PHYS 111 General Physics 1
Credit Hours: 4
Scheduled hours per week
Lecture: 3
Lab: 2
Other: 0

Catalog Course Description: Mechanics; heat; sound; designed for physics, chemistry, and engineering majors.

Pre-requisites: MATH 156

Co-requisites: PHYS 111L

Course Learning Outcomes:
Upon successful completion of this course, students are expected to be able to:

1. Demonstrate working knowledge of the principles and concepts of university-level calculus based physics;
2. Solve scientific or engineering problems involving the application of physics;
3. Apply physics to the workings of the world.

Topics to be studied:
- Linear, Circular, and Rotational Motion
- Force
- Newton's Laws of Motion
- Work, Energy, and Power
- Gravity
- Momentum
- Waves
- Thermodynamics

Relationship of Course to Program or Discipline Learning Outcomes:

Relationship of Course to Science Learning Outcomes:	
Students will learn the process and reasoning behind the Scientific Method and be able to conduct experiments that meet the requirements of the model.	x
Students exhibit the basic safety-related rules and regulations of working in the lab.	x
Students be able to recount the basic safety tenants associated with a specific scientific discipline.	
Students will become proficient at Science Writing.	
Students will recognize and identify the applications of their specific discipline in the 'real world.'	x
Students will accurately recount important milestones in the history of scientific inquiry in their discipline.	

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Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	x
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	x
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Special requirements of the course:

Additional information:

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