# Math 2011Q: Fundamentals of Algebra and Geometry II

T/Th 2:00-3:15 PM, Monteith 319

**Melissa Haire**
**Office:** MONT105
**Email:** melissa.haire@uconn.edu
**Office Hours:** Tuesday 3:20-4:50, Thursday 12:15-1:45, and by appointment

## Course Information

**Prereqs:** Math 2010, PSYC 1100 and 3 credits of Math other than Math 1010.

**Textbook:** *Reconceptualizing Mathematics*, by Sowder, Sowder, and Nickerson (2nd ed.) Chapters 16-26 will be the basis of what is covered this semester.

**Overview:** Math 2011 is a continuation of last semester's course, and the primary goal is still to improve and deepen your skills and understanding of school mathematics. The main difference is that this semester the class will exclusively focus on geometry for elementary school teachers. In order for you as a teacher to help children develop not only their math skills but also their ability to communicate using math, you must have a strong knowledge of the fundamentals of mathematics. Ideally, by the end of the semester, you will have both a solid understanding of the math concepts that are covered as well as ideas as to why the concepts and procedures work in the way they do. Beyond understanding the how and why, another goal of the class is to improve your mathematical communication skills, both in speaking and in writing. Assignments will consist of doing math problems and will also include writing components to help make the transition from being a student to being a teacher. Lastly, this course will have you well prepared for the methods class in the School of Education.

**Format:** In this class, lecturing will occur less and group work and student participation will occur more. There will be a lot of worksheets and group activities during class time in which you will work together to discover knowledge and receive feedback rather than just listening to a lecture for the duration of the class. It may happen that there is not enough time to finish a worksheet during class, in which case it may be assigned to be completed outside of class.

**Attendance:** With the pace of this class, attending every class is important in keeping up with the material. Of course, things happen from time to time and classes may have to be missed, but in that case, please be proactive and contact me while also getting notes from a friend or attending office hours to catch up on what you missed in class.

**Assignments:** There will be assorted assignments to be graded in this class and there will be a mix of in-class and out-of-class assignments. Unless specified otherwise, working together is always encouraged. Assignments will always be due at the beginning of a class period. If you miss an assignment deadline, but get it to me by the next class period, you can receive a maximum of half credit and after that, no credit can be given without a valid excuse.

**Quizzes:** There will be regular short quizzes which will be announced at least one class ahead of time and the lowest quiz grade will be dropped at the end of the semester.

**Tests:** There will be two in-class tests and a cumulative final exam. The two midterms are not scheduled yet, but expect one around weeks 5-6 and the other around weeks 10-12.
Final Exam: TBA

**Grading:**

| | |
|---|---|
| Class Assignments | 20% |
| Quizzes | 15% |
| Test #1 | 20% |
| Test #2 | 20% |
| Final Exam | 25% |