MATH 3624: Early Field Experience for Math Teachers
Syllabus
Spring Semester, 2014

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Office Hours
Mondays and Wednesdays from 3:00pm-4:00pm, Tuesdays and Thursdays, from 2:00 pm until 3:00 pm or by appointment. Also, feel free to knock on my door or to phone at any time; if I am too busy to talk, we can arrange for another time.

Text and Professional Membership
- *Principles and Standards for School Mathematics* by the National Council of Teachers of Mathematics (a.k.a. the NCTM Standards)
- Student membership in NCTM is required. You will receive a discount on *NCTM Standards*, as well as a subscription to one of two teaching journals: *Mathematics Teacher* or *Teaching Mathematics in the Middle School*.

For more information, see [http://www.nctm.org/](http://www.nctm.org/)

You will also need a notebook for recording journal entries following each field visit.

Scholar
Assignments, class notes, and other important information will be regularly posted to Scholar. All preservice teachers are expected to check Scholar at least once per week.

### Important Dates

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<tr>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
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<tbody>
<tr>
<td>3: First school visit</td>
<td>3: Technology Project Due</td>
<td>7: Teaching project due</td>
<td>5: Last class, Final (Learning) project due</td>
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<td>17: Equity project due</td>
<td>9-13: Virginia Tech spring break</td>
<td>21: Assessment project due</td>
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<td>24: Curriculum project due</td>
<td>29: Last school visit</td>
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Purpose of the Course

This course provides professional experiences related to teaching secondary school mathematics. Within those experiences, you will study the six principles for school mathematics, as described by NCTM (2000): Equity, Curriculum, Teaching, Learning, Assessment, and Technology. By the end of the course, you should understand these various aspects of the teaching profession, and you will have developed research-based approaches to continually improve your own teaching practice.

Abridged Description of Course Assignments

Detailed descriptions for all assignments will be discussed in class. Documents describing the assignments will be available through Scholar. Brief descriptions of the assignments follow.

- **Professionalism** (20 points): You will spend 30 hours in a secondary school this semester, assisting the classroom teacher and students. You will focus primarily on individual student learning, rather than whole-class teaching. We will discuss these experiences each week in our own classroom meetings.
  - Your mentor and supervisor will evaluate your professionalism in the schools, including dress, attitude, promptness, reliability, and initiative in working with teachers and students in the schools. Your supervisor will visit you in your school twice for check-ups, to help you develop a good relationship with your teacher and the classes.
  - For each school visit, you are expected to keep a log of your activities and a reflective journal entry on what you learned. The logs will be collected at the end of the semester, and the journals will be used to support research projects.
  - As part of your professionalism score, your course instructor will evaluate your participation in class and in online discussion forums.

- **Principle Research Projects** (80 points): You will complete six research projects, one for each of the six principles for school mathematics (NCTM, 2000). These projects should be focused on particular research questions and should draw upon existing literature (e.g., articles from The Mathematics Teacher), as well as data you collect from your experiences in the schools. The Learning Principle will be the focus of the final project.
  - **Brief Report** (30 points; 10 points each): For three of the other five principles, you will write a report (about 3 pages).
  - **Brief Presentation** (20 points; 10 points each): For two of these five principles, you will give a presentation in class (10-12 minutes).
  - **Final Report** (30 points): Your final paper will directly address the Learning Principle, while incorporating knowledge gained from your research and your peers’ presentations on the other five principles. You will turn in the 5-10 page final report in lieu of an exam.
Grading Policies

- **Policy on Late Assignments**: I expect that assignments will be turned in by the announced due dates. Assignments may be submitted in class, or by email before class.

- **Attendance**: Attendance is required for all class sessions. Attendance is important for the following reasons. First, as a future teacher it is important to develop the sense of responsibility needed to meet your class every day. Second, most classroom activities should yield experiences and learning that cannot be substituted with out-of-class assignments.

- **Attendance and Course Grades**: Participation in class is an important factor for me in determining final grades. Active participation in classroom and online discussions will form part of your professionalism grade. Of course, you can’t actively participate if you aren’t in class. Please try to email me ahead of time if you need to miss a class.

- **Academic Misconduct**: University policies concerning academic misconduct apply to this class and can be found at [http://www.honorsystem.vt.edu/](http://www.honorsystem.vt.edu/)

**Final Grades**

Points from course assignments add to 100. Your total determines your grade. I will round your grade to the nearest point, and will make decisions on borderline grades based on classroom participation. Letter grades will be assigned in the traditional 10-point increments, with +’s for final grades ending in 7, 8, or 9, and -’s for final grades ending in 0, 1, or 2.