Introduction
This is the first of a 3-course sequence focusing on mathematics teaching and learning. The course provides an opportunity for sustained learning and professional growth. Our goals are to help you:

● understand the nature of effective teaching and learning of mathematics,
● increase your knowledge of mathematics and mathematics pedagogy,
● increase your theoretical knowledge and practical experience in planning, teaching, and assessing mathematics,
● understand the mathematical needs of a diverse range of students,
● understand 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 three-course sequence, we will consider the Common Core State Standards for Mathematics.

In the first quarter we will analyze teaching practices in many ways, considering the role played by mathematics, the teacher, and the students. Several different examples of practice will be analyzed on video. 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 important questions in order to probe and further understanding. There will be a joint focus throughout the course on research and practice.

Course Requirements
We expect you to come to class having completed the reading and assignments due for that day and to be prepared to participate in class discussions and activities. This means that you have a clear idea of the main points; you may have formulated some questions; and/or you have noted any related issues that the reading or topic raised for you. On some days we will ask you to respond to the article, and engage with your peers, in the discussion section of Canvas.

Your participation depends upon your timeliness in attendance. If for any reason, you will miss or be late to class, please email the instructors ahead of time. In the summer quarter, you will be required to complete several assignments, conduct readings (see Course Schedule) and complete daily tasks, which will be described during class.
Major Assignments:
- Maths History: Due Tuesday, July 5th by 12:00pm.
- Reflection on class TBD
- Dear Data Representation. Due Monday July 11th (bring to class).
- Reflecting on Summer Mathematics: Due Monday, July 18th by midnight.

Your Grade
Our expectation is that everyone will receive an A grade. If your work – including the quality of your participation and assignments, (the Final Reflection Assignment, The Dear data assignment and a class Reflection) – is not at that standard we will discuss ways to improve it.

Regarding participation, we are looking for you to contribute to small and whole group discussions in class, and online discussions. Whether you are more talkative or more introverted in nature, we expect that you make concerted efforts to both listen and contribute, monitoring your level of sharing, and making space for others to join in. We recognize that you may have more to say about one topic over another, but across the 8 classes, we should have heard your thoughts and ideas in both small and whole group discussions and online. This will help your learning as well as the learning of the group.

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Session</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/13</td>
<td>6: Equity Focused Teaching and Learning</td>
<td></td>
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</tbody>
</table>


7/14  
**Session 7: Classroom Culture of Socio-mathematical Norms**


7/15  
**Session 8: Language Learners and Culturally Relevant Pedagogy**


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**What to turn in and where:**

<table>
<thead>
<tr>
<th>What:</th>
<th>By When:</th>
<th>Where:</th>
<th>Formatting &amp; Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths History: An Informal Essay</td>
<td>Tuesday, July 5th by 12:00pm</td>
<td>Upload to Canvas</td>
<td>500 words</td>
</tr>
<tr>
<td>Dear Data</td>
<td>Monday, July 11th (bring to class)</td>
<td>Upload to Canvas</td>
<td>images</td>
</tr>
<tr>
<td>Reflecting on Summer Mathematics</td>
<td>Monday, July 18th by 11:59pm</td>
<td>Upload to Canvas</td>
<td>1000-1500 words</td>
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