**Northern Michigan University**

**Department of Mathematics/Computer Science**

# Syllabus

## MA 151 MATHEMATICS FOR THE ELEMENTARY TEACHER II

**URL for course info: http://Ellerbruch.nmu.edu/classes/Ma151F04/MA151.html**

Seq #: 81432 section 02

10:00 - 10:50 pm M W Th F Room West 3806

Prerequisite: C in MA 150 or equivalent

latest update: 30 August 2004

**Instructor Information:**
Instructor: L. W. Ellerbruch
Office: NSF 1109
Telephone: 227-1597
Office Hours: As posted by office door but will include:

11:00 - 11:50 am M W Th F
2:00 - 2:50 pm M W Th F
Other hours by arrangement.

### Text:

Bennett, Albert B., Jr. and L. Ted Nelson, *Mathematics for Elementary Teachers A Conceptual Approach, fifth edition*, McGraw Hill, Boston: 2001.

MA 151 will cover portions of the chapters starting with 7 and continuing to the end of the text. There will be some assigned readings from material outside the text.

**Calculators and Technology:**
A syllabus and a complete and up-to-date list of assigned exercises will be available on a WWW page on the instructor's WWW server.

The laptop is only to be used for appropriate activities during class.

TI-Interactive is or can be installed on your laptop. It will serve the function of a graphing calculator for homework and in-class exercises. You will be allowed to use TI-Interactive **except** on exams. You will not be allowed to open or use a laptop during hourly objective format exams and the final. You will be encouraged to use the laptop for the performance exam.

Since you cannot use your laptop for the objective exams and the final, a minimum of a scientific calculator is suggested for the course. A Calculator will be useful for homework, in-class exercises, quizzes and exams. It should have the capability of logs, exponents, and it should have memory. You will find it important that the calculator also have factorial, permutations and combinations keys. You are responsible for learning how to use your specific calculator, although we will discuss the most common types. The calculator should work with negative exponents. A graphing calculator such as the Texas Instruments TI-86 is an extremely good calculator to consider if you can afford it and especially if you will be taking additional math classes.

You will need to have the Geometer's Sketchpad installed on your laptop by the Help Desk personel. Demonstration lessons will be provided for the Geometer's Sketchpad on the laptop.

**Assignments:**

In-class exercises and out-of-class exercises will be assigned on a daily basis. It is expected that students will complete all assigned homework exercises.

Reading assignments will be made, and it is very important to complete them.

**Attendance:**

Attendance is required. Exams may be made up only if the absence is excused **prior** to the absence.

**Grading:**

Exams

There will be two or three objective format hourly exams and one performance exam on constructions. There will be a comprehensive objective final which will be mandatory.

The objective format hourly exams will be formats such as multiple choice, True-False, Matching, or short answer and will cover material assigned.

For the performance exam on constructions you will be able to choose the Geometer's Sketchpad or classical compass and straight edge tools for demonstrating your ability and skill with geometric constructions.

The final will be comprehensive and objective format.

There will be NO partial credit on the objective format questions. There may be a correction applied for guessing.

Quizes
Quizes may be given at any time, but will **not** count in the grade calculation. They will be used to allow students to perform a self-check on the material and they will provide practice for the exams.

Points
Points are cumulative. There will be:

| points | category |
|---|---|
| 200 - 300 | hourly objective exams |
| 100 | construction exam |
| 200 | final |

Final Letter Grades

| % Score | Letter Grade |
|---|---|
| 93 - | A |
| 90 - 92.99 | A- |
| 87 - 89.99 | B+ |
| | |

| | |
|---|---|
| 80 - 82.99 | B- |
| 77 - 79.99 | C+ |
| 73 - 76.99 | C |
| 70 - 72.99 | C- |
| 67 - 69.99 | D+ |
| 63 - 66.99 | D |
| 60 - 62.99 | D- |
| | |

**Final**

There will be a final exam and all students will be required to take it. The final time will be at the scheduled time unless there is a change or correction in the university schedule.

The 10am class exam is scheduled from 10:00 to 11:50am Monday 13 Dec 2004, in West 3806.

**NOTES:**

All material in the course is cumulative and once covered in class, or assigned, may be used on any test.

**DISABILITY STATEMENT**

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. Hedgcock (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.

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## Links

L. W. Ellerbruch: LELLERBR@nmu.edu.