

Tamkang University Academic Year 110, 2nd Semester Course Syllabus

Course Title	CALCULUS	Instructor	MENG-YING CHOU
Course Class	TLFBB1A DIVISION OF GLOBAL COMMERCE, DEPARTMENT OF INTERNATIONAL BUSINESS (ENGLISH-TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Required ◆ 2nd Semester
Relevance to SDGs	SDG4 Quality education		
Departmental Aim of Education			
<ul style="list-style-type: none"> I. Acquisition of professional knowledge. II. Learning effective self-planning. III. Theoretical application of practical matters. IV. Interpersonal communication and teamwork. V. Analysis of problems and recommendations. VI. Awareness of Ethics as a global citizen. 			
Subject Departmental core competences			
<ul style="list-style-type: none"> A. Students can demonstrate that they have program basic knowledge of business and management.(ratio:50.00) D. Students can demonstrate that they are critical thinkers.(ratio:50.00) 			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> 2. Information literacy. (ratio:20.00) 5. Independent thinking. (ratio:80.00) 			

Course Introduction	In the second semester, our focus will be on the integration and its applications to the real life problems, especially in the region of business. We will also learn some techniques that enable us to find the integration of given functions.
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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	Students shall familiar with the definition of integration and also learn techniques that enable them to find the integration of a given function. Students are also expected to be able to use integration to solve some problems arising from the business.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	AD	25	Lecture	Testing

Course Schedule

Week	Date	Course Contents	Note
1	111/02/21 ~ 111/02/25	5.1 Antiderivatives and Indefinite integrals.	
2	111/02/28 ~ 111/03/04	5.2 Integration by Substitution and General Power Rule. 5.3 Exponential and Logarithmic Integrals.	
3	111/03/07 ~ 111/03/11	5.4 Area and Fundamental Theorem of Calculus.	
4	111/03/14 ~ 111/03/18	5.5 The Area of a Region Bounded by Two Graphs.	

5	111/03/21 ~ 111/03/25	5.6 The Definite Integral as the Limit of a Sum.	
6	111/03/28 ~ 111/04/01	6.1 Integration by Parts and Present Value. 6.2 Integration Table.	
7	111/04/04 ~ 111/04/08	6.3 Numerical Integration.	
8	111/04/11 ~ 111/04/15	6.4 Improper Integrals.	
9	111/04/18 ~ 111/04/22	7.1 The Three-Dimensional Coordinate System.	
10	111/04/25 ~ 111/04/29	Midterm Exam Week	
11	111/05/02 ~ 111/05/06	7.2 Surfaces in Space.	
12	111/05/09 ~ 111/05/13	7.3 Functions of Several Variables.	
13	111/05/16 ~ 111/05/20	7.4 Partial Derivatives.	
14	111/05/23 ~ 111/05/27	7.5 Extrema of Functions of Two Variables.	
15	111/05/30 ~ 111/06/03	7.6 Lagrange Multiplier.	
16	111/06/06 ~ 111/06/10	7.8 Double Integrals and Area in the Plane.	
17	111/06/13 ~ 111/06/17	7.9 Applications of Double Integrals.	
18	111/06/20 ~ 111/06/24	Final Exam Week	
Requirement			
Teaching Facility		Computer, Projector	
Textbooks and Teaching Materials		Brief Calculus: An Applied approach, 10th edition by Ron Larson	
References			
Number of Assignment(s)		(Filled in by assignment instructor only)	
Grading Policy		◆ Attendance : % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 40.0 % ◆ Final Exam : 40.0 % ◆ Other < > : %	

Note

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