**Math 115: Precalculus**  
Fall Semester, 2012  
M,T,W,R 4-4:50 in WS 3806

<table>
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<tr>
<th><strong>Course Instructor:</strong></th>
<th>Richard Balding</th>
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<tbody>
<tr>
<td>Office:</td>
<td>1111 New Science Facility</td>
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<tr>
<td>Office Phone:</td>
<td>906-227-1595</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:rbalcing@nmu.edu">rbalcing@nmu.edu</a></td>
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<tr>
<td>Office Hours:</td>
<td>M,W,R,F 10-10:50, M,T,W,R 3-3:50; or by appointment</td>
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**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 111 passed with a C- or better, MA104 with a B- or better or equivalent.

This course satisfies the Foundations of Natural Science/Mathematics requirement. Students who complete this course should be able to demonstrate a basic understanding of mathematical logic; use mathematics to solve scientific or mathematical problems in college classes; express relationships in the symbolic language of mathematics; and appreciate the role of mathematics in analyzing natural phenomena.

**Materials:**


**Calculators:**

Scientific or graphing calculators will be required in some tests – in some, no calculator of any kind will be allowed. For any work in which a graphing calculator is required, I have a computer simulator of the TI-83 that you can download and use (if you don’t have a graphing calculator already). Another possibility is to have the help-desk download TI-Interactive to your laptop.
Assessment:

Some form of assessment will take place most every week. Forms of assessment will include: collected homework (seldom, if ever), 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 (during office hours or 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.

Disability Services:

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). 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.