

Instructor: Professor Dye, WAT 202, 956-9547, sdye@hawaii.edu

Office Hours: Friday 2:00 to 3:00 p.m. and by appointment

Course Meeting Times and Location: MWF from 12:30 to 1:20 p.m. in WAT 415

Academic Honesty: Students are expected to comply with UH academic honesty policies.

Textbook: Required- *Classical Mechanics* by John R. Taylor (2005).

Other Resources: A scientific calculator may be useful for solving some homework exercises.

Course Description: Rigid-body mechanics continued, fluid dynamics, wave motion, theory of relativity.

Course Pre-requisite: PHYS 310

Course Policies: Course grades are computed from points earned on examinations, quizzes, and homework exercises.

Assignments and Mode of Evaluation: Students are strongly encouraged to prepare for each class session by completing the reading assignment and attempting the homework exercises. Graded assignments include: three exams (140 pts.), two quizzes (20 pts.), and 40 homework exercises (40 pts.). Only solutions showing relevant work are acceptable. Partial credit is usually given for work leading to a correct solution. No calculators or electronic resources may be used during exams or quizzes. The standard grading scale (+/- grades are not given) applies to the total of 200 points:

A = 180-200, B = 160-179, C = 140-159, D = 120-139, F = 0-119.

Class Schedule, Reading Assignments, Homework Exercises:

Monday	Wednesday	Friday
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Date	Topic/Reading Assignment	Homework Exercises
1/11	Introduction, syllabus	
1/13	Chap. 9: Mechanics in Non-inertial Frames	10, 13, 16, 25, 33
1/15		
1/20		
1/22		
1/25		
1/27	Chap. 10: Rotational Motion of Rigid Bodies	6, 11, 27, 35, 43
1/29		
2/1	Quiz 1: Chap 9	
2/3		
2/5		
2/8		
2/10		

2/12	Chap. 11: Coupled Oscillations, Normal Modes	
2/17		
2/19		
2/22		
2/24		
2/26		
2/29	Exam- Chap. 9-11 (30 pts.)	
3/2	Chap. 12: Nonlinear Mechanics, Chaos	
3/4		
3/7		
3/9		
3/11		
3/14	Chap. 13: Hamiltonian Mechanics	
3/16		
3/18		
3/28		
3/30		
4/1	Chap. 14: Collision Theory	
4/4		
4/6		
4/8		
4/11		
4/13	Exam- Chap. 12-14 (30 pts.)	
4/15	Chap. 15: Special Relativity	
4/18		
4/20		
4/22		
4/25	Chap. 16: Continuum Mechanics	
4/27		
4/29		
5/2		
5/4		
5/13	Exam (12:00 – 2:00 p.m.)- Chap. 9-16 (80 pts.)	