

# Engineering Physics II – Summer 2016

Syn 30259 PHY 03954 sect 003

Lecture	Mon/ Wed,	6:00 pm - 8:00 pm	Room 331
Lab	Mon/ Wed,	8:00 pm -10:00 pm	Room 327
Office	Mon/Wed, Tue/ Thurs,	5:00 pm - 6:00 pm <i>by appointment</i>	Room 325.1 phone 223- 3303

week	chapter (section)	tests & events	lab
June 1	waves, 21		standing waves
June 6, 8	22, 23, 24		charged straws
June 13, 14	25, 26		capacitance
June 20, 22	27	test ○	capacitance
June 27, 29	28, 29		circuits
July 6	30, 31		inductance
July 11, 13	32, 33		solenoid
July 18, 20	34	test ○	ac circuits
July 25, 27	34		Brewster
Aug 1, 3	35, 36		lenses
Aug 8, 10	review	final ○	labs due Aug 15

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

○ June 22	Chapters 21, 22, 23, 24, 25, 26	(200 pts)
○ July 20	Chapters 27, 28, 29, 30, 31, 32, 33	(200 pts)
○ Aug. 10	Chapters 34, 35, 36 * <b>this test is cumulative</b>	(250 pts)

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 two test grades, a final, a set of labs, and a set of homework. The first two tests will each count 200 points, and the final is worth 250 points. The collection of labs is worth 250 points. The homework set is worth 100 points. Your 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 should be cleared before missing a test.**

Each lab analysis and writeup is due within two weeks of being assigned. Attendance will be taken for lab, and everyone must work on a lab to get credit. In order to pass the course you must pass your lab section, regardless of other grades. With this in mind you can only miss three labs. 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. Your homework will be due on the Thursday two weeks after the corresponding chapter is covered in class.

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.

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: 03954 4 credits instructor: David Potter Summer 2016

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 : *Fundamentals of Physics, 10th edition vol 2; Jearl Walker; Halliday & Resnick*  
OTHER : Scientific calculator  
METHODOLOGY : Lecture/Lab

LECTURE: Mon/ Wed, 6:00 pm - 8:00 pm in RGC 331  
LAB: Mon/ Wed, 8:00 pm -10:00 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 5:00 pm - 6:00 pm  
Tue/Thurs, By Appointment  
APPOINTMENT HOURS: call or e-mail

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 (2): 400 points (*200 each*)  
Final Exam: 250 points  
Laboratories: 250 points  
Homework: 100 points

In most classes, 92 up is an "A", 80-91 is a "B", 65-79 is a "C"  
Small variations from this will be fitted to individual classes.

**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).

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.

COURSE OUTLINE/CALENDAR on front page

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