



HANYANG UNIVERSITY

Hanyang International Winter School

General Physics 2

Professor:	So-Yeon Baek	
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Home Univ.:	Hanyang University	
Dept.:	Department of Applied Physics	Credits: 3

Description:	General physics 2 is the second part of a two-semester calculus-based introductory physics course for science and engineering majors. This course will cover physics related to electricity, magnetism, such as Coulomb's law, Gauss' law, electric field and potential, circuits, magnetic field, induction, electromagnetic waves and lights.
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Objective:	In this course, students will learn how to express the phenomena observed in nature. The purpose of this lecture is to let students understand basis of the physical properties of electric and magnetic fields created by static charge and current distributions. Also help students learning basic knowledge of physics toward their engineering majors.
Preparations & notice :	[Textbook] Principles of Physics(10 th Edition), written by Halliday, David Lecture notes will be given in the HY-in site prior to class. One class consists of 3 sessions (4 hours and 30 mins) 9:00 am – noon , 13:00pm – 14:30 pm

Schedule:	Class 1	Orientation and Introduction to the Physics Vectors(Ch.3 reviewed) CH.21. Coulomb's law
		Quiz
	Class 2	CH. 22 Electric Fields CH. 23 Gauss' law Problems and Solutions.
		Quiz
	Class 3	CH. 24 Electric Potential Problems and Solutions.
		Quiz
	Class 4	CH. 25 Capacitance CH. 26 Current and Resistance Problems and Solutions.
		Quiz
	Class 5	Mid-term Exam Solutions on Midterm problems.

Class 6	CH. 27 Circuits Problems and Solutions.
Class 7	Quiz CH.28 Magnetic Fields CH. 29 Magnetic Fields due to Currents Problems and Solutions.
Class 8	Quiz CH. 30 Induction and Inductance Problems and Solutions.
Class 9	Quiz CH. 32 Maxwell's Equations CH. 33 Electromagnetic Waves Problems and Solutions.
Class 10	Light as a wave (Interference and diffraction) Final Exam. Solutions on Final exam problems.

	Midterm	Final	Attendance	Assignments	Participation	Quiz
Evaluation:	(%)	(%)	(%)	(%)	(%)	(%)
	20	20	10	10	10	30