

# Physics 170

## General Physics I

**Instructor:** Jason Kumar  
WAT 436  
[jkumar@hawaii.edu](mailto:jkumar@hawaii.edu)  
(808)956-2972

**Class meets:**  
MTWF 10:30-11:20am  
WAT 420

**Office hours:**  
TTh 12:00-12:30pm  
WAT 421  
T 3-4pm  
WAT 420

**Recommended Textbook:**  
University Physics Volume 1: 12<sup>th</sup> Edition  
Hugh Young and Roger Freedman

### Topics to be covered:

Motion in three dimensions

Newton's laws

Work, kinetic and potential energy

Conservation of momentum and energy

Rotation and angular momentum

Elastic collisions

Gravitation

Periodic and wave motion

Thermodynamics

## Grading:

The course grade will be based on homework and exams

- ~5% -- participation
- ~35% -- homework
- ~40% -- quizzes, midterms
- ~20% -- final

Generally, collaboration and discussion on homework is permitted. But students should write and understand their own solutions.

The grading scheme will be roughly as follows:

A+	~> 90%
A	~84-89%
A-	~80-83%
B+	~76-79%
B	~70-75%
C+	~66-69%
C	~60-65%
C-	~56-59%
D	~50-55%
F	~<50%

## Student Learning Objectives:

It is intended that this course provide students with:

- 1) an introduction to the concept of physics as an experimental science.
- 2) a firm grounding in Newtonian mechanics.
- 3) an introduction to thermodynamics