Teaching College Mathematics   Instructor: Russell Brown
M 4-4:50   Office: POT741
POT 745   Phone: 859 257 3951
Fall 2013   rbrown@uky.edu
                                                 M 10-10:50 in Mathskeller
                                                 WF 10-10:50 and by ap-
                                                 pointment

Text: The text for this course will be *Teaching first, a guide for new mathematicians,* the department provides each new ta with a copy of this book.

Goal: The goal of this course is to introduce students to some of the tools needed for teaching mathematics, to learn the mechanics of working in a classroom and to learn about and to begin learning about the educational tradition in the community of mathematicians.

Required work: Students will be expected to attend all classes and participate in a small number of seminars or other activities. Please contact the instructor if you must miss class.

Students will be given reading assignments, written assignments, including preparing a *curriculum vitae* and review materials prepared by colleagues. Students will earn a C by satisfactorily completing all but two assignments. Students will earn a B by satisfactorily completing all but one assignment with at least 20% marked as excellent work. Students will earn an A by completing all assignments with at least 1/3 marked as excellent work.

Dropbox: Each student should create a Dropbox account at `www.dropbox.com`. I will share two folders with you. One is a private folder where you will place your work and I will return the graded copy. The other is a public folder that will be shared with the entire class and I will use to distribute reading assignments and other class materials.

Outline: Below is an approximate outline for the semester. Expect to see a few changes.

1. (Week 1) No class due to Labor Day. Set up Dropbox.

   Peer classroom visit. Visit a class taught by another teaching assistant in the department. Write a short summary of the class and describe two or three aspects of the class that went particularly well. Include the name of the teaching assistant, and the name, date and time of the course. These summaries will be due in Dropbox by 11 pm on Tuesday, 10 September, the day after our first meeting for MA 601.

2. (9 September) Collaborative learning. Reading assignment: Studying students.

3. (16 September) Grading exams and quizzes. Grading exercise to be completed before class.

4. Policies and procedures at the University of Kentucky, academic dishonesty. Reading: Procedure for handling academic dishonesty.

5. Introduction to WeBWorK, answering feedback. Reading: Weibel and Hirsch.

6. Classroom management. Discussion in a mathematics classroom.

7. Mid-term evaluations. Prepare written summary of responses.

8. Using LaTeX to write mathematics.

9. Preparing a webpage.

10. Writing a quiz, learning objectives. Assignment: prepare a quiz, comment on a colleague's quiz.

11. The flipped classroom.

12. The Common Core. Mathematical practices.

13. Course objectives. Preparing syllabi.

14. Writing a *curriculum vitae*. Applying for jobs–you don't want to be here forever, do you? Assignment: Prepare your *curriculum vitae*.

August 28, 2013