

**Northern Michigan University**  
**Department of Mathematics & Computer Science**  
**MAED 591 (50683): Research Foundations of Mathematics Education**  
**Web based (2 credit hours)**  
**June 22 – July 31, 2009**

**Instructor:** Dr. Carol Bell  
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**Course Description:**

Introduction to research methods in mathematics education. Critique of selected classical and contemporary studies in mathematics education. Emphasis is on translating research into classroom practice. Also provides a forum for students to present and discuss proposals for master's projects.

**Prerequisite:**

Prior to taking this course, students should have completed at least half the requirements of the Master of Science in Mathematics Education degree program.

**Text and Other Course Requirements:**

Lessons Learned from Research, edited by Sowder and Schappelle, National Council of Teachers of Mathematics (2002). ISBN 0-87353-526-X

[If you are a member of NCTM, you can purchase this text at a discounted membership rate directly from the NCTM catalog at

<http://my.nctm.org/eBusiness/ProductCatalog/product.aspx?ID=12300.>]

This course uses WebCT (Web Course Tools) so you must have Internet access in order to complete assignments and receive course information. To get to the WebCT log-on screen, go to <http://webct.nmu.edu/webct/entryPageIns.dowebct>. Your user id and password should be the same as your NMU campus email user id and password.

**Course Goals:**

- To become more knowledgeable about and more critical readers of mathematics education research literature
- To use the implications of research findings to change teaching practices in mathematics
- To develop a proposal for your master's thesis or project

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

- **Class Participation (25%):** You will be required to participate in online discussions posted via WebCT on various topics related to research in mathematics education. Included in your participation grade is that each of you critiques other students' work that is posted on the discussion board in WebCT.

- **Assignments (25%):** Written assignments on the readings from the text or journal articles will be given during the first three-four weeks of the course.
- **Master's Proposal (50%):** You will need to identify a topic that will become the focus of your master's thesis or project. You will present your ideas to the class using the discussion board in WebCT and lead a discussion aimed at formulating and refining your idea. You are required to submit a proposal consisting of the following sections (at a minimum): (1) introduction (statement and significance of the proposed thesis or project), (2) review of the literature, (3) methodology, (4) proposed plan of action (timeline for completion of the thesis or project), and (5) bibliography.

**Grading Scale (%):** Your course grade will be based on your total number of points as a percentage of the total possible points for the semester. Percents and corresponding grades are listed below.

|                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| 100 – 95.0: A   | 86.4 – 82.5: B  | 76.4 – 72.5: C  | 66.4 – 62.5: D  |
| 94.9 – 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     |

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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.