

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

Course #: PHYS 3352; CRN: 22480
Course Title: Analytical Mechanics II
Credit Hrs: 3
Term: Spring 2020
Course Meetings & Location: TR 10:30-11:50 am; PSCI 224
Prerequisite Courses: PHYS 3351
Instructor: Tunna Baruah
Office Location: PSCI 120
Contact Info: Phone # 915-747-7529
E-mail address: tbaruah@utep.edu
Fax # 915-747-5447

Office Hrs: TR 12:00-1:00 pm or by appointment
Textbook(s), Materials: Required: Classical Dynamics of particles and systems, by Thornton and Marion, 5th edition
Suggested: Mechanics : Symon

Course Objectives (Learning Outcomes): Students learn about Lagrangian and Hamiltonian dynamics and their application, analyze classical dynamics of particles, central force motion, systems of particles, rigid bodies, and coupled oscillations. The objective is that students can apply the methods and analyze the behavior of dynamical systems.

Course Activities/Assignments: The course will cover chapters from 7 to 12. The topics to be discussed are Lagrangian and Hamiltonian dynamics, central force motion, dynamics of a system of particles, non-inertial reference frame, dynamics of rigid bodies, and coupled oscillations. The students will solve textbook problems. Homework will be assigned.

Assessment of Course Objectives: The students will be required to solve textbook problems using the techniques they learn during the course. The assessment will be made based on regular quizzes, homework, and tests.

Grading Policy: The grades will be determined from three tests including the final (60%), quizzes (20%), and homework (20%). Quizzes will be based on class work and home-works.

Make-up Policy: No makeup tests or quizzes. If you are going to miss a class/quiz, inform a week before.

Attendance Policy: None

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

Civility Statement: No cell phones.

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: Test dates:
Mid terms: TBA
Final : May 14th, 10:00 am – 12:45 pm.