Introduction to Physics

Course Title	Introduction to Physics		
Course Code	PHY101B	**101**	Free Elective
Credit	4	**Contact Hours**	60
Prerequisites	None	**Co-Requisites**	None
Duration	15 weeks	**Class Type**	Lecture

SolBridge GACCS Objectives	%	Learning Objectives
1. Global Perspective	50	1. Students will be equipped with conceptual and analytical tools needed for financial markets and institutions
2. Asian Expertise	30	2. Understand the role and interdependence between the different elements in the financial system.
3. Creative Management Mind	10	
4. Cross Cultural Communication	0	
5. Social Responsibility	10	

Course Description

Students gain "hands on" experience with the topics which are relevant to non-science majors, such as pollution, solar energy, heat transfer, electromagnetism, materials science, fluid dynamics, etc.

Learning and Teaching Structure

The Course will be taught as a mixture of lectures, exercises and case studies. The laboratory part is intended to teach the students basic principles of physics in one semester by supplementing the lectures. Selected experiments from mechanics and general physics areas will be covered. Besides experimental projects done on campus field trips to Research Laboratories and National Science Park in Daedeok Science Valley will be arranged for hands-on experience on modern science and technology. Also there will be several assignments requiring essay preparation after watching videos or reading papers.

Assessment	%	Text and Materials
Attendance and Participation	20	Title: Physics for Scientists and Engineers a Strategic Approach with Modern Physics
Homework Exercises Assignments	20	Edition: 3rd Edition (Published in 2013)
Midterm Examination	20	Authors: Randall D. Knight
Final Examination	40	Publisher: Pearson Education, Inc. (BN-13: 978-0-321-82408-8).

Course content by Week

1	Introduction
2	Concepts of Motion
3	Kinematics in One Dimension
4	Vectors and Coordinate Systems
5	Kinematics in Two Dimensions
6-7	Force and Motion, Dynamics: Motion Along a Line
8	Midterm Examination
9-10	Newton's Third Law
11	Impulse and Momentum
12	Energy
13	Work
14	Rotation of a Rigid Body
15	Final Examination