Course Description

Department of Mathematics

Nature of the course ☑ required ☐ elective		Area 麻煩老師勾選類別，或直接填寫 ☐ Algebra ☐ Analysis ☐ Geometry ☐ Statistics ☐ Applied Mathematics ☐ Discrete Mathematics ☐ Others			
Calculus ☐ Calculus A ☑ Calculus B					
Course number	201 101B1	Section number	15	Number of credits	3
Course title	Calculus				
Instructor	Tsong-Cherng Lee [李聰成]				

I. Contents：

First Semester:
(1) Functions and Their Graphs.
(2) Limits and Continuity.
(3) Differential Calculus: Derivatives and Their Applications.
Midterm Test
(4) Integral Calculus: The Fundamental Properties.
(5) Logarithmic, Exponential, and Inverse Trigonometric Functions.
(6) Applications of Integration.
Final Test
Second Semester:
(1) Techniques of Integration.
(2) Infinite Sequences and Series.
Midterm Test
(3) Differential Calculus of Functions of Several Variables.
(4) Double Integrals.
Final Test

II. Course prerequisite：

III. textbook：

Stewart: Calculus 7^{th} ed. 2012

IV. Grading scheme：

Midterm Test 50%
Final Test 50%

V. Others：

Home Work: Selected Exercises from the Textbook (Major Sourse of the Problems in the Tests).

VI. Course Goal：