HANYANG UNIVERSITY

Hanyang International Winter School

Faculty Information	**Name**	Shen, Yang				
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	Home University	Hanyang University				
	Department	College of Economics and Finance				
	Homepage					
Course Information	**Class No.**	18502	**Course Code**	GEN2052	**Credits**	3
	Course Name	Calculus 1				
	Lecture Schedule	Mon-Fri / 13:00-17:30				
	Course Description	This course covers topics of differential and integral calculus, including functions and limits, differentiation, definite and indefinite integrals, and applications of derivatives and integrals.				
	Course Objective	1. Introduce the fundamental concepts and properties of single variable calculus; 2. Explore the theorems and applications of differentiation and integration; 3. Provide students with the mathematical tools necessary for more advanced courses.				
	Prerequisite	-				
	Materials/Textbooks	*Single Variable Calculus*, Ninth edition, by James Stewart				
Evaluation	**Attendance**	20%	**Quiz**	%		
	Assignment	%	**Mid-term Exam**	40%		
	Presentation	%	**Final Exam**	40%		
	Group Project	%	**Participation**	%		
	Etc.	**Evaluation Item**		**Ratio**		
				%		
				%		

Daily Lecture Plan	**Day 1**	Course introduction; functions
	Day 2	The limit of a function
	Day 3	Calculating limits using the limit laws
	Day 4	The derivative as a function; The chain rule
	Day 5	Implication differentiation; Linear approximation; Midterm Q&A
	Day 6	Midterm exam; Applications of differentiation I
	Day 7	Applications of differentiation II; The definite integral
	Day 8	The fundamental theorem of calculus
	Day 9	Indefinite integrals; Applications of integration
	Day 10	Final Q&A; Final exam