

Course Title	()	()	Semiconducting Materials
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() Lecturer	()	/ / (Course No. /)	005918/ /3
(/HP) Contact No.		/ (Class Hour/Venue)	
(Course Prerequisite)		(Target Student)	3~4th grade
E-mail (E-mail Address)		/Office Hour (Office/Office Hour)	10:00 am ~ 8:00 pm

(Objectives)	가 PN junction, semiconductor 가 This class is usually learned following the solid state physics. The purpose of this class is to understand the basic physics of semiconductor devices. Those students who want to get a job in the semiconductor, displays, optoelectronics, or general electronic fields are strongly encouraged to take this class since the physics of semiconductor devices are very important for those job .
CQI (Continuous Quality Improvement Plan)	
(Text book & References)	Semiconductor Physics and Devices (basic principles) -Third edition Author: Donald A. Neamen : McGRAW-HILL
(Assignment book)	
(Lecture Methods)	Powerpoint presentation. The lecture will be given in English ()
(Assignment)	1. 2. 3. 4. 5.
(Reading Materials)	
가 (Course Grading)	[가] (%) : 30, (%) : 40, 가 (%) : 20, (%) : 10, (30)%, (40)%, 가 ()%, (10)%, (20)%
(Etc.)	The lecture will be given in English ()

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(Week)	(Course Contents)	(Etc.)	
1	Introduction Ch.1 Crystal Structure of Solids		
2	Ch.2 Introduction to Quantum Mechanics		
3	Ch.3 Introduction to the Quantum Theory of Solids		
4	Ch.4 The semiconductor in Equilibrium		
5	Ch.4 The semiconductor in Equilibrium		
6	Ch.5 Carrier Transport Phenomena		
7	Ch.5 Carrier Transport Phenomena		
8	Midterm test		

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(Week)	(Course Contents)	(Etc.)	
9	Ch. 6 Nonequilibrium Excess Carriers in Semiconductors		
10	Ch. 7 The PN junction		
11	Ch. 7 The PN junction		
12	Ch. 8 The PN junction diode		
13	Ch. 9 Metal Semiconductor and Semiconductor Heterojunctions		
14	Ch. Bipolar transistor, Basic MOSFET		
15	MOSFET transistors		
16	Final term test		

<p style="text-align: center;">가 1 (Additional Guide1)</p>	<p style="text-align: center;">()</p> <p>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.</p>
<p style="text-align: center;">가 2 (Additional Guide2)</p>	