MA 350: Methods and Materials for Teaching Senior High School Mathematics
Fall Semester 2014       T - Th 4:00 - 5:40       WS 3616

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Office Hours: M, W & F 9:00 - 10:00; M & W 12:00 - 1:00; or by appointment

Prerequisites: Admission to the methods phase of teacher education. Concurrent (or prior) enrollment in ED 349, MA 312, and MA 331, or consent of instructor. You are to take this class now only if you will do student teaching in Winter or Fall 2014.

Required Materials:


2. Johnson, David R. *Every Minute Counts: Making your Math Class Work*

3. Johnson, David R. *Motivation Counts: Teaching Techniques That Work*

Course Overview:

MA 350 helps to prepare you for student teaching and for your future career as a mathematics teacher. It is designed to acquaint you with the contemporary mathematics curriculum and instructional resources, and to help you develop methods and strategies for teaching high-school mathematics. During the semester you will have opportunities to plan and present lessons to your peers, and the required field experiences will provide opportunities for you to interact with high-school students and teachers. These experiences, together with class activities, discussions, and assignments, will help you to formulate your own teaching philosophy and instructional style.

Course Requirement:

- Attend all classes and participate actively in class discussions and activities. (Attendance is taken daily; absence, tardiness, or failure to participate actively have a negative impact on your grade.)
- Complete assignments on time. All written assignments are to be done with a word processor and submitted in hard copy.
- Field experiences in schools: at least 20 hours during the course of the semester. Written reports of your field experiences will also be required.
- Develop, present and evaluate mini-lessons as assigned, both in this class and in your field placement.
- Solve assigned problems and discuss mathematical concepts and processes from a pedagogical perspective—with emphasis on reasoning and sense making.
**Course Objectives:** During MA 350, students are expected to:

- Develop a philosophy of mathematics teaching.
- Discuss recommendations, goals, and issues in school mathematics.
- Develop an understanding of the curriculum and expected outcomes of school mathematics.
- Develop a variety of teaching strategies employing appropriate instructional materials and technologies.
- Demonstrate ability to plan, present, and evaluate mathematics lessons.
- Demonstrate knowledge of the content of secondary mathematics curricula.

**Grading:**

- Points will be assigned for class participation, projects, presentations, assignments, and tests. Your grade will be determined by the percentage of the total possible points that you earn, as follows:
  - A = 93–100%; A- = 90–92%; B+ = 87–89%; B = 83–86%; B- = 80–82%; etc.
- As teachers, you will be expected to communicate with students, parents, administrators, and others in correct and proper English. Therefore, such things as grammar, spelling, punctuation, and syntax will be considered in the evaluation of your written work.
- Late assignments will have points deducted unless prior arrangements have been made for good and valid reasons.
- Class participation means attending class every day, arriving on time, always being prepared for class, actively contributing to class discussions, asking as well as answering questions, and engaging in discourse with other members of the class as well as with the professor.

**Final Exam and Other Tests:**

- Tests will be announced in class in a timely fashion.
- Quizzes can happen at any time and will be unannounced.
- The final exam for this class is scheduled for Monday, December 9, 10:00 – 11:50 a.m.

**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 (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.