

# MATH 602: Equity Issues in Mathematics Education (3 CR)

SUMMER 2016

Section 01—MTWR 1-3:40pm, Wickersham Hall 104

## Professor: Dr. Moss

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Office: Wickersham 214-C

Phone: 871-5903 (email will be received and answered *much* more quickly than voicemail)

Office Hours: by appointment

*Check your marauder email account regularly for important class announcements.*

## Required Materials

- A small three-ring folder to serve as your reading journal
- A small three-ring folder or binder to serve as your problem-solving portfolio

## Course Description

This course is designed for graduate level students with an interest in equity issues in mathematics education. In this course, we examine issues of equity in mathematics education from multiple perspectives. It is a reading-intensive course that spans such topics as the achievement gap, tracking, culturally-relevant pedagogy, multiculturalism, the nature of mathematics, and mathematics for democracy and social justice. Course assignments will primarily involve presentations, discussions, writing, and some problem solving.

## Attendance and Participation

Participation includes attendance. Students should arrive on time to each class session, and regular attendance is expected (see University Policy on attendance). Students are expected to contact the instructor ***prior*** to class if an absence is unavoidable. Make-up work will be assigned to compensate for missing class time.

Students are expected to actively participate in class discussions and activities, demonstrating that course readings and assignments have been completed thoroughly and thoughtfully. Thoughtful completion of readings and assignments will provide background for scholarly debates and a critical examination of educational theories and research findings.

## Evaluation Components and Descriptions

1. (20%) Reading Journal: This journal is your record of every article read for class (with the exception of short selections from the Responding to Diversity books). Entries should be no more than 1 page typed and single-spaced. Each entry should include a) the full citation of the article in an appropriate format, b) a brief summary of the article (*not* pulled from the article's abstract), c) a comparison/contrast of the article with one or more articles read previously, and d) substantive questions and comments you would use to start a class discussion.
2. (10%) Lead 2 Article Discussions: Each student will be responsible for formally leading the in-class discussion of 2 articles from daily readings. This will be based on random selection, so all students should be prepared on any given day to take the lead. (If you have thoughtfully completed your reading journal, this will not be a problem.)
3. (10%) Presentation of 2 Articles: Each student should select and read 2 recent (within the last 10 years) articles or book chapters exploring an equity issue in mathematics education. One of these should be a research or theoretical paper from a top-tier research journal (such as JRME, JMTE, etc.) or book. The other should be a paper from a practitioner-oriented journal (such as Mathematics Teacher, Mathematics Teaching in the Middle School, Teaching Children Mathematics, etc.). You should prepare a handout for the class including full reference information for your articles, a brief description (*not* pulled from the article's abstract), and substantive questions raised or comments.
4. (10%) Select and Teach a Mathematics Lesson for Social Justice: Select an activity or lesson from the book *Rethinking Mathematics*. Modify the lesson as appropriate for use in a middle or high school classroom, seek

out additional sources as appropriate, write a full lesson plan, and teach it to your classmates. Afterwards, complete the “reflection” portion of the lesson plan and submit it to your professor the day after teaching.

5. (10%) Design a Mathematics Lesson for Social Justice: Working individually or in pairs, design a mathematics lesson for social justice appropriate for use in a middle or high school classroom. Prepare a ~10 minute presentation for the class and provide copies of your lesson plans and handouts for each classmate.
6. (10%) Problem-solving Portfolio: This portfolio is your record of mathematics lessons for social justice that you have completed and/or analyzed; there will be a short reflection component for each activity or lesson. Specific requirements will be given for each activity as it is assigned.
7. (20%) Two Reaction Papers: Requirements will be given for each paper as it is assigned.
8. (10%) Daily Assignments, Attendance, and Participation

Letter grades will be assigned according to a ten point scale. The minimum percentage needed (i.e., no rounding) to attain each letter grade is as follows:

93%	A	87%	B+	77%	C+	67%	D+
90%	A-	83%	B	73%	C	63%	D
		80%	B-	70%	C-	60%	D-

### **Academic Honesty**

The policies of Millersville University regarding academic honesty can be found at

<http://muweb.millersville.edu/~govern/sect3/acaddis.html>. **Violating the policy will result in a score of 0 for the assignment and be reported to the Associate Provost for Academic Administration.** As always, please conduct yourself with integrity and do your own work.

### **Special Accommodations**

It is Millersville University policy to provide reasonable accommodations to students with disabilities. Please contact Learning Services to discuss your needs: 348 Lyle Hall, 717-872-3178.

### **I am a Safe Zone Mentor**

The Safe Zone program trains University employees to provide support and resources for MU lesbian, gay, bisexual, transgender/transsexual, queer/questioning, intersex, allies/androgynous/asexual (LGBTQIA) students and employees. This program has been developed to provide easily recognizable staff and faculty who will be available to students or colleagues for support, mentoring and information regarding helpful resources related to LGBTQIA issues.

