam
9 (Mar 12 – 16)	Ch. 29: Electromagnetic Induction	
10 (Mar 19 – 23)	Ch. 29: (continued)	Mar 23: Deadline to apply for Summer and Fall 2012 graduation
11 (Mar 26 – Mar 30)	Ch. 30: Electromagnetic Oscillations and Currents	Mar 28: Honors Convocation
12 (Apr 2 – 6)	Ch. 31: Electromagnetic Waves	Apr 2: Last day to withdraw from course with "W" Apr 6: Good Friday, No Classes
13 (Apr 9 – 13)	Ch. 32: Reflection and Refraction of Light	
14 (Apr 16 – 20)	Ch. 34: Wave Optics	
15 (Apr 23 – 27)		
16 (Apr 30 – May 3)	MT – Review Days; WR – Study Days	End of Course

HOMEWORK WEBSITE INSTRUCTIONS

YOUR COURSE ID# is 37534

Registration is a two step process. First register on the HW server, then for your course.

To Register on the Homework Server

1. Go to <https://quest.cns.utexas.edu/student>
2. Click the link which says, "Get Started"
3. Click the link which says, "*I need a UT EID*"
4. On the left click the link, "*Get a UT EID*"
5. Click Continue
6. Select **no** for **all** the questions asked and select continue
7. Answer the questions, only questions with an asterisk are required, please enter a valid email address. Click continue
8. **IF** it says your EID may already exist, **DO NOT CLAIM IT!** Click, **I DONT SEE MY UT EID.**
9. Answer the reset questions, click continue
10. Create a password with hints, select continue
11. Confirm information and select, **CREATE MY UTEID.**
12. Record your UTEID

To Register for your Course

1. Log on to [://quest.cns.utexas.edu/student](https://quest.cns.utexas.edu/student) using your new UTEID and password
2. click the link, **Register** as a student
3. Enter the 5 digit course ID # 37534.
4. Enter your last name, first name
5. Enter your UTEID (**NOT YOUR SSN!!**), click OK
6. Click OK **ONCE** and wait until confirmation of registration
7. Now when you log in, you will see your course ID# and your instructor's name.

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.