## Course Description

## Department of Mathematics

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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	nstructor Tsong-Cherng Lee [李聰成]				
<ul> <li>I. Contents: <ul> <li>First Semester:</li> <li>(1) Functions and Their Graphs.</li> <li>(2) Limits and Continuity.</li> <li>(3) Differential Calculus: Derivatives and Their Applications.</li> <li>Midterm Test</li> <li>(4) Integral Calculus: The Fundamental Properties.</li> <li>(5) Logarithmic, Exponential, and Inverse Trigonometric Functions.</li> <li>(6) Applications of Integration.</li> <li>Final Test</li> <li>Second Semester:</li> <li>(1) Techniques of Integration.</li> <li>(2) Infinite Sequences and Series.</li> <li>Midterm Test</li> <li>(3) Differential Calculus of Functions of Several Variables.</li> <li>(4) Double Integrals.</li> <li>Final Test</li> </ul> </li> </ul>					
II. Course prerequisite:					
III. Reference material ( textbook(s) ):					
S.T. Tan, Calculus, 2010. 新月圖書代理					
IV. Grading scheme:					
Midterm Test 50% Final Test 50%					
V. Others:					
Home Work: Selected Exercises from the Textbook (Main Sourse of the Problems in the Tests).					
VI. Course Goal:					