

**ELEMENTS OF PHYSICS FOR ARCHITECTS & INTERIOR DESIGN STUDENTS**  
**PHYSICS 161**

**LECTURE HOURS:** MWF 12:20 – 1:10PM, 415 Nielsen  
**SEMESTER:** Fall 2008  
**INSTRUCTOR:** Dr. Margie Abdelrazek, 214 Nielsen (974-6180)  
margie@utk.edu  
**OFFICE HOURS:** MW, 11:00am – 12:00pm & 1:30pm – 2:30pm  
or by appointment (at least 24 hours prior notice)

**REQUIRED TEXT AND MATERIALS:**

*Physics*, Giancoli, 6<sup>th</sup> edition

**EVALUATION:**

Written examinations, assigned homework, reading quizzes weighted as follows, will be used to establish the final grade for the course.

Tests	45%
Final Exam	25%
Homework & Quizzes & In-class activities	30%

**LECTURES:** Summary lecture notes will be posted on Blackboard prior to lecture. It is your responsibility to read and review the material (text, summary notes, and examples) BEFORE coming to class. Class time will be used to review the concepts in the chapter and work examples and/or problems from the text. Please take advantage of the tools that are listed in the beginning of the textbook, since they are valuable supplemental learning resources. Attendance is VERY important, since we will be covering a healthy amount of material and students cannot afford to fall behind.

**TESTS:** There will be four tests given, from which the lowest test score will be dropped. Only non-programmable calculators allowed (if necessary). A sheet with equations and constants will be provided. It is in the student's best interest to take all four exams, because you cannot guarantee your performance on any given test. Students will have ONE WEEK from the time they have received their test grades to raise any grading concerns – beyond that, the test grades will be considered final.

**HOMEWORK ASSIGNMENTS:** Developing problem-solving skills and strategies are essential for physics (and many other things) and can be achieved by solving and practicing problems. Homework problems from the text will be assigned regularly and due weekly unless otherwise specified. Assignments will be submitted online using the Blackboard system. It is the student's responsibility to ensure proper submission of homework: assignments that are not submitted properly will be a ZERO grade.

**COURSE CONTENT:** (some chapters will not be covered in their entirety)

Chapter 1	Introduction; Trigonometry review
Chapter 3	Vectors
Chapter 4	Motion and Force: Dynamics
Chapter 5	Circular Motion
Chapter 6	Work and Energy
Chapter 8	Rotational Motion
Chapter 9	Bodies in Equilibrium: Elasticity and Fracture
Chapter 10	Fluids
Chapter 11	Vibrations and Waves
Chapter 13	Temperature and Kinetic Theory
Chapter 14	Heat
Chapter 15	Laws of Thermodynamics
Chapter 18	Electric Currents

Chapter 19	DC Circuits
Chapter 22	Electromagnetic Waves
Chapter 23	Light: Geometric Optics
Chapter 24	Wave Nature of Light
Chapter 25	Optical Instruments

**OTHER COMMENTS:**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss his/her specific needs. Please contact the Office of Disability Services at 865-974-6087 in Hoskins Library to coordinate reasonable accommodations for students with documented disabilities.

Please turn off all pagers or mobiles or put them in silent mode!