

Math 115: Precalculus
Winter Semester, 2005
M,W,R,F 2-2:50 in WS 3803

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Office Hours:	M,W,R,F 11-12 and 1-2; or 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 that 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 or an overhead graphing calculator. The calculators will do the necessary mathematical activities but may use different keystrokes. It is **your 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, tests and a cumulative final.

The two lowest Homework/Quiz grades will be dropped. 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 (e-mail me before the test).

Grading Scale : (Approximate)

90 – 100 %	A's
80 – 89 %	B's
70 – 79 %	C's
60 – 69 %	D's
below 60 %	F

Extra Help :

Extra help is available from me (by appointment), the math study lab (WS3810) and the all-campus tutorial service (LRC 111H) . Don't wait until you fall behind before you seek help. Math builds on itself, catching up is very difficult, if you fall too far behind.

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 2001 C. B. Hedcock (227-1700; TTY 227-1543). 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.