

Engineering Physics II Spring 2015

PHY 2426 Syn 26399 sect 003

Lecture	Mon/ Wed,	6:00 pm - 8:20 pm	Room 331
Lab	Mon/ Wed,	8:30 pm - 9:00 pm	Room 327
Office	Mon/ Wed, Tue/ Thur,	5:30 pm - 6:00 pm 11:00 am - 12:00 pm	Room 325.1 phone 223- 3303

week	chapter (section)	event	lab
Jan 21	wave motion	<i>safety</i>	standing waves
Jan 26, 28	21, 22		meter reading
Feb 2, 4	23, 24		charged straws
Feb 9, 11	24, 25		large capacitor
Feb 16, 18	25, 26		small capacitor
Feb 23, 25	27, review	test ○ no lab	
Mar 2, 4	28, 29		circuits
Mar 9, 11	29, 30		magnetic field
Mar 16, 18	- <i>spring break</i> -		
Mar 23, 25	30, review	test ○ no lab	
Mar 30, Apr 1	31		Faraday's law
Apr 6, 8	32		capacitance by inductance
Apr 13, 15	33		resonance
Apr 20, 22	34		phase shift
Apr 27, 29	35		Brewster's angle
May 4, 6	36		lenses and mirrors
May 11, 13	review	final ○ interference	

It is very important that you are registered for class at this time. This will be checked, and you risk losing time and money if matters are not as they should be. See me immediately if there is any doubt.

Attendance is very important, and will be recorded for both class and labs. Being present for tests is mandatory. Test make-ups must be cleared **before** missing a test. Lab make-ups will be available on Fridays.

Tests

○ Feb. 25	Ch 21, 22, 23, 24, 25, 26 & wave motion
○ Mar. 25	Ch 27, 28, 29, 30
○ May 13	Ch 31, 32, 33, 34, 35, 36 * * this test is cumulative

Ch Homework		Ch Homework	
21	18, 31, 42	29	4, 10, 12, 35, 53
22	22, 24, 32, 33, 34, 56	30	9, 21, 22, 29, 33, 45
23	24a, 25, 44	31	2, 18, 31, 45, 66
24	23a, 48, 67, 92	32	5, 13, 15, 41
25	13, 14, 33, 45	33	12, 20, 21, 34, 68
26	21, 31, 42, 53	34	7, 43, 89, 93
27	10, 15, 24, 57	35	12, 23, 34, 40, 39
28	3, 8, 13, 23, 36	36	2, 7, 8, 18, 21, 31

Your grade consists of a lab grade, homework and the three test grades. Homework is worth 100 points. Your lab notebook is worth 250 points. The first two tests are worth 200 points each. The final is cumulative and counts as 250 points. Your total points earned will be divided by 1000 (the maximum number of points possible) to give a numerical grade.

You need to be present for tests. **Make-ups must be cleared before missing a test.**

Each lab analysis and writeup is submitted within two weeks after being assigned. The exception is the last lab, which is due the following week on May 7. If you miss a lab you can make it on on Fridays.

All homework assignments come from the exercises and problems section of each chapter. Each homework set is due on the Wednesday two weeks after the corresponding chapter is covered in class. The exception is the last set, which is due the following week on May 7. Please mark chapters clearly. Late homework will not be accepted after two weeks.

Remember, in doing homework, labs, or tests, it's important to explain as much as you can about what you are doing. We are looking for process as well as answers in this course. If you are having trouble understanding concepts or assignments, come to see me during office hours or contact me for an appointment. Remember I want to help; come see me if you don't understand something.

My email address is <gink@austin.rr.com> You can often reach me at 478-8125. Office hours are one hour before class on Monday through Thursday. Check online for class syllabi, homework assignments, and other information.

ENGINEERING PHYSICS II PHYSICS 2426 section 003
SYNONYM: 26399 4 credits instructor: David Potter Spring 2014

COURSE DESCRIPTION: Calculus-based study of electricity and magnetism, geometric and physical optics, and modern Physics.
This is the second half to the calculus-based PHYS 2425/2426 sequence.

PREREQUISITES : 1. PHYS 2425 or equivalent
2. Credit in MATH 2414 or its equivalent
TEXT : Halliday, Resnick and Walker, *Fundamentals of Physics, 9th edition vol 2*
OTHER : Scientific calculator
METHODOLOGY : Lecture/Lab

LECTURE: Tue/ Thur, 7:00 pm - 8:20 pm in RGC 331
LAB: Tue/ Thur, 8:30 pm - 9:00 pm in RGC 327

OFFICE LOCATION: RGC 325.1
PHONE NUMBER: 223- 3303
E-MAIL ADDRESS: gink@austin.rr.com
OFFICE HOURS: Mon/Wed, from 5:30 pm - 6:00 pm
Tue/Thurs, from 2:30 pm - 3:00 pm
APPOINTMENT HOURS: call or e-mail

Remember, I do want to help you. Come and see me or make an appointment.

This is a university calculus level physics course intended for majors in engineering, physics, chemistry, mathematics, computer science and other technical and scientific majors.

OBJECTIVES:

In the lecture, to get a slightly deeper acquaintance with some important ideas of physics, and to get some practice thinking as a physicist does.

In the lab, to see some physical ideas made real, and to get some exposure to laboratory equipment, as well as to get some exposure to technical writing and using graphs and charts.

GRADING SYSTEM: points earned are divided by 1000 to get a class grade

Tests:	200 points	
Final Exam:	250 points	In most classes, 92 up is an "A", 91-82 is a "B", 81-65 is a "C"
Laboratories:	250 points	Small variations from this will be fitted to individual classes.
Homework:	100 points	

COURSE POLICIES:

You are encouraged to attend. Too many absences can get you dropped. Withdrawals are generally up to student.

For incompletes, see incomplete rule in college catalog (This section in the catalog is 3 paragraphs long).

To pass this course, you must pass the lab section of the class. You must be present during lab or make up a lab on Friday to get credit.

Scholastic Dishonesty: Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations, and homework.

Academic Freedom: Students are free to disagree with instructors on matters of opinion or personal philosophy, and will incur no penalty from doing so. However, instructors will judge student work based upon its relation to the current state of mainstream scientific fact and theory. Students are allowed to voice opinions, concerns, complaints and suggestions to the instructor. However, it is up to the instructor to decide how to use the student's comments to meet the class's best interests.

Student Discipline: Matters of student discipline will be adjudicated by the instructor on a case-by-case basis, in conjunction with the Task Force Leader or Dean. Students may consult with the Office of Student Services or the Associate Dean at their campus on these matters.

Office with Student with Disabilities: Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office for Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester.

TESTING CENTER POLICY: Physics tests may not be given in the testing center except for make up tests.

STUDENT SERVICES HANDOUT and INSTRUCTIONAL SERVICES HANDOUT: to be handed out to student by each instructor if student already does not have copy