PHYS133C : Physics I (Algebra-based)

This is a study of classical physics. Topics include linear and projectile motion, vectors, Newton's Laws of Motion, work, energy, momentum, collisions, rotational kinematics and dynamics, translational and rotational equilibrium, and gravity. A graphing calculator will be required.

Credits 4

Lab/Practicum/Clinical Hours 2

Lecture Hours 3

Corequisite Courses

MATH124C

Learning Outcomes

- State, interpret, and apply the definitions of physical quantities related to kinematics, dynamics, energy, momentum, rotational motion, and gravitation.
- Set up and solve problems, including word problems, in classical mechanics analytically using algebra and trigonometry.
- Solve problems in classical mechanics using numerical methods.
- Solve problems in classical mechanics using graphical methods including the use of position, velocity, and acceleration vs time graphs, graphical vector addition, and free body diagrams.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, and summarize findings in a laboratory report.