Professor: Teresa Dunleavy, Ph.D.
Course Meetings: Thursdays, 5.30-8.30pm, CRMSE Rm. 218
Office Hours: Before and after class, and by appointment
Email: teresa.dunleavy@mail.sdsu.edu
Cell: 651.248.3694
Course Website: https://blackboard.sdsu.edu

Prerequisites: MthEd 603 and consent of instructor or graduate advisor.

Required Course Materials:
• Other course readings will be posted on our Blackboard website.

Computer and Internet Access:
I will send out notices via email, and I will post assignments and other information on Blackboard. We also may access internet and/or computers and electronic readers during class.

Course Description & Goals: The ultimate goal is for this course to positively affect the ways that you plan for, implement, and reflect upon teaching. The content goals for the course are designed to help you explore learning and teaching mathematics from an equitable teaching and learning perspective. As such, we will deeply examine current research in equitable teaching and learning practices. We will read and discuss research-based articles, case studies of classrooms, and narratives from teachers reflecting on their own practice. By engaging deeply with the course content, you will have the opportunity to be transformed to think differently about what equitable teaching and learning looks like.

Another important objective of this class is to provide opportunities for you to develop as writers and communicators of ideas associated with this course content. Deep processing of the readings is facilitated by opportunities to characterize and illustrate key constructs through class discussion and written assignments.

Learning Outcomes:
Upon successful completion of this course, students will be able to:
• Examine and grow your beliefs about what it means to be mathematically competent.
• Work towards creating an environment that is emotionally and academically safe for all students to share and display their mathematical competence.
• Orchestrate classroom discourse in ways that promote investigation and growth of mathematical ideas.
• Develop and articulate personal teaching philosophy that is responsive to course readings, discussion, classroom observation, and personal experience.
• Understand classroom practices that respects individuals and student diversity.

Course Expectations:

What I expect from you:
• Attend every class and arrive on time and ready for a prompt start.
• Complete all readings and assignments before class.
• Respect and engage with one another’s ideas.
• Arrive at class ready to participate, to contribute to class, and to expand your knowledge of what it means to teach and learn mathematics.
• Work hard and take initiative in your learning as well as other’s learning. You will work actively with your peers, sharing, taking and giving, listening and explaining, questioning and answering. You will be genuinely curious about others’ ideas, and you will take responsibility for being prepared for participation in class discussions and group work, and for assisting your peers in gaining an appreciation and understanding of mathematics. You should expect the same from your classmates.
• All students are expected to participate daily and to listen to the comments of their classmates. I encourage people to both speak AND listen in class. If you are very talkative, challenge yourself to listen to your peers and ask good questions of them. If you are shy, challenge yourself to contribute each class, even if it is something short. What does participation look/sound like?
  o It is clear you actively (not passively) engaged in the readings.
  o Questions are thoughtful and move the class towards a better understanding of materials.
  o Comments are on topic, respectful, intriguing. Disagreeing is good! Play devil’s advocate, challenge “common sense” you are prepared, with all needed materials you engage one another.
  o You build in evidence from readings, research, theory as well as your own life.
  o In small group work, you are on-task and contributing to the activities’ goals.

The quality of this course will depend on seriousness and thoughtfulness with which we address issues raised by the readings and our experiences. I hope for us to view this course as a collaborative effort to learn, question, and make sense of some challenging and exciting ideas.

What you can expect from me:
• I want you to succeed!
• I will provide the learning environment and opportunities for you to satisfy the class goals.
• I will provide the support necessary for you to succeed in this course and learn valuable life lessons in the process, both in and out of class.
• I will be available during office hours and by appointment, as well as via email.
Grading Policy:
As your instructor, one of my responsibilities is to assess your learning; this takes many forms from providing written feedback on assignments, to assigning grades at the end of the semester, to engaging in informal conversations about a topic, to answering questions via email, to asking a specific question to someone based on their current thinking, to simply listening to your ideas. While many students equate assessment and grades, assessment will take many forms in this course, only one of which involves formally assigned grades. I encourage you to focus more broadly on assessment in terms of feedback that will shape your future learning; grades also play a role as an indicator of progress and learning.

I hope that we all recognize that grades are designed to reflect what one knows and what one has learned, but they do so inadequately. By their very nature, all grading systems are subjective, even those that are based solely on ‘objective’ tests. In an attempt to better measure your knowledge, your grade in my class will be based on both my assessment and your own personal assessment of whether you have met the objectives and learning outcomes for this course. In other words, for each major assignment you will receive two forms of assessment, my assessment and your own personal self-assessment. As your teacher, I bring knowledge, experience, and expertise in the subject to help identify areas that you understand well as well as areas that need clarification and extension. As a learner, you will bring your own unique perspective of what you do and do not understand. These perspectives may not always match, but, together, our assessments will provide a more complete picture of your current understanding of mathematical discourse.

Additionally, we learn not only from the readings and from the instructor, but also from our fellow students. For this reason, attendance and participation are essential in this class, and classwork will be considered in your final grade. Most of you are currently serving as full-time teachers while enrolled in two graduate courses, so I know how busy you will be. However, I have found that students with busy schedules who fall behind find catching up to be very difficult. Furthermore, if you come to class without having completed the weekly readings, you will not be able to contribute thoughtfully to our class discussions. For these reasons, I encourage you to keep on schedule. I will note assignments that are turned in late, and if you consistently turn in late work, your final grade may be lowered. I understand that life presents circumstances for which we cannot plan, so please come speak to me if you find that you are having difficulty keeping up with the work.

Final grades may be lowered for displaying unprofessional attitudes (this includes inappropriate participation or an absence of participation). Arriving late, leaving early, or skipping classes will be interpreted as lack of participation. If circumstances prevent you from attending class, please contact me in advance. Absences may be excused; they will be evaluated on a case-by-case basis. Make-up assignments will be required. If absent, it is your responsibility to speak to me early, in order to determine what you need to do to make up the absence. Unexcused absences may result in lowering the final grade by 5 points per absence. If you have extraordinary circumstances in your life that will have an impact on your attendance, let me know as soon as possible.
All of your written work will be held to high standards and should conform to proper rules of grammar, usage, punctuation, and spelling. All written assignments must be typed, double-spaced, use 12pt font, 1” margins, and conform to APA guideline for citations and references.

As a matter of professionalism and respect, please do not check your phone, email, or surf the net during class time (breaks are fine). Unless you are the parent of small children, or caring for an ill family member, cell phones should not ring or buzz during class either.

Policy on Cheating and Plagiarism:
Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one’s grade or obtaining course credit; such acts also include assisting another student to do so. This includes any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one’s own work, which includes using phrases from texts & articles as your own, without giving credit to the author(s). Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the University. For more information on the University’s policy regarding cheating and plagiarism, refer to the Schedule of Courses (“Legal Notices on Cheating and Plagiarism”) or the University Catalog (“Policies and Regulations”). Academic dishonesty will not be tolerated, will result in a failing grade for this course, and will be reported to the University.

Students who have Disabilities:
The University is committed to providing reasonable academic accommodation to students with disabilities. The Student Disability Services Office provides university academic support services and specialized assistance to students with disabilities. Individuals with physical, perceptual, or learning disabilities as addressed by the Americans with Disabilities Act should contact Student Disability Services for information regarding accommodations. Please notify me so that reasonable efforts can be made to accommodate you. If you would like to seek accommodations, contact the Student Disability Services Office & then contact me (http://www.sa.sdsu.edu/dss/dss_home.html) at (619) 594-6473 (SS-1661).

Religious Observances:
University Policy on Absence for Religious Observances includes the following statements: “By the end of the second week of classes, students should notify the instructors of affected courses of planned absences for religious observances. Instructors shall reasonably accommodate students who notify them in advance of planned absences for religious observances.” Notify me in a timely manner and we’ll find a reasonable accommodation.
Course Grade Breakdown:
Classwork & Reading Reflections, 25%
Fieldwork Assignments, 30%
Lesson Studies, 20%
Final Paper, 25%

Classwork & Reading Reflections, 25%
Reading Reflections
Each week, you will read our weekly readings and post your reading reflections to our discussion board 24 hours before class.

Reading Leader
Each week, one or more of you will take the role of reading leader. In your reading leader role, you will be the first to respond to the week’s readings and you will thereafter respond to your classmates’ posts and keep the discussion going. As reading leader, you will also read the additional reading, write a summary of the week’s posts to submit in class, and lead a 30-minute in-class discussion on your week’s topic. (Note: Your job as reading leader is to go beyond summarizing- we will discuss this more in class; also see assignment description.)

Fieldwork Assignments, 50%
We will get the most out of this course by relating what we learn to what is currently happening in the field of mathematics education. For this reason, we will have a number of opportunities to relate our work with equitable teaching and learning practices to what is happening in the field. You will either partner this course with a mathematics class you teach this spring or with another teacher’s classroom. If you are not currently teaching, we will work together to find you a partner teacher’s classroom. The fieldwork portion of your grade will involve visits to your partner teacher’s classroom in order to focus on:
1) Student Work: examining student work around a given mathematical task for what students know and understand,
2) Status: Investigating student status
3) Competence: Investigating students’ mathematical competence,
4) Interviews: two interviews with students around their mathematical thinking

Final Paper, 25%
Your final paper will be a proposal that will involve taking what you have learned and applying it to how you plan to implement these kinds of practices in your future work in mathematics education. This paper will go beyond summarizing the readings from the course by applying the ideas to classrooms. More details will be given as the course progresses.

Late or Missing Assignments: This course is intense, and it is often overwhelming to try and catch up once you fall behind. Work must be turned in on the due date to earn full credit. Each day an assignment is late, your grade on that assignment will drop one letter grade. Occasionally, you may have circumstances that create conflicts between the timely and thoughtful completion of your university assignments and engagement in the rest of your life. If you find yourself in this case, please contact me to discuss your particular situation. Also keep in mind that all assignments must be submitted in order to receive credit for this course.
## Course Outline

The readings listed below are grouped by week. Unless indicated otherwise, complete the readings in the order they are listed prior to the class meeting date where they are listed. Prepare for each class by posting your weekly reading response to our Blackboard discussion board using the rubric & guidelines outlined in class.

Note: The schedule for weeks A-F will take place between 30 January and 6 March 2014. You will be notified of the week assigned to each of these classes/topics as soon as possible.

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Ch. 2: Boaler, Jo. (2008). “What’s Going Wrong in Classrooms?” in *What’s Math Got to Do with It?*
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| A. | The State of Mathematics  
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MthEd 604: Research on Mathematics Teaching and Teachers:
A Closer Look at Equitable Teaching and Learning Practices
Spring 2014

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<td>Finals: 12 May</td>
<td>Final Paper</td>
<td>Final Paper due at 11.59pm</td>
<td>Post Final Course Paper online to Blackboard.</td>
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Additional Resources:
Common Core Standards in Mathematics: [http://www.corestandards.org](http://www.corestandards.org)


Consider using the NCTM 120-Day Free Trial: [http://standardstrial.nctm.org/triallogin.asp](http://standardstrial.nctm.org/triallogin.asp)


Reinhart, S. Never Say Anything a Kid Can Say.


Stein, Engle, Hughes, Smith. Professional Development Case Studies.


**Syllabus is Subject to Change**

*Please note that due to the dynamic nature of best teaching practices, this syllabus and schedule are a constant work in progress. We will most likely need to change and alter things here, and when we do so, I will provide you with proper notification.*