Course Syllabus

1.	**Program of Study**	Bachelor of Science Program Bachelor of Arts Program Bachelor of Business Administration Program Bachelor of Nursing Science Program
	Faculty/Institute/College	Mahidol University International College
2.	**Course Code**	ICNS 103
	Course Title	Fundamental Mathematics
3.	**Number of Credits**	4(4-0-8)(Lecture/Lab/Self study)
4.	**Prerequisite *(s)***	ICNS 100
5.	**Type of Course**	General Education Course
6.	**Session**	2nd trimester / 2004
7.	**Conditions**	-

8. Course Description

Limit and continuity. Introduction to differential and integral calculus with applications.

9. Course Objective *(s)*

After successful completion of this course, students should be able to

9.1 to build concepts of single-variable differential and integral calculus, partial derivatives, and the business application thereof.

10. Course Outline

Week	Topic	Hour			Instructor
		Lecture	Lab	Self-Study	
1	Limits and Continuity	4	0	8	Suthida
2	Differentiation	4	0	8	Suthida
3	Differentiation	4	0	8	Suthida
4	Additional Differentiation Topics	4	0	8	Suthida
5	Additional Differentiation Topics	4	0	8	Suthida
6	Higher-Order Derivatives and Extrema	4	0	8	Suthida
7	Extrema	4	0	8	Meechoke
8	Applications of Differentiation	4	0	8	Meechoke
9	Integration	4	0	8	Meechoke
10	Methods and Applications of Integration	4	0	8	Meechoke
11	Multivariable Calculus	4	0	8	Meechoke
	Total	44	0	88	Meechoke
Final Examination					

11. Teaching Method *(s)*

11.1 Lecture
11.2 Worksheets
11.3 Homework
11.4 Self-study

12. Teaching Media

12.1 Texts
12.2 Teaching materials

13. Measurement and evaluation of student achievement

Student achievement is measured and evaluated by

13.1 the ability to build concepts of single-variable differential and integral calculus, partial derivatives, and the business application thereof.

Student's achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+,C,D+, D, and F.

Students must have attended at least 80% of the total class hours of this course.

Score above 50% is a necessary, but not sufficient, condition for passing the class.

Ratio of mark

1. Homework and Participation 10%
2. Quiz 1 10%
3. Quiz 2 10%
4. Midterm 35%

5. Final 35%

14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction toward teaching and learning of the course using questionnaires.

15. Reference *(s)*

Ernest F. Haeussler, Jr. and Richard S. Paul. Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences. (10th Edition).Prentice-Hall International, Inc.

16. Instructor *(s)*

16.1 Suthida Supantamart

16.2 Meechoke Chuedoung

17. Course Coordinator

Suthida Supantamart