



Teaching plan for the semester form

Course Instructor	Hassan M. Jaber Al-Ta'ii				
E_mail	domez973@yahoo.com				
Title	The electrical and magnetism				
Course Coordinator	Type here the came of course coordinator				
Course Objective	<p>The syllabus describes the concept of a magnetic field and its impact on electric charges, the student can be Shown how to get the magnetic field from the electric sources, as well as access to an electric field of magnetic sources, Connects this clarification of the close relationship between the electric ,magnetic and some electrical measurement devices , the student will know about the AC circuit and how to calculate the effective values of voltage, current and angle phase difference and Z for these circuits . The student will be inform of the types of magnetic materials and cause of each type, and finally the syllabus gives him some idea about the Maxwell's equations. The student will be qualified and become familiar with basic of the magnetism that will be benefit to him when will be study the electro-magnetism topic in fourth class.</p>				
Course Description	Type here course description				
Textbook	1- Ibrahim Naser etal, the electrical and Magnetism, 2 nd , University of Mosul, 1986.				
References	<p>2- Raymond Serway, and John Jewett, "Physics for Scientists and Engineers with Modern Physics", Brooks/Cole, 9th ed, 2010. ISBN: 9781439048443. Chapters (29-34), Pages 829-1008</p> <p>3- Paul Tipler, and Gene Mosca, "Physics for Scientists and Engineers", W. H. Freeman and Company, New York, 6th ed, 2008. ISBN:9780716789642, Chapters (26-30). Pages 887-1054.</p>				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As (35%)	As (15%)	As (10%)	----	As (40%)
General Notes	Type here general notes regarding the course				



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week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		The Magnetic Field		
2		Magnetic Flux And Gauss's Law For Magnetism		
3		Magnetic Force on a Current-Carrying Wire		
4		<i>Motion of a charged particle in a magnetic field</i>		
5		<i>Motion of a charged particle in a magnetic field, Application</i>		
6		The Biot - Savart Law		
7		Application of magnetics field		
8		Application of magnetics field		
9		Electromagnetic Induction (Faraday's Law of Induction)		
10		The electric generator and the electric motor		
11		Self-Inductance -Mutual Inductance		
12		Energy induction - Inductors Linking with each other		
13		Search Coil Method of Measuring Magnetic Flux		
14		The Electrical transferred		
15		Resonators pipelined and parallel quality coefficient		

Instructor Signature:

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