

PHYS 310 Theoretical Mechanics

Class Meets:

Class Meets: T R, 9:00-10:15, in WAT 114

Instructor:

Luis Elias, Watanabe 310, lelias@hawaii.edu, (808)956-2961

Recommended Textbook

Analytical Mechanics

Fowles and Cassidy

7th edition

Thomson/Brooks/Cole ISBN 0-534-49492-7

Requirements

PHYS: 151 or 170 or 170A; and Math 244 (or concurrent) or MATH 253A (or concurrent); or consent of the instructor.

Homework

Homework: You must submit the solutions to all problems assigned of which only one problem of each chapter will be graded. Answers to homework problems will be posted.

Grade Distribution

3 midterms (50%) + 1 FINAL (30%) + HW submitted (10%) + HW graded (10%)

Exam problems will be selected from problems worked in class and problems assigned as homework.

Course Content

1. Vectors
2. Rectilinear motion
3. Oscillations
4. 3D Motion
5. Non-inertial Systems
6. Gravitation and Central forces

Midterm examination dates

September 28, October 26, and November 23

Final examination

Thursday, Dec 16, 9:45-11:45 WAT 114