

MATHEMATICS 235

MAPLE

Fall 2002

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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 mid-term, and on a final exam.

Assignments	30%
Midterm	30%
Final Exam	40%

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