

## 2015년도 2학기 전자기학 수업계획서

교과목명 Course Title	(국문) 전자기학	(영문)	Electromagnetics
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담당교수(소속) Lecturer	서용호 (나노신소재공학과)	학수번호/구분/학점 (Course No. /)	006152/전공선택/3학점
전화(연구실/HP) Contact No.		강의시간/강의실 (Class Hour/Venue)	
선수과목 (Course Prerequisite)	일반물리학, 현대물리	수강대상 (Target Student)	나노공학과 3학년
E-mail (E-mail Address)		연구실/Office Hour (Office/Office Hour)	

교과목표 (Objectives)	Based on the concept of engineering mathematics, learn static electric field and static magnetic field, steady current, and related problems. Apply the basic knowledge of the electromagnetism to electronics, electric engineering and device material engineering.
이번 강의의 개선을 위한 개선계획 CQI (Continuous Quality Improvement Plan)	이번 학기에는 벡터와 3차원좌표계 미적분의 기초 수학부분을 좀 더 자세히 설명하여 계산 능력을 향상시키고자 함.
교재 참고도서 (Text book & References)	Textbook : "Electromagnetic Field Theory Fundamentals", Bhag Guru and Huseyin Hizioglu, 2nd Edition
과제도서 (Assignment book)	References: "Foundations of Electromagnetic Theory", John R. Reitz, "Classical Electrodynamics" Jackson, John Wiley & Sons
수업방법 (Lecture Methods)	Lecture using projector presentation.
과제물 (Assignment)	5-7 homeworks
독서물 (Reading Materials)	N/A
학업성취 평가방법 (Course Grading)	[상대평가] 중간고사(%) : 30, 기말고사(%) : 40, 수시평가및과제(%) : 20, 출석(%) : 10, midterm exam 35%, final exam 35%, attendance 10%, homework and quiz 20%,
기타 (Etc.)	

주별 교과내용 (교과목명 : 전자기학)

주 (Week)	교 수 내 용 (Course Contents)	수업형태 및 활용기자재 (Etc.)	비 고
1	Introduction on electromagnetism, review on required mathematics	Projector presentation	
2	vector, vector field,	Projector presentation	
3	differentiation and integration of vectors	Projector presentation	
4	Electrostatics 1 charge	Projector presentation	
5	Electrostatics 2 electric field	Projector presentation	
6	Electrostatics 3 electric field	Projector presentation	
7	capacitance	Projector presentation	
8	midterm exam	Examination	

주 (Week)	교 수 내 용 (Course Contents)	수업형태 및 활용기자재 (Etc.)	비 고
9	steady current 1	Projector presentation	
10	steady current 2	Projector presentation	
11	steady current 3	Projector presentation	
12	steady current 4	Projector presentation	
13	Magnetostatics 1	Projector presentation	
14	Magnetostatics 2	Projector presentation	
15	Magnetostatics 3	Projector presentation	
16	final exam	Examination	

특별한 지원이 필요한 경우(장애학생 등) 학기 첫 주에 담당교수와의 면담을 통해 출석, 강의, 과제 및 시험 등에 관한 교수학습지원 사항을 요청할 수 있음  
Students who require special assistance (including special needs students) may contact their professors during the first week of the semester to discuss issues related to attendance, lectures, assignments and exams and request learning assistance.

추 가  
안내사항1  
(Additional  
Guide1)

추 가  
안내사항2  
(Additional  
Guide2)