EDUCATION 263D: CURRICULUM & INSTRUCTION ELECTIVE IN MATHEMATICS
TUESDAYS, 3:00 PM – 5:50 PM
CERAS 302

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office hours by appointment

INTRODUCTION

This is a condensed overview of mathematics teaching and learning designed to follow a three-course sequence in methods of curriculum and instruction in non-mathematical secondary content. The course provides 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 Common Core State Standards for Mathematics and the eight Common Core State Standards for Mathematical Practice. 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 acts of close and respectful listening to students’ mathematical thinking and asking open questions to probe and deepen understanding. There will be a joint focus throughout the course on connecting research and practice.

COURSE REQUIREMENTS

We expect you to come to class having completed the reading and assignments due for that day and prepared to participate in class discussions and activities. Attendance to all sessions is mandatory. Please give us ample notice if you must be late to or miss a class. You can request an extension on a due date, but it must be done 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.

☐ Cross-Content Observations due Tuesday, May 15th at 1pm.
☐ Task-Based Lesson Plan: due Tuesday, May 29th at 1 pm.
**Submitting Assignments:**
All assignments should be digitally submitted to Canvas unless otherwise specified by the instructors. 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 word documents unless otherwise specified.

Please save all files using the following naming convention:
*Lastname_Assignment.doc*. For example: *Anderson_CrossContent.docx*

**Assessments and Grading:**
Your grade will be based primarily on the quality of the assignments mentioned above. We will also consider attendance and active contributions to class discussions. 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 due date. Please contact us well in advance if you have concerns about completing assignments on time. Extensions may be granted by your instructors, if requested. Late work that is submitted without an extension may be subject to a grade penalty.

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

**UNIVERSITY POLICIES**

All Stanford students are expected to 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](https://communitystandards.stanford.edu/student-conduct-process/honor-code-and-fundamental-standard)

**Students with Documented Disabilities**
Students who may need an academic accommodation based on the impact of a disability 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](http://studentaffairs.stanford.edu/oae)).

**Honor Code**
1. The Honor Code is an undertaking of the students, individually and collectively:
   - that they will not give or receive aid in examinations; that they will not give or receive unpermitted aid in class work, in the preparation of reports, or in any other work that is to be used by the instructor as the basis of grading;
that they will do their share and take an active part in seeing to it that others as well as themselves uphold the spirit and letter of the Honor Code.

2. The faculty on its part manifests its confidence in the honor of its students by refraining from proctoring examinations and from taking unusual and unreasonable precautions to prevent the forms of dishonesty mentioned above. The faculty will also avoid, as far as practicable, academic procedures that create temptations to violate the Honor Code.

3. While the faculty alone has the right and obligation to set academic requirements, the students and faculty will work together to establish optimal conditions for honorable academic work.

Violations of the Honor Code

Examples of conduct that have been regarded as being in violation of the Honor Code include:

- Copying from another’s examination paper or allowing another to copy from one’s own paper
- Unpermitted collaboration
- Plagiarism
- Revising and resubmitting a quiz or exam for regrading, without the instructor’s knowledge and consent
- Giving or receiving unpermitted aid on a take-home examination
- Representing as one’s own work the work of another
- Giving or receiving aid on an academic assignment when a reasonable person should have known that such aid was not permitted

Sanctions for Violating the Honor Code

In recent years, most student disciplinary cases have involved Honor Code violations; of these, the most frequent arise when a student submits another’s work as his or her own, or gives or receives unpermitted aid. The standard sanction for a first offense includes a one-quarter suspended suspension from the University and one or more educational components. In addition, most faculty members issue a "No Pass" or "No Credit" for the course in which the violation occurred. The standard sanction for multiple violations (e.g. cheating more than once in the same course) is a three-quarter suspension and 40 or more hours of community service.
### COURSE SCHEDULE

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<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>2</td>
<td>4/10</td>
<td>Big ideas, Learning Objectives, and Concept Mapping</td>
<td>Charles, R. I. (2005). <em>Big ideas and understandings as the foundation for elementary and middle school mathematics</em>.</td>
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<td>Reinhart, S. (2000). <em>Never say anything a kid can say!</em></td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Topic</td>
<td>Assignment and Notes</td>
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READINGS

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