

**Northern Michigan University**  
**Department of Mathematics & Computer Science**  
**MAED 512 (50726): Technology-Assisted Mathematics Instruction**  
**MTWR 9:50 – 11:30am West Science 3616**  
**June 16 – July 10, 2008**

**Instructor:** Dr. Carol Bell  
**Office Phone:** (906) 227-1603

**Office:** NSF 1113  
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**Office Hours:**

I will generally be available just before class. If you must see me outside of that time, please contact me via email to make an appointment.

**Course Description:** Hands-on investigations of selected mathematical topics through applications of technology, including computers, graphing calculators and video. Design, delivery and evaluation of technology-based mathematics lessons; structuring learning in the technology-enhanced classroom. The impact of technology on the mathematics curriculum. Includes work with spread-sheets, data bases, drawing programs, symbol manipulators, etc. (2 cr. hrs.)

**Required Materials:** A USB flash drive to save the class projects and a Texas Instruments' TI-83+ or TI-84+ graphing calculator. You must also have access outside of class to a computer with an Internet connection.

**Course Objectives:**

This course is designed to give students an opportunity to explore a variety of technologies used in the mathematics classroom and to develop some practical materials for classroom use.

**Assessment Format:** Specific information on each assessment measure is provided below.

- **Class Participation & Attendance (10%):** It is essential for you to attend every class so that you may share and discuss technology-related teaching ideas with classmates and receive additional information about the requirements of each assignment. Included in your class participation grade is that each of you contributes to any discussions, both in small group and whole class situations. Each student, present or not, is responsible for all directives announced in class. If you are absent on the day an assignment is due, it is your responsibility to turn it in to me before the next class period.
- **Writing Assignments (15%):** You will be required to read articles related to teaching and technology, and then write a summary of the article along with a personal reaction to the article.
- **Technology Assignments (50%):** A variety of assignments will be given throughout the course that address the technologies discussed in class.

- **Final Project (25%):** You must develop a final technology project that will be of use for your own teaching. All projects will be shared with other students in the course. Projects will be presented during the last class period.

**Grading Scale (%):** Your grade is based on the assessment format noted above. Percents and corresponding grades are listed below.

100 – 93.0: A	86.4 – 82.5: B	76.4 – 72.5: C	66.4 – 62.5: D
92.9 – 89.5: A-	82.4 – 79.5: B-	72.4 – 69.5: C-	62.4 – 59.5: D-
89.4 – 86.5: B+	79.4 – 76.5: C+	69.4 – 66.5: D+	59.4 – 0: F

### **Appropriate Classroom Laptop Use:**

Although having a laptop in class opens up new learning possibilities for students, sometimes students utilize it in ways that are inappropriate. Refrain from instant messaging, e-mailing, surfing the Internet, playing games, writing papers, doing homework, etc. during class time. Acceptable uses include taking notes and working on assigned in-class activities, projects, and discussions that may be enhanced by laptop use. It is easy for your laptop to become a distraction to you and to those around you. Inappropriate uses will be noted (silently) and will result in loss of a grade in participation points. If you use your laptop during class, you will be expected to email me the notes you typed in class at the end of the class period (I will not ask for them but will keep records of those who do/do not).

### **NMU's Non-Discrimination Statement:**

Northern Michigan University does not unlawfully discriminate on the basis of race, color, religion, sex, national origin, age, height, weight, marital status, familial status, handicap/disability, sexual orientation, or veteran status in employment or the provision of services, and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities an equal opportunity to participate in all programs and activities.

Anyone having civil rights inquiries may contact the Equal Opportunity Office, 502 Cohodas Hall, telephone number 906-227-2420.

### **ADA Statement:**

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office by: coming into the office at 2001 C. B. Hedgcock; calling 227-1700; or e-mailing [disserv@nmu.edu](mailto:disserv@nmu.edu). 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.