University Physics II: Syllabus
(PHY 2049)
<<Term, Year>>

Message from Instructor:

Welcome to University Physics II. I hope you are having a restful break and are looking forward to the start of a new semester. Please be sure to read the syllabus and become familiar with it. On the last page you will find a syllabus quiz to verify that you have read the syllabus. This will be your digital signature affirming that you have ready it. Please answer the questions, scan it, and submit it in the drop box on elearning. Elearning will be where you will find all course files.

Materials: Please be sure to have your text book and your personal response clicker the first day of class. You will also need a ruler, protractor, and compass for this course. We will begin our lecture the first day of class. If you wait to purchase the course materials, you will put yourself at a disadvantage. With this in mind, please review Chapter 1 in preparation for our first day.

The laws of physics are relatively few in number, but the myriad of different circumstances in which they may be applied shows that strict memorization is not the best procedure for learning the subject matter. Rather, applying the concepts of physics to numerous problems leads to a much better understanding of physics. Therefore, the student is advised to apply the concepts to as many problems as possible in order to gain a deeper insight into the subject. Students are also encouraged to work in groups. This technique usually leads to more material being covered with greater overall understanding.

Lastly, please review your trigonometry and algebra. We will utilize these regularly in class. Any review of these in class will be brief and are meant to refresh your memory, not to teach them to you.

With that said, I look forward to meeting and working with each and every one of you over the next term.

Welcome back,

<<Instructor’s Name>>
Email: <<Enter Email>>
Office: Department of Physics, Building 4, Room <<##>>, Phone: <<####>>

Office hours: <<Enter Hours>>
I'm around most of the time. Feel free to stop by with questions or comments (except the hour before class!), or check after class. You can also schedule an appointment by email.

Class meeting time and location: <<MW or TR #:##am/Bldg 4 Room ##>>
Pre/co-requisites: PHY 2048 University Physics I, MAC 2312 Calculus II


Optional: Student Workbook (Comes with the Text Book, optional)

Tutoring Center:
The tutoring center is located in building 4, 3rd floor, room 321. This center is staffed by senior physics majors and is open during normal business Monday - Friday. Students are strongly encouraged to regularly use the tutoring center.

Course Description:
University Physics II is intended to provide you with a fundamental understanding of the laws of physics with applications to our everyday life and major. This course also serves to develop cognitive and analytical skills necessary which can be applied in all majors.

Continuation of PHY 2048. Electrostatics and magnetism; basic electric circuits; optics; selected topics in modern physics. (General Studies Course: NS/LEC)

Student Learning Outcomes:
University Physics II is designated as a General Studies course. The General Studies curriculum at the University of West Florida is designed to provide a cohesive program of study that promotes the development of a broadly educated person and provides the knowledge and skills needed to succeed in university studies. This course has been approved as meeting the requirement in Natural Sciences. The General Studies learning outcomes for this course are Problem Solving and Quantitative Reasoning.

Homework:
1. Posted online on ####### and due the following ####### at the start of class. Solutions to all homework (HW) assignments and exams will be posted on the course web site.
2. Working together on the HW is strongly encouraged. This helps facilitate the learning process and the recognition of missing concepts.
3. If you continue to have difficulty with the Homework, feel free to come to my office during office hours or set up an appointment for additional help.

Quizzes:
Post-Class:
At the end of every chapter the students will have to answer a single question on elearning. This has a time limit of 15 min. A complete answer should be comprised of at least 2 complete sentences.

Active Learning: You will actively participate in each class by answering questions posed to the class during lecture. You will be graded solely on if your genuine participation, NOT on whether or not you answer the questions correctly. This is to give the instructor active feedback on how well the class as a whole is assimilating the material.

Grading:
  10% Quizzes
  20% Homework
  30% Midterms (1 hour)
<table>
<thead>
<tr>
<th>Topics – University Physics II</th>
<th>Week</th>
<th>Student Learning Outcome - Student is able to..</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric charges and Forces - Ch. 26</td>
<td>1</td>
<td>Utilize the concept of forces to predict the motion of charge and calculate the forces acting on a charge.</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td>The Electric Field - Ch. 27</td>
<td>2</td>
<td>Calculate electric field for various charge distributions</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td><strong>Date of 1st Graded Work</strong></td>
<td>2</td>
<td><strong>Date of 1st Graded Work</strong></td>
<td></td>
</tr>
<tr>
<td>Gauss’s Law - Ch. 28</td>
<td>3</td>
<td>Find the characteristics of electric fields.</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td>The Electric Potential - Ch. 29 Potential and Field - Ch. 30</td>
<td>4-7</td>
<td>Discuss the concept of electric potential, relate the electric potential to the electric field,</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td>Current and Resistance - Ch. 31</td>
<td>8</td>
<td>Calculate currents and potentials in different circuits.</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td>Fundamentals of Circuits - Ch. 32</td>
<td>9</td>
<td>Analyze dc circuits for currents and potentials.</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td><strong>Midterm</strong></td>
<td></td>
<td></td>
<td>Exam - Assessment - Chs 18 - 22</td>
</tr>
<tr>
<td>The Magnetic Field - Ch. 33</td>
<td>10</td>
<td>Find magnetic forces and calculate magnetic fields due to different current distributions.</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td>Electromagnetic Induction - Ch. 34</td>
<td>11</td>
<td>Use Faraday’s law of induction to predict induced potentials and fields</td>
<td>Homework; End of Chapter Quiz</td>
</tr>
<tr>
<td></td>
<td>Electromagnetic Fields and Waves - Ch. 35</td>
<td>12</td>
<td>Discuss the nature and origin of electromagnetic waves, calculate the frequencies and wavelength</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------</td>
<td>----</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>AC Circuits - Ch 36</td>
<td>13-14</td>
<td>Analyze ac circuits for currents, potentials, and phases</td>
</tr>
<tr>
<td></td>
<td>Review for Final</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Exam</td>
<td></td>
<td>Apply multiple physics concepts to a single complex problem without the assistance of study aids.</td>
</tr>
</tbody>
</table>

Help:
1. Instructor office hours (see above), and also available by appointment/email/ or stop by anytime.
2. Tutoring available in Physics Tutor Center in building 4, room 321. See Physics office for schedule.
3. Assistance: The Student Disability Resource Center (SDRC) at the University of West Florida supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such as time-limited exams, inaccessible web content, or the use of non-captioned videos and podcasts, please notify the instructor or the SDRC as soon as possible. You may contact the SDRC office by e-mail at sdrcresearch.uwf.edu or by phone at (850) 474-2387. Appropriate academic accommodations will be determined based on the documented needs of the individual. SDRC will provide the student with a letter for the instructor that will specify any recommended accommodations.

Withdrawals: UWF policy requires that students submit to the Office of Records and Registration a completed withdraw from courses, which is a different policy from that used by some other institutions, notably PJC. Withdrawals from this course that are processed by <<Update Withdrawal Date>> will result in a “W” grade being recorded. Withdrawals after this date can be done only by withdrawing from the University; the grade assigned will be W or WF. No withdrawals can be made after the close of classes.

Student Conduct:
Students are expected to behave in a manner that is professional and becoming of a University of West Florida student. This includes, but is not limited to, treating their fellow students and instructors, and University property, with respect.

Honesty in our academic work is vital, and we will not knowingly act in ways which erode that integrity. Accordingly, we pledge not to cheat, nor to tolerate cheating, nor to plagiarize the work of others. (UWF Student Life Handbook). Academic dishonesty is a serious offense and will be taken seriously. Please refer to the UWF Student Life Handbook for a list of behaviors that fall under the definition of academic misconduct. The handbook also outlines the penalties for academic misconduct and the due process procedures that must be followed. (Links to the Student Life Handbook and the UWF Academic Conduct Statement are posted on the UWF Web Site at: http://www.uwf.edu/cas/resources/).
Everything in Writing:
In an effort to prevent any confusion about deviations that may occur on an individual basis, everything must be in writing. This must include an email from the student and a confirmation email from the instructor. Verbal arrangements are not binding and will not be accepted as valid evidence toward any grievances the student may bring forward any time during or at the end of the term.

Name: ____________________________
Class Name: _______________________
Class Section: _____________________
Name of Instructor __________________

Instructions: Answer the questions below. Once complete, scan and upload this sheet and place it in the “Dropbox” on elearning.uwf.edu Note: No paper copies or emails will be accepted.
DUE: This needs to be submitted by the end of the first week of class.

Syllabus Quiz:

1. Did you read the syllabus and do you understand it? Y/N

2. Is a letter grade of a ‘B’ from 75% to 80%? T/F

By signing below, you affirm that you have read the syllabus and will abide by the contents within.

Signature: ________________________________