

MATHEMATICS 235

MAPLE

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UNIT 1 - Introduction to Maple

- 1.1 Worksheets and syntax.
- 1.2 Types of numbers and evaluation.
- 1.3 Assignment, variables, and functions.
- 1.4 Basic commands: *solve*, *int*, *diff*, *seq*.
- 1.5 Basic plotting of functions in two and three dimensions.

UNIT 2 - Manipulation of Mathematical Expressions.

- 2.1 Basic manipulation commands: *simplify*, *factor*, *expand*.
- 2.2 Operations on polynomials.
- 2.3 Operations on sets, lists, and sequences
- 2.4 Simple Mathematical procedures.
- 2.5 Maple Packages and Procedures.

UNIT 3 - Programming Mathematical Procedures

- 3.1 The *if/then/else/end if* construct.
- 3.2 The *for/from/by/while/do/end do* construct.
- 3.3 Data types and type checking.

EVALUATION:

The final grades in the course will be determined from marks on the assignments, on the midterm, and on a final exam.

Assignments	30%
Midterm	30%
Final Exam	40%

Grade scale:	<i>F</i>	<i>D</i>	<i>C</i>	<i>C+</i>	<i>B-</i>	<i>B</i>	<i>B+</i>	<i>A-</i>	<i>A</i>	<i>A+</i>
	[0, 50)	[50, 60)	[60, 65)	[65, 70)	[70, 75)	[75, 80)	[80, 85)	[85, 90)	[90, 95)	[95, 100]