

Course Syllabus

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| 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 Internatoinal College |
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| 2. Course Code | ICNS 101 |
| Course Title | Introduction to Mathematics |
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| 3. Number of Credits | 4(4-0-8)(Lecture/Lab/Self study) |
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| 4. Prerequisite (s) | ICNS 100 |
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| 5. Type of Course | General Education Course |
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| 6. Session | 2 nd trimester |
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| 7. Conditions | - |
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| 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 describe single-variable differential and integral calculus, partial derivatives, and the 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	Rate of Change	4	0	8	Suthida
4	Differentiation Rules	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	Taweeratana
8	Differentials and the Indefinite Integral	4	0	8	Taweeratana
9	Integration with Initial Conditions and More Integration Formulas	4	0	8	Taweeratana
10	Techniques of Integration and the fundamental Theorem of Integral Calculus	4	0	8	Taweeratana
11	Area	4	0	8	Taweeratana
	Total	44	0	88	Taweeratana
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 describe single-variable differential and integral calculus, partial derivatives, and the 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.

MUIC standard grading criteria: 90% and above is grade A

Ratio of mark

- 1. Homework and Participation 10%

2.Quiz 1	10%
3.Quiz 2	10%
4.Midterm	35%
5.Final	35%

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

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 Taweeratana Siwadune

17. Course Coordinator

Suthida Supantamart