

## **COURSE SYLLABUS - PHYSICS 5306-001 "Classical Dynamics" FALL 2014**

**Instructor:** Prof. Juyang Huang, Tel: 834-3182, E-mail: [juyang.huang@ttu.edu](mailto:juyang.huang@ttu.edu)

**Lecture:** MWF 10:00-10:50 AM in 112 Science Building

**Office Hours:** MWF 11:00-11:50 AM, and by appointment, Science 35

**Textbook:** "*Classical Mechanics*" by H. Goldstein, C. Poole & J. Safko, 3<sup>rd</sup> Ed. (Addison Wesley, 2002, ISBN 0-201-65702-3).

**Learning Outcomes:** Students should be able to thoroughly understand the concepts and methods of classical dynamics at graduate level. Students are expected to be able to apply key principles to solving problems, both familiar and unfamiliar, in this area of physics.

**Outcome assessment:** The expected course outcomes will be assessed through homework and exams, as well as in-class discussion. The exams will provide a mixture of relatively familiar and unfamiliar problems, which will test the students' abilities to apply reasoning and math skills based on the conceptual aspects of the material to their solution.

**Course website** (<http://www.phys.ttu.edu/~huang24/Teaching/Phys5306>): The site contains homework materials, my lecture notes, and other important course information.

**Homework:** Problems will be assigned from the textbook and other sources. Solving problems and working through derivations is the primary means of learning classical dynamics. You are expected to devote many hours outside of class for every hour in class. You may discuss homework assignments with your classmates or use resources available in the web for help, but you must do your own work. Some problems in your homework assignments will be selected for exams.

**Examinations:** To prepare students for departmental Ph.D. Preliminary Exam, all exams, including final, will be *closed-book* and will be given *in-class*. The coverage and time will be announced.

**Grading Policy:** Three exams: 25% each; final exam 50%.  
Your lowest exam or ½ of your final will be dropped  
100-86: **A**; 85-72: **B**; 71-58: **C**; 57-44: **D**

**Attendance:** You are expected to attend ALL lectures unless you have an emergency. The first non-emergency absence will be excused. However, any additional non-emergency absence will cost you 1% of your semester grade per absence.

**Disability:** Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office in 335 West Hall or 806-742-2405.

**Academic dishonesty** will not be tolerated and will be treated according to the Student Handbook rules.