

Tamkang University Academic Year 114, 1st Semester Course Syllabus

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

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

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

Course Introduction	Calculus
	(This is a 2-credits courses with 3-hours lecture. In each week, the lecturer will teach and guild you through the textbook content for two hours. The TA will demo the textbook exercises in the remaining one hour.)

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	To learn how to perform differentiation and integration.	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	Testing

Course Schedule

Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	Limit and Continuity.	
2	114/09/22 ~ 114/09/28	Rates of Change, Slopes, and Derivatives.	
3	114/09/29 ~ 114/10/05	Some Differentiation Formulas.	
4	114/10/06 ~ 114/10/12	The Product and Quotient Rules.	Holiday on Friday
5	114/10/13 ~ 114/10/19	Higher-Order Derivatives.	

6	114/10/20 ~ 114/10/26	The Chain Rule and the Generalized Power Rule. Nondifferentiable Functions	Holiday on Friday
7	114/10/27 ~ 114/11/02	Graphing Using the First and Second Derivatives.	
8	114/11/03 ~ 114/11/09	Mid-term Exam	
9	114/11/10 ~ 114/11/16	Optimization.	
10	114/11/17 ~ 114/11/23	Further Applications of Optimization.	
11	114/11/24 ~ 114/11/30	Optimizing Lot Size and Harvest Size.	
12	114/12/01 ~ 114/12/07	Implicit Differentiation and Related Rates.	
13	114/12/08 ~ 114/12/14	Differentials, Approximations, Marginal Analysis.	
14	114/12/15 ~ 114/12/21	Exponential Functions, Logarithmic Functions.	
15	114/12/22 ~ 114/12/28	Differentiation of Logarithmic and Exponential Functions.	
16	114/12/29 ~ 115/01/04	Final-term Exam (Final Week of Diverse Assessments)	
17	115/01/05 ~ 115/01/11	Two Applications to Economics. (Flexible Teaching Week for Teachers)	
18	115/01/12 ~ 115/01/18	textbook exercises on iClass (Flexible Teaching Week for Teachers)	

Key capabilities	
Interdisciplinary	
Distinctive teaching	
Course Content	Logical Thinking
Requirement	rollcall (bonus 10%)

Textbooks and Teaching Materials	Using teaching materials from other writers:Textbooks Name of teaching materials: Brief Applied Calculus(Asia Edition), 7e. Berresford. (In Chinese words: 作者 Geoffrey C.Berresford, 華泰圖書出版.)
References	
Grading Policy	◆ Attendance : % ◆ Mark of Usual : 30.0 % ◆ Midterm Exam : 35.0 % ◆ Final Exam : 35.0 % ◆ Other < > : %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php . ※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.