Course Title, Class	Term	Day of the week, Period	Credit	Instructor
Calculus I			3	Dr. Nguyen Canh Nam

Course Description

This course provides fundamental knowledge about calculus for single and multivariable functions needed to study further mathematics as well as engineering subjects. Students will be provided a mathematical foundation to succeed in the fields of Technology, Engineering and Economics.

Focus and Goal

Courses which students are recommended to enroll in, but not required to

Schedule

1st	Concepts of function - Definition of a function, domain and range. - Bounded function, monotone function, periodic function, composite function.
2nd	Function (continuous) & Limit of a function - Inverse function - Elementary functions - Definition, uniqueness of limit of a function - Left hand and right hand limit, limit at infinity
3rd	Limit of a function (continuous) - Calculation on limit - Limit of composite function - Infinite limit - Concept of infinitesimal and infinity
4th	Continuity of a function - Definition - Left hand and right hand continuity - Discontinuous function - Continuity of composite and inverse function - Uniform continuity
5th	Continuity of a function (continuous) - Theorems of continuous function Derivative and Differentiation of a function - Definition of derivative, differentiation - Calculation
6th	Derivative and Differentiation of a function (continuous) - Rules of derivative and differentiation of composite and inverse functions - Derivative of elementary functions
7th	Derivative and Differentiation of a function (continuous) - High order derivative and differentiation - Mean value theorems
8th	L'Hospital rule. Finite expansion formula of a function
9th	Scheme of surveying a function
10th	Indefinite integral

11th	Definite integral
12th	Applications of integral
13th	Multi-variables functions
14th	Multi-variables functions (continuous)
15th	Multi-variables functions (continuous)

Out of class assignment

Grading Criteria and Method of Evaluation

Kind	Percentage	Evaluation Criteria
Final Examination	70%	Whether you understand the basic concepts dealt with in class, whether you can solve problems.
Midterm Examination Continuous Assessment Others	30%	Students have to finish a test in 60 minutes. The test covers the content from 1st week to 9th week.
		Home works and exercises accomplishment is counted
		All attendance is considered.
Note		

Educational advice for enrolled students

Textbooks

Title	Author	Publisher	ISBN code	Comment
Essential calculus	James Stewart	Brooks/Cole	978-1133112297	
Note				

Reference books

Title	Author	Publisher	ISBN code	Comment
Note				

Internet Websites related to the Course

Contact

Others