Introduction to Mathematics 2

(PMTH 127)

4 Credits Hours

1439-1440 H

Text book

- Introduction to Math 2 compiled from Introduction to calculus by M. Zahri and College Algebra and Trigonometry by M. Lial and Calculus by R. Adams

Course Coordinator: Mohammad Sudqi Hamdan

Evaluation System:

Evaluation of the students in PMTH 127 includes:
- Two one Hour exams.
- Quizzes
- Final exam at the end of the semester.

Grades are distributed as the following:

Activities	Points
First Exam	20%
Second Exam	20%
Quizzes	10%
Participation	10%
Final Exam	40%
Total	100%

Letter Grade

The letter grades derived from the course mark and will based on the performance of the in the above exams and assignments as the following:

A+	A	B+	B	C+	C	D+	D	F
95-100	90-94	85-89	80-84	75-79	70-74	65-69	60-64	60 >

Course content:

Chapter 1: Systems and matrices	1.1 System of linear equations	8 Hrs.
	1.2 Properties of Matrices	
	1.3 Determinant solution	
	1.4 Matrix Inverses	
Chapter 2: Trigonometric functions	2.1 Angle Measure	6 Hrs.
	2.2 Trigonometric Functions	
	2.3 Evaluating Trigonometric functions	
		20%
Chapter 3: The Circular Functions and Their Graphs	3.1 Radian Measure	6 Hrs.
	3.2 Unit Circle	
	3.3 Graphs of Sine and Cosine Functions	
Chapter 4: Polynomial and Rational Functions	4.1 Fundamental Identities	4 Hrs.
	4.2 Verifying trigonometric identities	
	4.3 Sum and difference identities	
	4.4 Double-Angle identities	
	4.6 Trigonometric equations	
	First Exam (chapters 1-4)	20%

Chapter 5: Limits and continuity	1.1 Limits of function	12 Hrs.
	1.2 Limit at infinity and infinite limit	
	1.3 Continuity, piecewise functions	
	1.4 The Formal Definition of Limits	
Chapter 6: Differentiation	5.1 Tangent Lines and Their Slopes	12 Hrs.
	5.2 The Derivative	
	5.3 Differentiation Rules	
	5.4 The Chain Rule	
	5.5 Derivatives of Trigonometric Functions	
	5.6 The Natural Logarithm and Exponential	
	5.7 Higher order derivatives	
	Second Exam (Chapters 3-4)	
Chapter 7: Applications of Differentiation	6.1 l'hopital's Rule	4 Hrs.
	6.2 Extreme Values	
Chapter 8: Integration	7.1 The Method of Substitution	4 Hrs.
	Final Exam (Chapters 1-5)	40%

Academic integrity:

All students are expected to follow the rules of Majmaah University. Unexpected absences exceeding 25% of total number of class meetings will result in '' DN '' grade and prevent student from doing the final exam.