

## Tamkang University Academic Year 112, 2nd Semester Course Syllabus

Course Title	CALCULUS	Instructor	WANG, REN-HE
Course Class	TLBAB1A DEPARTMENT OF BANKING AND FINANCE DIVISION OF GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM),	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ 2nd Semester</li> </ul>
Relevance to SDGs	1A SDG4 Quality education		
Departmental Aim of Education			
<ul style="list-style-type: none"> <li>I. Acquisition of professional knowledge.</li> <li>II. Learning effective self-planning.</li> <li>III. Theoretical application of practical matters.</li> <li>IV. Interpersonal communication and teamwork.</li> <li>V. Analysis of problems and recommendations.</li> <li>VI. Awareness of Ethics as a global citizen.</li> </ul>			
Subject Departmental core competences			
<ul style="list-style-type: none"> <li>A. Students can demonstrate that they have program basic knowledge of business and management.(ratio:40.00)</li> <li>B. Students can demonstrate that they have capability in professional knowledge expression. (ratio:10.00)</li> <li>C. Students can demonstrate that they have capability in using information technology. (ratio:10.00)</li> <li>D. Students can demonstrate that they are critical thinkers.(ratio:40.00)</li> </ul>			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> <li>1. A global perspective. (ratio:5.00)</li> <li>2. Information literacy. (ratio:20.00)</li> <li>3. A vision for the future. (ratio:10.00)</li> <li>4. Moral integrity. (ratio:15.00)</li> <li>5. Independent thinking. (ratio:30.00)</li> <li>6. A cheerful attitude and healthy lifestyle. (ratio:5.00)</li> </ul>			

7. A spirit of teamwork and dedication. (ratio:10.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

**Course Introduction**

Welcome to the Calculus course! This course delves into various aspects of calculus, including integration, additional topics in integration, and multivariable calculus, providing students with a comprehensive understanding of this foundational mathematical discipline.

**The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.**

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Understand the fundamental concepts of integration and apply them to real-world problems. Master additional topics in integration. Proficiently handle multivariable functions, computing partial derivatives, total differentials, and multiple integrals. Apply acquired knowledge to solve practical scientific, engineering, and mathematical problems.	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCD	12345678	Lecture, Practicum	Testing, Practicum

**Course Schedule**

Week	Date	Course Contents	Note
1	113/02/19~ 113/02/25	Integration	

2	113/02/26 ~ 113/03/03	Integration	
3	113/03/04 ~ 113/03/10	Integration	
4	113/03/11 ~ 113/03/17	Integration	
5	113/03/18 ~ 113/03/24	Integration	
6	113/03/25 ~ 113/03/31	Additional Topics in Integration	
7	113/04/01 ~ 113/04/07	Additional Topics in Integration	
8	113/04/08 ~ 113/04/14	Additional Topics in Integration	
9	113/04/15 ~ 113/04/21	Midterm Exam Week	
10	113/04/22 ~ 113/04/28	Additional Topics in Integration	
11	113/04/29 ~ 113/05/05	Additional Topics in Integration	
12	113/05/06 ~ 113/05/12	Calculus of Several Variables	
13	113/05/13 ~ 113/05/19	Calculus of Several Variables	
14	113/05/20 ~ 113/05/26	Calculus of Several Variables	
15	113/05/27 ~ 113/06/02	Calculus of Several Variables	
16	113/06/03 ~ 113/06/09	Calculus of Several Variables	
17	113/06/10 ~ 113/06/16	Final Exam Week (Date:113/6/11-113/6/17)	
18	113/06/17 ~ 113/06/23	Flex week, learning activities should be arranged.	
Key capabilities			
Interdisciplinary			
Distinctive teaching			

Course Content	Logical Thinking
Requirement	
Textbooks and Teaching Materials	Using teaching materials from other writers:Textbooks, Handouts Name of teaching materials: Calculus for Business, Economics, and the Social and Life Sciences, 11th ed. Hoffmann Bradley, Sobecki Price.
References	
Grading Policy	◆ Attendance : 10.0 %   ◆ Mark of Usual : 20.0 %   ◆ Midterm Exam : 20.0 % ◆ Final Exam : 30.0 % ◆ Other 〈TA course〉 : 20.0 %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> .  <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>