C&I 542 Supervision and Teaching Mathematics
13 June – 29 July 2011
Online

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ED 104
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Office Hours: by appointment

Course Description: This course focuses on effective implementation of teaching/learning strategies to best supervise, assess, and facilitate school mathematics instruction. Students will learn about the history of the national standards efforts in mathematics and the National Board for Professional Teaching Standards (NBPTS), as well as the more recent controversies in methodological implementations of the *Standards*. Students will use appropriate technology, search the Internet, use hands-on–minds-on learning strategies, evaluate student materials, and develop a philosophy for approaching school mathematics learning and teaching. Inservice teachers from both elementary and secondary schools work together in developing an integrated, comprehensive plan for enhancing mathematical power of all students.

Required Texts: Boaler, J., & Humphreys, C. (2005). *Connecting mathematical ideas: Middle school video cases to support teaching and learning.* Portsmouth, NH: Heinemann.

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author. Partially available: http://standards.nctm.org/document/index.htm

National Council of Teachers of Mathematics. (2006). *Curriculum focal points for prekindergarten through grade 8 mathematics*. Reston, VA: Author. Free download from: http://www.nctm.org/standards/focalpoints.aspx

Course Objectives: By the end of the semester, students will be able to:

1. describe the components of an effective mathematics program;
2. discuss the implementation of an effective mathematics program;
3. determine criteria for evaluating effective teaching of mathematics;
4. determine appropriate assessment and evaluation techniques for assessing student progress and evaluating mathematics curriculum programs; and
5. establish criteria for facilitating growth in the effective teaching of school mathematics.

Course Requirements:
Weekly student led online discussions; math-edology; e-example sharing; letter to the editor on mathematics issue; inquiry lesson; essay demonstrating a course objective; self-assessment; and final exam.