EDUCATION 263D: CURRICULUM & INSTRUCTION ELECTIVE IN MATHEMATICS
TUESDAYS, 3:10 PM – 5:50 PM
ZOOM MEETINGS FOUND IN CANVAS

INSTRUCTOR: BENJAMIN S. WOODFORD
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office: zoom ID 241-541-7710
office hours by text appointment

COURSE OVERVIEW:

This is a condensed overview of mathematics teaching and learning designed to follow a three-course sequence in methods of curriculum and instruction intended for non-mathematics focused secondary teachers. The course aims to provide an opportunity for sustained learning and professional growth. The goals of the course are to help you:

- examine your own knowledge, beliefs, and assumptions about mathematics, teaching, and students,
- increase your knowledge of mathematics and mathematics pedagogy,
- increase your theoretical knowledge and practical experience in planning, teaching, and assessing mathematics,
- address the mathematical needs of a diverse range of students,
- recognize the complexities of diverse, multiple-ability classrooms while broadening your repertoire of teaching techniques, and
- learn from your experiences in schools through informed reflection.

Throughout the course, we will consider the eight Common Core State Standards for Mathematical Practice and the Common Core State Standards for Mathematics content. We will analyze teaching practices in many ways, considering the role played by mathematics, the teacher, and the students. Different examples of practice will be analyzed with video and through personal reflection. We will also engage in mathematical tasks that will place you as learners of mathematics and pedagogy. We will consider the importance of close and respectful listening to students’ mathematical thinking and the value in asking open questions to probe and deepen understanding. There will be a joint focus throughout the course on connecting research and practice.

COURSE REQUIREMENTS

You are expected to come to class having completed the reading and assignments due for that day and prepared to participate in class discussions and activities. Participation with all sessions is mandatory. Please give ample notice if you will be late, or plan to miss a class. You can request an extension on a due date, requests must be done proactively in a timely manner.

Assignments: Please turn in all assignments to Canvas by the due date. All papers should be done with 1-inch margins, 12 pt. Times New Roman font, double-spaced, with a single-spaced heading that includes your name, name of course, date, and assignment title. File names should include your last name and the assignment title.
☐ Cross-Content Observations due Tuesday, May 5th at 1pm.
☐ Task-Based Lesson Plan: due Tuesday, June 2nd at 1 pm.

Submitting Assignments:
All assignments should be digitally submitted to Canvas unless otherwise specified by the instructor. All feedback will be provided digitally within your submitted documents, and either re-posted to Canvas or emailed to you. Please submit all files as Google Docs, unless otherwise specified.

Please save all files using the following naming convention:
Lastname_Assignment. For example: Woodford_CrossContent

Assessments and Grading:
Your grade will be based primarily on the completion of the assignments mentioned in class. Attendance and active contributions to all zoom class activities will also be considered in your final grade. As with all your work in C&I this year, you may revise and resubmit any written assignment for a higher grade.

We expect that you will turn in all assignments by the time/due date posted in Canvas. Please contact me well in advance if you have concerns about completing any assignment on time. Extensions may be granted by your instructor, if requested. Late work that is submitted without an extension may be subject to a grade penalty and delayed entry into the grade book.

Grading is based on a simple 8-9-10 scale. If you make a reasonable attempt to satisfy the assignment thoughtfully you earn a 9, which will total to an A in the Class. Sub-par work that is satisfactorily completed earns an 8, only work that stretches above and beyond the assignment spec will earn a 10 (consider this not as a goal, but as a byproduct of taking deep dives on an idea that speaks to you). If you do not complete an assignment you will earn a zero and need to speak with me about making it up.

Absences:
Absences are for major illness or family emergencies only. In such instances, students are responsible for contacting the instructor before class, and for completing any work missed due to absence. Missing more than two class sessions may result in a grade penalty.

UNIVERSITY POLICIES

Students Needing Academic Accommodations
Students with an academic accommodation based on the impact of any medical condition must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: (650) 723-1066, URL: http://studentaffairs.stanford.edu/oae). If you have an undocumented need or
something that is not provided by the OAE, please speak with your instructor to reach acceptable terms that will allow you to participate in the course fully, without restriction.

All Stanford students are expected to read, understand, and follow the Stanford Honor Code and Fundamental Standard, as noted in the STEP Handbook and Stanford Student Guide. Website: https://communitystandards.stanford.edu/student-conduct-process/honor-code-and-fundamental-standard

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Grading: Credit/No Credit

Selected readings are outlined in the syllabus and subject to change as the course develops.

### COURSE SCHEDULE

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| 2    | Big ideas, Learning Objectives, and Concept Mapping | □ Charles, R. I. (2005). *Big ideas and understandings as the foundation for elementary and middle school mathematics.*  
Introduction.  
□ Reinhart, S. (2000). *Never say anything a kid can say!* |  |
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READINGS


Common Core Standards for Mathematical Practice (2010), (pp. 6-8).


