Math 115: Precalculus
Fall Semester, 2003

Course Instructor:	Dr. Stephen Smith
Office:	1304 New Science Facility
Office Phone:	906-227-1594
E-mail:	stepsmit@nmu.edu
Office Hours:	M 11-12; W 12-1; Th, 11-12; F, 12-1 & 2-3or by appointment

Brief Description of the Course:

The primary purpose of this course is to prepare students for calculus. The course assumes you have a good foundation in algebra. The course will include some selected topics from algebra, but its primary emphasis will be on the study of trigonometry and analytic geometry. Since the goal is to prepare you to study calculus, both theory and applications which might arise in calculus will be stressed. You will be expected to understand where formulas come from and, in some cases, derive the formulas for yourself.

However, mastering formulas and procedures for solving routine problems (the so-called "plug and chug" mathematics) is not sufficient. You will be expected to learn to solve non-routine, multi-step problems -- problems that are not just variations of worked examples -- that involve the use of formulas and methods of algebra, trigonometry, and analytic geometry. You will be expected to write-up solutions in mathematically correct form.

Prerequisites: Math 105 passed with a C - or better, or equivalent.

Materials:

Precalculus: Mathematics for Calculus. Fourth edition. (2002). Stewart, Redlin, and Watson. Brooks/Cole: Pacific Grove, CA.

Graphing facility: Your laptop should have installed a copy of the Computer Algebra System (CAS) called ***TI Interactive***. You use TI Interactive in much the same way you use a graphing calculator. Many of you may have used graphing calculators in the past and may already have your own. If you prefer to use a graphing calculator, bring it to class daily. If you decide to buy a graphing calculator, the Math Department recommends the TI-83 plus, TI-85, or TI-86 which are available in the NMU bookstore and various local stores.
Classroom activities will often involve graphing. In class, I will demonstrate using TI-Interactive **only**. The calculators will do the necessary mathematical activities but may use different keystrokes. It is **<u>your</u> responsibility** to make sure you know how to do what is necessary **BEFORE** the day of a test or quiz. You will be expected to use TI-Interactive or your calculator when taking tests. Do ***NOT*** ask to borrow either a classmate's or my equipment for tests or quizzes—this will not be allowed.

Boot up your computer when you come to class and have the TI Interactive program immediately available (or have your calculator ready).

Assessment:

Some form of assessment will take place most every week. Forms of assessment will include: collected homework, announced/pop quizzes, and tests. There will be three (3) in-class tests and a cumulative final.

Participation will form part of the grade. Thus, attendance is required. Roll will be taken daily. Beyond your mere presence, to get full participation points, you will be expected to be prepared and actively contribute to the activities and conversations of the classroom. You will be expected to have your text, computer &/or calculator, paper, and pencil/pen at every class.

The two lowest Homework/Quiz grades will be dropped. As a result, no make-ups or late work on Homework/Quizzes will be allowed. A makeup for a missed test will be given *only* under exceptional circumstances and *prior* approval from me will be required.

Homework/Quizzes (10 total @ 20 pts each)	160 points
Participation	40 points
Tests (3 @ 100 pts each)	300 points
Cumulative final	200 points

A	93-100 percent	A-	90-92 percent	B+	88-89 percent	B	83-87 percent
B-	80-82 percent	C+	77-79 percent	C	70-76 percent	C-	67-69 percent
D	60-66 percent	E	below 60 percent				

Note: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office at 1104 University Center (227-1737). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

Information card: Please answer ***all*** the questions below on the index card. Number your answers as indicated.

Front of card:
1. Name
2. Year in college
3. Major
4. Minor
5. What math courses have you taken in college and what grades did you get in those courses?
6. What math courses did you take in high school and approximately what grades did you get in those courses?

Back of card:
7. If you are repeating this course, when did you take it and what was your grade?
8. What additional math courses do you plan to take in college?
9. Why are you taking this course?
10. Briefly, what are your career plans?