

**THE UNIVERSITY OF TEXAS AT EL PASO**  
**COLLEGE OF SCIENCE**  
**DEPARTMENT OF PHYSICS**

CRN: 11390  
Course Title: PHYS 2230, Thermal and Fluid Physics  
Credit Hrs: 2  
Term: Fall 2015  
Course Meetings & Location: MW 10:00 am – 10:50 am, Liberal Arts Building 304  
Prerequisite Courses: PHYS 2420  
Instructor: Dr. Huiyan Yang  
Office Location: PSCI 215B  
Contact Info: Phone # 915-747-7510  
E-mail hyang4@utep.edu  
Fax # 915-747-5447  
Emergency Contact # 915-747-5536  
Office Hrs: MW 11:00 am – 11:50 am, or through appointment  
Textbook(s), Materials: Required: University Physics, Young and Freedman, 13<sup>th</sup> Edition  
Online study tool: MasteringPhysics (MPYANG16861)  
(Homework is assigned and graded in MasteringPhysics. All students are required to have access of MasteringPhysics.)  
Course Objectives (Learning Outcomes): Develop an understanding of macroscopic properties of fluid. Attain knowledge of thermal physics. The topics covered include pressure, Bernoulli's equation, temperature and heat, the first and second laws of thermodynamics.  
Course Activities/Assignments: Course activities include reading assignment, lectures, homework, three regular exams, and a final exam.  
Assessment of Course Objectives: Outcomes will be measured by homework and exams.  
Grading Policy: Grades will be calculated using the following weights:  
Homework 30%; Quizzes 10%; Exams 30%; Final Exam 30%  
Make-up Policy: No credit will be given to missed homework. Attendance at exam is mandatory. Make-up exams can be arranged at the discretion of the instructor. A written excuse will be necessary for rescheduling an exam.  
Attendance Policy: Attendance in class is the responsibility of the students. If class is missed, you are responsible for obtaining the notes from another student or from the instructor.  
Academic Integrity Policy: Acts of academic dishonesty will not be tolerated in this class. Lapses in academic integrity will be referred to the Dean of Students, as required at <http://academics.utep.edu/Default.aspx?tabid=23785>.  
Civility Statement: This course requires positive behaviors: Be on time and be focused on your work. Please do not distract yourself or others with telephones or music.

**Disability Statement:** If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).

**Military Statement:** If you are a military student with the potential of being called to military service and /or training during the course of the semester, you are encouraged to contact me as soon as it appears that your service will interfere with this course. The instructor will work with you to ensure that your service will not adversely affect your academic progress.

**Course Schedule:** Tentative timeline and topics: May change with class activity  
Chapter 12: Fluid Mechanics 2.5 weeks  
Chapter 17: Temperature and Heat 3 weeks  
Chapter 18: Thermal Properties of Matter 2.5 weeks  
Chapter 19: The First Law of Thermodynamics 2 weeks  
Chapter 20: The Second Law of Thermodynamics 3 weeks