



HANYANG UNIVERSITY

Hanyang International Summer School

Faculty Information	Name						
	E-mail						
	Home University						
	Department						
	Homepage						
Course Information	Class No.		Course Code	ISS1171	Credits	3	
	Course Name	Introduction to Microelectronics					
	Lecture Schedule	Tue-Fri /					
	Course Description	This is an introductory course on microelectronics, which covers basic semiconductor physics, semiconductor devices and circuits..					
	Course Objective	To understand the operational principles of semiconductor devices To understand the operation principles of electronic circuits and become and learn how to design them					
	Prerequisite	-					
	Materials/Textbooks	Fundamentals of Microelectronics, 3rd ed., Razavi, Wiley					
Evaluation	Attendance	10%	Quiz	%			
	Assignment	%	Mid-term Exam	40%			
	Presentation	%	Final Exam	50%			
	Group Project	%	Participation	%			
	Etc.	Evaluation Item			Ratio		
					%		
			%				
Daily Lecture Plan	Week 1	Day 1	Opening Ceremony				
		Day 2	Chapter 2: Basic Semiconductor Physics				
		Day 3	Chapter 2: Basic Semiconductor Physics				
		Day 4	Chapter 3: Diode Models and Circuits				
	Week 2	Day 1	Chapter 4: Physics of Bipolar Transistor				
		Day 2	Chapter 6: Physics of MOS Transistors				
		Day 3	Chapter 6: Physics of MOS Transistors				
		Day 4	Midterm Exam				
	Week	Day 1	Chapter 7: CMOS Amplifiers				



	3	Day 2	Chapter 7: CMOS Amplifiers
		Day 3	Chapter 7: CMOS Amplifiers
		Day 4	Chapter 5: BJT Amplifiers
	Week 4	Day 1	Chapter 5: BJT Amplifiers
		Day 2	Chapter 8: Operational amplifier as a black box
		Day 3	Chapter 8: Operational amplifier as a black box
		Day 4	Final Exam