



## PHY 101: Technical Physics I

This is a noncalculus-based introduction to the principles of physics and their applications. Topics include vectors, Newton's law of motion, work, energy, machines, and rotation. Emphasis is placed on understanding through problem solving. This course is not transferable to most four-year engineering degrees. Pre or co-requisite: MTH 141 or MTH 152. Three lecture hours and two laboratory hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery.

### Course Student Learning Outcomes

1. Apply knowledge of forces, energy, and momentum to solve numerical problems.
2. Utilize mathematical tools such as dimensional analysis and vectors.
3. Model real world situations using physics tools and concepts.
4. Analyze laboratory data, including sources of error.
5. Recognize the power and proper usage of scientific thinking and methods.

**Credits:** 4

**Program:** Physics