PHYSICS 2120 SYLLABUS Calculus-based Physics II Fall 2012

TEXT: *Essential University Physics*, Volume 2, 2nd edition by Richard Wolfson

Chapter	Subject Matter	Approximate # of Lectures	Approximate Dates
20	Electric Charge, Force, and Field	4	8/27-9/5
21	Gauss' Law	3	9/7-9/12
22	Electric Potential	3	9/14-9/19
23	Electrostatic Energy and Capacitors	2	9/21-9/24
24	Electric Current	2	9/26-9/28
25	Electric Circuits	3	10/1-10/5
EXAM I: THURSDAY, October 11, 7-9 PM (Location TBA)			
26	Magnetism: Force and Field	6	10/8-10/22
27	Electromagnetic Induction	4	10/24-10/31
28	Alternating Current Circuits	3	11/2-11/7
EXAM II: THURSDAY, November 15, 7-9 PM (Location TBA)			
29	Maxwell's Equations and Electromagnetic Waves	3	11/9-11/14
30	Reflection and Refraction	2	11/16-11/19
32	Interference and Diffraction	4	11/21-11/30
31	Images and Optical Instruments	3	12/3-12/7
COMPREHENSIVE FINAL EXAM: TUESDAY, December 11, 8-10 AM (Location TBA)			

Instructor	Office	Phone	E-mail
Dr. Raymond Kozub	BR 227C	3479	rkozub@tntech.edu
Dr. Sakir Ayik	BR 217	3156	ayik@tntech.edu
Dr. David Murdock	BR 221	3044	murdock@tntech.edu

Homework will be assigned, answered, and graded using Mastering Physics, which is web-based; an access card comes with textbook purchases from the TTU bookstore or can be purchased separately online. Log-in at http://www.masteringphysics.com. Necessary information for your class section will be provided separately. There are some issues to consider when using a web-based service. First, connections to the web can be erratic. Inability to connect will not be an excuse for not getting an assignment done on time. Second, the web site only asks for an answer, not a full solution; on quizzes and exams this will not be acceptable. Third, the web site may sometimes accept a number (without units) to its numerical problems; this can be acceptable if a question requests its answer in a certain set of units. However, on quizzes and exams, we will typically only ask for a given variable and you will be required to include appropriate units with your answer (as well as throughout your solution). Fourth, web systems are often much too lenient in dealing with significant figures. Again, we expect you to do things correctly on quizzes and exams. If any of these issues are unclear or if you have problems in signing up or accessing your assignments, please contact your instructor **immediately**.

There will be at least four classroom quizzes, each of about 25 minutes duration. These are announced in advance, and the lowest quiz grade will be dropped at the end of the semester. **Makeup quizzes will not be given without prior approval of the instructor**.

A sheet of fundamental equations will be provided for you to use on major exams; these will be available for viewing in advance of the exam. However, there will be no formula sheets for the quizzes.

Grade Weightings: Homework 15%; Quizzes 15%; Exam I 20%; Exam II 20%; Final 30%

Grade Scale: 100-80 A; 79-65 B; 64-50 C; 49-35 D; 34-0 F

All students are invited to seek assistance from any Physics faculty member who is available at the time.

As part of the physics department's research into student learning, you may be asked to take physics content diagnostic tests. Your scores on any diagnostic tests will be confidential and will not count toward your course grade. However, in the interest of improving pedagogy in physics, you should try to perform as well as you can on any such test.

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Academic Adjustment form should be completed as soon as possible, preferably by the end of the first week of the course (August 31). The ODS is located in the Roaden University Center, Room 112; phone 372-6119.

NOTE: Physics 2121 lab classes will start the week of August 27.