Minnesota State University Moorhead

MATH 260: Computer Calculus

A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 1

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: MATH 261

MnTC Goals: None

Introduction to applications of computer software to calculus. Students must either have taken, or be concurrently enrolled in, Math 261.

B. COURSE EFFECTIVE DATES: 02/21/2002 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Use Maple to do symbolic manipulation to solve mathematical problems including solving equations, computing derivatives, and computing definite and indefinite integrals.
2. Use Maple to generate 2-dimensional and 3-dimensional graphs.
3. Use Maple to produce lab reports.
4. Do some programming in Maple.

D. LEARNING OUTCOMES (General)

1. Become comfortable using computers to aid in solving mathematical problems.
2. Understand the difference between exact solutions and approximate solutions to real world problems.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted