

PHY 112 - PRINCIPLES OF PHYSICS - SUMMER 2006

CLASS TIMES: 9:00 AM-12:00 PM, M-Th, F218 - Meets July 5 - July 26

INSTRUCTOR: Dr. Gregory Kozlowski, Office: F253, 775-3433, gregory.kozlowski@wright.edu
Office Hours: 8:15-8:55 AM, M-Th

TEXTBOOK: *Physics - Principles with Applications, Sixth Edition*, Douglas C. Giancoli. (One copy is on reserve in the library.)

CLASS MEETINGS: The readings for each class meeting are listed in the schedule and I will assume that you have read them before class. Typically half of the class time will be devoted to a review of the highlights from the readings and half will be devoted to your working on study guides. You are expected to be present and actively working each day and will receive credit for your participation. Your completed study guide should be submitted as part of your daily assignment at the start of the next class meeting.

HOMEWORK: Daily homework assignments are listed in the schedule. Your solutions, neatly written and carefully showing how you arrived at your results, should be submitted as part of your daily assignment at the start of the next class meeting.

DAILY ASSIGNMENTS: Daily assignments usually consist of your completed study guide from the previous class meeting and your completed homework assignment. Your daily assignment is due at the start of the next class meeting. All of the pages should be stapled together so they do not become separated in the grading process. No late daily assignments or parts of assignments will be accepted. Selected parts of each daily assignment will be graded and they will be returned to you. You will receive a grade of zero for any scheduled exam that you miss. An optional hour-long make-up exam on the same material as the first two hourly exams will be administered during the second hour of the final exam period. Your score on this exam will replace one lower score (or one zero score) on the first or second hourly exam. Anyone may take this make-up exam. There is no make-up exam for the third in-depth exam or for the make-up exam. Missing assignments or parts of assignments will receive a score of zero. Your lowest two (2) daily assignment scores will be dropped when computing your total assignment grade.

LABORATORY: Concurrent registration in PHY 102 is required. See Mr. William Wagner, Laboratory Director, (F239) about problems related to the laboratory class.

FREE HELP ROOM: Available in F213A, M-Th, 2-5 PM.

EXAMINATIONS: Three hour-long, in-depth, multiple-choice exams will be given as listed in the schedule. Questions will be based on the material in the assigned sections of the textbook, in the lectures, in the study guides, and in the homework assignments. You are expected to take all of the examinations when scheduled. If you miss an exam for a documented serious reason (e.g. childbirth, hospitalization), you may apply to take the comprehensive make-up exam.

You may prepare one 8 1/2" x 11" formula sheet for your use during each exam. No other papers or books may be used except those distributed with the exam. You must provide your own scientific calculator and #2 pencils for the exams.

On days when exams are scheduled, the exam will be held first after a brief review of the daily assignment submitted for grading. After the exam, the normal class will continue.

ACADEMIC INTEGRITY refers to the "integral" quality of the search for knowledge that a student undertakes. The work a student produces, therefore, ought to be wholly his or hers; it should result completely from the student's own efforts. A student will be guilty of violating academic integrity if he/she a) knowingly represents work of others as his/her

own, b) uses or obtains unauthorized assistance in the execution of any academic work, or c) gives fraudulent assistance to another student [McGlynn, 2001].

Wright State University strictly enforces violations of academic integrity. Past violations include collaborating with others on graded course work including in class exams, take-home tests, on-line quizzes, and homework assignments. For more information see <http://www.wright.edu/students/judicial/>.

Know the policy – ignorance is not a defense.

GRADING:	Three In-Depth Exams	300 points max
	Study Guides	50 “ “
	Daily Assignments	100 “ “
	Total Score	450 points max

100% --- **A** --- 88% --- **B** --- 75% --- **C** --- 62% --- **D** --- 50% --- **F** - 0

SCHEDULE: (Ch. = chapter, App. = appendix, P = problem)

DATE	CLASS	HOMEWORK DUE NEXT CLASS
7/5 Wed.	Secs. 9.5-6;10.1-5 Elasticity, Fracture, Fluids	Ch. 9 P 50(1.5 mm), 51 Ch. 10 P 5, 10(1.2m), 11, 16(654 kg/m ³)
7/6 Thur.	Secs. 10.6-10;11.1-3 Fluid Dynamics, Vibrations	Ch. 10 P 27, 39, 44[2.3x10 ⁶ N], 45, 46[2.2m/s, 2atm] Ch. 11 P 4(740N/m, 2.5cm, 2.6Hz), 7, 11, 19, 23
7/10 Mon.	Secs. 11.4-9,11-13 Wave Motion	Ch. 11 P 32(0.572Hz, 0.571m/s, 0.0595J), 38 [545 m, 188m, 3.41m, 2.78m], 41, 51, 55, 57
7/11 Tue.	Secs. 12.1-2,4,6-7 Sound, Doppler Effect	Ch. 12 P 1, 9, 16(990W, 280m), 19, 25, 45, 49, 55
7/12 Wed.	EXAM Secs. 13.1-2,4,6-10;14.1-4 Kinetic Theory, Heat	Ch. 13 P 5, 11, 31, 39, 49 Ch. 14 P 5, 13, 19
7/13 Thur.	Secs. 14.5-8;15.1-2,4-9 Laws of Thermodynamics	Ch. 14 P 23, 39 Ch. 15 P 3, 11, 19, 31, 37
7/17 Mon.	Secs. 16.1-9 Coulomb Law, Electric Field	Ch. 16 P 9, 11, 13, 19, 23, 28 (0.84x10 ⁸ N/C direction is towards negative charge), 34(3.87x10 ⁴ N/C), 41
7/18 Tue.	Secs. 17.1-5 Electric Potential	Ch. 17 P 9, 12(7.8x10 ⁵ m/s), 15, 21, 29
7/19 Wed.	EXAM Secs. 17.7-9 Capacitance, Dielectrics	Ch. 17 P 36(0.75μF), 39, 40(5.6x10 ⁻⁵ F), 43, 51
7/20 Thur.	Secs. 18.1-7 Electric Currents	Ch. 18 P 9, 21, 35, 46(390V, 3.9A), 48(1.7kW, 3.4kW, zero)
7/24 Mon.	Secs. 19.1-3 DC Circuits	Ch. 19 P 3, 7, 15, 20(4.6kΩ), 24(17.4V, 13.3V), 25
7/25 Tue.	Secs. 19.5-7 Capacitors, RC Circuits	Ch. 19 P 27, 34(2.47V), 36(0.0207μF, 1.83nF), 42(1020μC, 339μC), 50(2.33nF, 14.2μs)
7/26 Wed.	EXAM	Read Sec. 20.1-7 for a head start on PHY 113 which starts tomorrow

Additions, deletions and modifications to the syllabus will be announced in lecture.