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

Course #: PHYS 5321; CRN: 11452

Course Title: Mechanics

Credit Hrs: 3

Term: Fall 2015 Course Meetings & Location: CRBL 202 at 3:00-4:20 on T,R.

Prerequisite Courses: PHYS 3352

Instructor: Tunna Baruah

Office Location: PSCI 225 B

Contact Info: Phone # 915-747-7529

E-mail address: tbaruah@utep.edu

Fax # 915-747-5447

Emergency contact:

Office Hrs: W 1:00 – 2:00 pm or through appointment.

Textbook(s): Required: Classical Mechanics – Goldstein, Poole and Safko, 3rd
Edition

Suggested: Classical dynamics of particles and systems – S. T.Thornton and J. B.
Marion.

Course Objectives (Learning Outcomes): The course will cover chapters 1-9. Topics to be covered are: Mechanics of a single particle and a system of particles, Variational principles, Lagrange's equations, Two-body central force problem, Kinematics of rigid body motion, Small oscillations, Special Theory of Relativity, Hamilton's equations of motion, Canonical transformation.

Course Activities/Assignments:

There will be two lectures per week. Homework will be assigned regularly but not collected. The students are expected to read the textbook and do the homework.

Assessment of Course Objectives:

Grades will be determined from quizzes, two midterms, and the final exam.

Grading Policy: Quiz (25%), Midterms (25% each), Final (25%).

Make-up Policy: No make up tests.

Attendance Policy: None.

Academic Integrity Policy: See <http://academics.utep.edu/Default.aspx?tabid=23785>

Civility Statement: No cell phone, no chatting with classmates, active participation in class activity.

Disability Statement: If a student has or suspects he/she has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

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, please contact me within the first two weeks of class to arrange in advance for makeup exams, etc.

Course Schedule: Tentative weekly schedule: subject to change depending on course progress

Chap. 1 : Week 1
Chap. 2 : Week 2, 3
Chap. 3 : Week 4, 5
Chap. 4 : Week 6
Chap. 5 : Week 7,8
Chap. 6 : Week 9
Chap. 7 : Week 10
Chap. 8 : Week 11,12
Chap. 9 : Week 13,14
Midterms: Sep. 29, Nov. 3
Final: Dec. 7