

IL 2432 and 2478 Spring 2022 University of Pittsburgh School of Education
TEACHING AND LEARNING IN SECONDARY SCIENCE AND MATHEMATICS 3

Wednesdays 4:00 – 6:30 in WWPB 5400

Instructor: Dr. Kokka kokka@pitt.edu (412) 648-1079 Office Hours: by appointment, please email me.
Zoom info for the first three classes: <https://pitt.zoom.us/j/91338230044> Passcode: pitt

<p>Bookmarks:</p> <p>COURSE OBJECTIVES</p> <p>COURSE REQUIREMENTS AND ASSIGNMENTS</p> <p>TENTATIVE SCHEDULE OF READINGS</p> <p>COURSE RUBRIC</p> <p>COURSE POLICIES</p>	<p>Other helpful links:</p> <p>Pitt Teacher Ed Program https://app.education.pitt.edu/teacherprep/index</p> <p>SJ math/science resources I collected https://bit.ly/SJMathScienceResources</p> <p>APA formatting Purdue OWL</p> <p>Lesson Folder that Sam W created</p> <p>Sign up sheet for a 5 Min Closing (optional)</p>
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COURSE DESCRIPTION AND REQUIREMENTS

COURSE OBJECTIVES:

The major goals of this course are to support you to:

1. Learn about a) growth mindset, b) assessment practices that support student learning (e.g., formative and performance assessment), c) equitable group work practices, d) culturally relevant pedagogy and justice-oriented teaching.
2. Begin to actualize equitable mathematics and science teaching and assessment practices in secondary (7-12) classrooms.
3. See and understand relationships between students' learning and specific **actions** taken by the teacher before and during the lesson, the tasks in which students engage, and the resources (e.g., physical materials, knowledge, other students) that are available during a lesson. Understand the nature of task demands and the need for thorough and thoughtful **planning** to enact group worthy tasks of high cognitive demand.
4. Make observations of the classroom to which you have been assigned and reflect on students' **opportunities to learn**, with respect to **equity** and **social justice** goals.
5. **Reflect** on your own mindset, identity, experiences, and dispositions and consider how these influence you as a teacher in your work with students.

TEACHING AND LEARNING IN
SECONDARY SCIENCE AND
MATHEMATICS 3
COURSE TOPICS

Growth Mindset

Formative and Performance Assessment

Equitable Groupwork

Culturally Relevant Pedagogy / Justice-Oriented Teaching

IL 2432 AND 2478
SPRING 2022 UNIVERSITY OF PITTSBURGH

Teaching & Learning in Secondary Science and Mathematics 3 is intended to contribute to your development as a supportive, effective, reflective, and equity- and justice-oriented teacher. We will use, in connected ways, readings, assignments, projects, your experiences from your field-placements (when applicable), instruction, and our classroom discussions to help you develop and apply your understanding of important issues related to the above topics.

REQUIRED READINGS:

Please read the readings by the date indicated, before coming to class. Scroll down to see a tentative schedule for reading assignments, which will be available via Canvas [See the “Readings” folder in the “Files” tab for pdfs of articles.] and our Pitt library. Keep in mind that the readings, assignments, etc. may be slightly revised as we go along. Please check the Google Doc version of this syllabus (rather than downloading it at the start of the term) since it is a living document. Please let me know if you have any difficulty accessing a reading, link, or video.

COURSE REQUIREMENTS AND ASSIGNMENTS

The course schedule lists the major activities and assignments that will form the basis of your grade in the course. *The tentative readings schedule (scroll down to the table) indicates the dates when these items will be due.* Some of the written assignments will require additional directions, and these will be discussed in class. Please be sure you complete and submit each assignment by the dates noted below. [Note: Percentage weights are subject to changes.]

Attendance and Participation (30%)

You are expected to attend ALL classes, *having completed reading and assignments*, and participate in activities and discussions in ways that indicate a commitment to establishing and maintaining a professional learning community.

Attendance Expectations: The expectation is that you will be present, on time, and prepared for every class, having completed reading (and any other preparatory) assignments.

Active participation: You will be invited to be an active participant in class by speaking (or using the chat function, when holding class via Zoom) and in small groups. You will also be invited to participate in reflection entries on Canvas. Scroll down to read more about class participation expectations in the rubric at the bottom of this document. You will also be expected to be thoughtful, reflective, respectful, and generative in class discussions (during and outside of class, e.g. Canvas Discussion Boards).

5 Min Class Closing (optional) You will be invited to [sign up](#) for a date to lead a brief ≤ 5 minute “closing/share” at the end of class, e.g., play a video, share a poem, share a useful website, an infographic, teach us a skill (e.g., capoeira, sign language, singing, sports, meditation, etc.).

Reflections: You will be invited to reflect on your teaching and what you are learning throughout the term. This may be an in-class reflection or it may be a discussion board post online that you are invited to complete during or outside of class time.

Major Assignments (adds up to 70% see below)

Assignment due dates are listed in the tentative schedule of topics, readings, and assignments. Detailed assignment descriptions and rubrics are available in Canvas. Assignments are expected to be submitted to Canvas by the due date and time. Typically I do not accept late work. However, I have changed my “late policy” to be flexible given the stress and circumstances of the global pandemic. *If you need an extension please email me before it's due, at least one day before it's due.* Please read the course grading policy below. Basically, as long as you submit your assignments complete and on time you will have the opportunity to revise any assignment until you receive a meets/exceeds expectations (equivalent of an A). However, if you submit your assignment more than 1 week late you will not have the opportunity to revise, and your grade will be lowered. If you do not revise an assignment that needs revisions your grade will be lowered and you may risk not passing the course. *Please note that you must fully complete all major assignments to pass the course.*

1. **Formative Assessment Assignment (15%):** You will develop a formative assessment (with a partner if you choose) utilizing the five “key strategies” summarized by Wiliam (2007). This work will include collecting and analyzing a class set of student work before and after providing feedback. This assessment may also be used for your Unit Plan.
2. **Unit Plan (25%):** Over the course of the semester, you will develop a unit plan (with a partner if you choose) on a topic you will teach in your classroom in late spring. You will present this in class, time permitting. You (and a partner) will develop a detailed overview of the sequence, including its primary instructional goal(s) and subgoals, timeline, and formative and performance assessments, and linked lesson plans.
3. **Social Justice Math/Science Planning/Teaching/Reflecting (PTR) Presentation (15%):** You also will design a social justice math or science lesson in your classroom and reflect on the experience. You will present this at the school-wide **Pitt Freedom and Justice Gathering** (held 4/13/22 during our class meeting time). You will also submit your Powerpoint, Lesson plans, student facing materials, student work, and your reflection.
4. **Course Summary, Reflection, Digital Portfolio (15%):** You will reflect on your progress, learning, assignments, teaching, discussions, challenges, growth, and your overall performance in the course.

COURSE GRADES

Your major assignments will be evaluated with a standards-based rubric. For every assignment you turn in you will also evaluate yourself with the assignment rubric. We will discuss this in class. As long as you receive mostly “meets expectations” and “exceeds expectations” you will receive an A in the course. You may revise an assignment as long as you turn it in on time. Basically, I want everyone to be able to revise assignments to receive an A in the course.

A: Meets Expectations/Exceeds Expectations

B: Meets Expectations

C: Needs Improvement/Meets Expectations

D: Needs Improvement

F: Excessive absences; missing, late, and/or unrevised assignments

ASSIGNMENT COMPLETION AND SUBMISSION

Typically, I do not accept late work. However, I have changed my “late policy” to be flexible given the stress and circumstances of a global pandemic. Assignments are expected to be submitted to Canvas by the due date and time. However, this is a difficult time for all of us. *If you need an extension please email me before it's due, at least one day before it's due.* Please read the course grading policy above. Basically, as long as you submit your assignments **complete and on time** you will have the opportunity to revise any assignment until you receive a meets/exceeds expectations (equivalent of an A). Not submitting an assignment on time or at all jeopardizes your ability to pass the course. G grades are also a possibility. Please read below.

G-GRADES

If unforeseen events (such as major illness) prevent a student from timely completion of course work, they may request a meeting with the instructor to discuss the possibility of earning a “G” grade for the term. If both student and instructor agree to the “G” grade, they collaboratively write a document that describes exactly what the student needs to do to complete the required coursework and the time frame within which they must do so.

IMPORTANT NOTE: The federal government’s policies governing educational loans stipulate that a student must be making good progress toward his/her degree in order to continue to be eligible for financial assistance. “Good progress” is measured in part by the student’s completion of at least 2/3 of all credits for which he/she is registered. Thus, receiving a “G” grade—which indicates that the course has NOT been completed—may negatively impact a student’s ability to receive federally-subsidized loans.

OFFICE HOURS: By appointment. The best way to schedule an appointment is by emailing me at kokka@pitt.edu.

More Course Policies: Scroll down to the bottom of the document.

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TENTATIVE SCHEDULE OF READINGS AND ASSIGNMENT DUE DATES

Note: Readings and assignment due dates are subject to be revised and changed as needed throughout the course.

WEEK	2022 DATE	TOPIC	READINGS (complete by class meeting date)	ASSIGNMENTS DUE
1	1/12	Growth Mindset	<p>Dr. Dweck's TED Talk https://youtu.be/hiiEeMN7vbQ</p> <p>Dr. Boaler's TED Talk https://youtu.be/3icoSeGqQtY</p> <p>An Introduction to Evidence Based Undergraduate STEM Teaching https://youtu.be/T1huHXCgKy8</p> <p>Re-read our Pitt School of Ed Mission/Vision https://www.education.pitt.edu/deans-welcome</p> <p>Read this syllabus</p> <p>Create your slide in this Google Slide Show (look for the slide with your name on it. Please email me at kokka@pitt.edu if you do not see your name, my apologies!)</p> <p>https://docs.google.com/presentation/d/117YaiZfWpowHahu2DI87JYK37ePmkq8ECW533G_mu_w/edit?usp=sharing</p> <p>Optional: Browse Dr. Boaler's site https://www.youcubed.org/</p>	
2	1/19	Growth Mindset	<p>[Introduction, Chapters 1 and 2] <i>Mathematical Mindsets</i> by Jo Boaler</p> <p>This book is available online from the Pitt library. I included the pdfs for these chapters in Canvas to make it easier to access.</p> <p>Watch: https://youtu.be/JGx9xm_JJgg [12 min.]</p> <p>https://www.youcubed.org/wim/believe-in-yourself-2/ [3 min.]</p> <p>https://www.youcubed.org/wim/brains-grow-and-change/ [4 min.]</p> <p>https://www.youcubed.org/wim/the-importance-of-struggle/ [5 min.]</p> <p>Browse the Week of Inspirational Math https://www.youcubed.org/week-inspirational-math/</p> <p>Sign up for a 5-min. Closing (optional).</p>	Guest Speakers: math and science grads from this program
3	1/26	Assessment : Formative Assessment	<p>[Chapter 8: Assessment] <i>Mathematical Mindsets</i> by Jo Boaler.</p> <p>This book is available online from the Pitt library. I included the pdf for this chapter in Canvas to make it easier to access.</p> <p>Wiliam (2007) Five Key Practices for Effective Formative Assessment</p> <p>Watch Formative Assessment in a Science Classroom https://youtu.be/CyM72ISNFtk [7 min.]</p>	

			Sign up for a 5-min. Closing (optional)	
4	2/2 BLM at Schools Week	Assessment : Formative Assessment	<p>Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom.</p> <p>[Ch 2 and 5] Bailey, K., & Jakicic, C. (2011). <i>Common formative assessment</i>: This book is available online from our library. The two chapters are in Canvas.</p> <p>Watch Ibram Kendi's discussion of standardized testing and the eugenics movement (start at 23:15) https://www.democracynow.org/2019/8/13/ibram_x_kendi_intelligence_tests_education [8 min.]</p> <p>Watch Why is the 1% so white? MTV Decoded https://youtu.be/9f82oMg6QRQ [6 min.]</p> <p>Watch BLM At School Week of Action at Seattle public schools https://youtu.be/ykWs3Xapocg [2 min.]</p> <p>Browse the BLM At School Website and Curricular Resources: https://www.blacklivesmatteratschool.com/ https://www.blacklivesmatteratschool.com/curriculum.html</p> <p>(Optional) Read the National Education Association's article: The Racist Beginnings of Standardized Testing https://www.nea.org/advocating-for-change/new-from-nea/racist-beginnings-standardized-testing</p>	Guest Speaker: Chris Roberts
5	2/9	Assessment: Performance Assessment	<p>What is Performance Assessment? https://pdo.ascd.org/lmscourses/PD11OC108/media/Designing_Performance_Assessment_M2_Reading_Assessment.pdf</p> <p>The New NGSS Classroom by Holtius et al. https://www.aft.org/ae/summer2018/holthuis</p> <p>What does a Performance Assessment look like? Here are 6 Examples https://www.cce.org/thought-leadership/blog/post/performance-assessment-six-examples</p> <p>Watch Hampton High Performance Assessment Videos https://youtu.be/KZomm-1BbYQ https://youtu.be/zvYSVEmcjHM</p> <p>Add to these thank you cards please: For Chris Rogers https://sendwishonline.com/en/sign-cards/Lbps8iBODjegJnh For Rachel, Tom, Matthew, and Caroline https://sendwishonline.com/en/sign-cards/wuG04P3ERC5n6BJ</p> <p>Slides from Chris Rogers: IG @justmaybechris</p>	Share Formative Assessment Assignment work in class for peer feedback (not due until 2/16; this is intended to support your work)

			<p>https://docs.google.com/presentation/d/1_7xH-Apnh7kVFjkZ6a-t5Bwvx0IcPdD_y0EFp3FCM/edit</p> <p>Browse the curriculum and resources: https://scienceeducation.stanford.edu/ https://performanceassessment.stanford.edu/ https://www.cce.org/work/quality-performance-assessment/performance-assessment-examples [create a free log in] https://www.cce.org/work/quality-performance-assessment/tools-resources</p> <p>Optional: (This is a 1 min read!) Read the table “Beliefs about Teaching and Learning Mathematics” on the first page from this link.</p>	
6	2/16	Assessment : Grading and Feedback	<p>Kokka (2017) Alternatives to Standardized Tests</p> <p>Scriffiny, P. L. (2008). Seven reasons for standards-based grading. <i>Educational Leadership</i>, 66(2), 70-74.</p> <p>Leahy, S., Lyon, C., Thompson, M., Wiliam, D. (2005). Classroom Assessment Minute by Minute Day by Day. <i>Educational Leadership</i>, November 2005, 18-24.</p> <p>Please complete the midterm OMET feedback form for this course by Feb 21st. Thank you!</p>	Formative Assessment Assignment DUE: Present in Class
7	2/23	Equitable Groupwork	<p>[Chapter 7: From tracking to growth mindset grouping] <i>Mathematical Mindsets</i> by Jo Boaler. This book is available online (click here) from the Pitt library. I was unable to download this chapter like I was able to for the previous chapters. Find chapter 7 from the link please. {Update: I was able to download it, and it’s in Canvas now!}</p> <p>Wiggins and McTighe Understanding by Design</p> <p>Please complete the midterm OMET feedback form for this course by Feb 21st. Thank you!</p>	
8	3/2	Equitable Groupwork	<p><i>Heterogenius Classrooms: Detracking Math and Science</i> by Maika Watanabe Watch video (1 hour, 20 min.) https://sfsu.app.box.com/s/9aalq0qc565r9hhf8ngth01g1g8bdre5</p> <p>Never Say Anything a Kid Can Say by Reinhart</p> <p>Please fill out the Google Form with anonymous feedback, thank you!</p> <p>PS. FYI I added the pics I took from the Spaghetti Marshmallow challenge to our class editable Google Drive folder https://bit.ly/PittMathScience2022 Lesson Folder [Thanks Sam W! I added this link to the top of this syllabus too.]</p>	

			<p>Sign up sheet for a 5 Min Closing (optional) [In case you wanted to sign up]</p>	
PITT SPRING BREAK				
9	3/16	Equitable Groupwork	<p>[Chapter 1 all; Chapter 2 science; Chapter 3 math] <i>Heterogenous Classrooms: Detracking Math and Science</i> by Maika Watanabe</p> <p>Thank you Sam W! Here are the pics Sam took from class today.</p> <p>Did you indicate who your partner will be for your Unit Plan assignment on this sheet? (You may choose to work alone if you prefer. Add your name anyway as a solo person for this so I know you are accounted for.)</p> <p>In class today (3/16), I will briefly share more about the next assignment because we (faculty) need to collect group names and topics to start creating the program for the event, which I will also describe. It's going to be fun! Please don't stress about it, we will talk about it today. I will be asking you find a group and indicate your team member names on this sheet.</p> <p>Please sign up for the Freedom and Justice Gathering which will all attend and present at on 4/13 https://bit.ly/PittFreedom</p>	<p>Share a portion of your Unit Plan (e.g., Performance Assessment or Lesson) for peer feedback in class. This is not evaluative; this is intended to help with your Unit Plan.</p>
10	3/23	Equitable Groupwork	<p>[Chapter 6 all; Chapter 4 math; Chapter 5 science] <i>Heterogenous Classrooms: Detracking Math and Science</i> by Maika Watanabe</p> <p>Anonymous feedback: Please give feedback about the course. It's a short two question form.</p> <p>Please sign up for the Freedom and Justice Gathering to receive the Zoom link for class on 4/13 https://bit.ly/PittFreedom</p> <p>Consider signing up to lead a closing.</p>	
11	3/30	Culturally Relevant Pedagogy / Justice-Oriented Teaching	<p>A People's Curriculum for the Earth Book [read "Science for the People" starting on page 5 of the pdf which is page 273 of the book and "Facing Cancer: Social Justice in a biology class" starting on page 23 of the pdf which is page 309 of the book; skim the Intro; browse the Resources]</p> <p>Watch Van Jones The economic injustice of plastic [12 min.]</p> <p>Aguirre et al 2019 Engaging Teachers in the Powerful Combination of Mathematical Modeling and Social Justice: The Flint Water Task</p>	<p>Unit Plan DUE: Present in Class on Wednesday March 30th; Upload by 12:59p Friday April 1st</p> <p>Unit Plan Presentation Feedback Form https://forms.gle/bb3piLUF9WMR3gv6A</p>

			Summarize (1-2 sentences) least 3 resources on this Google Sheet from this list: Social Justice Mathematics and Science Curricular Resources for K-12 Teachers https://bit.ly/SJMathScienceResources	
12	4/6	Culturally Relevant Pedagogy / Justice-Oriented Teaching	<p>A Science Teacher Takes on Feminism and Abolition in Her Classroom... What Could Go Wrong? by Amreen Karmali</p> <p>Watch: https://www.facebook.com/watch/?v=10153871342506701 (video is related to Karmali's article)</p> <p>10 Ways Sex Education Can and Should be Abolitionist</p> <p>Lesson 7.4 Do postal codes predict test scores?</p> <p>Summarize (1-2 sentences in your own words) at least 3 resources on this Google Sheet from this list: Social Justice Mathematics and Science Curricular Resources for K-12 Teachers https://bit.ly/SJMathScienceResources</p> <p>Please complete your OMET by April 24th thank you!</p>	<p>Present in class: Social Justice Math/Science Planning/Teaching/R reflecting assignment (to prepare for your presentation on 4/13; this assignment is not due until 4/13)</p> <p>Feedback Link</p>
13	4/13	Culturally Relevant Pedagogy / Justice-Oriented Teaching	<p>Incubate a Better World in the Minds & Hearts of Students Dr. Ruha Benjamin (video) https://youtu.be/9xmrJJESCt8</p> <p>Freedom and Justice Gathering 4-7p [class will be virtual on Zoom since we will be attending the Freedom and Justice Gathering. Make sure you register to receive the log in link https://bit.ly/PittFreedom.]</p> <p>Program link: https://bit.ly/PittFJProgram</p> <p>Give feedback to roundtable presenters here: https://bit.ly/PittRoundtable</p> <p>Please share your reflections at the end of the event on this padlet: https://bit.ly/PittFJReflections</p> <p>Please complete your OMET by April 24th thank you!</p>	<p>Social Justice Math/Science Planning/Teaching/R reflecting DUE</p>
14	4/20	Culturally Relevant Pedagogy / Justice-Oriented Teaching	<p>[Math] Chapter 1-2 HS Math Lessons to Explore, Understand, and Respond to Social Injustice</p> <p>[Math] Lesson 6.6 What's a Fair Living Wage? (See reading in Canvas, also see Task Cards online.)</p> <p>[Science] Justice-centered science pedagogy: A catalyst for academic achievement and social transformation by Dr. Daniel Morales-Doyle</p> <p>[Science] Lee and Buxton Ch. 5 Science Curriculum and Student Diversity: Culturally Relevant Science</p>	<p>https://jamboard.google.com/d/1foVZ3qJzLjerglhPbDjAL_kar1aV_TOfrhYy5-wPiI/edit?usp=sharing Jamboard link</p>

			Optional review the 5 Practices	
			Please complete your OMET by April 24th thank you!	
15	4/27	Culturally Relevant Pedagogy / Justice-Oriented Teaching	<p>Dr. Dave Kung TED Talk Math for Informed Citizens (18 min.) https://youtu.be/Nel5PF8jtsM</p> <p>(Optional) Calabrese Barton and Tan 2018 Equity and the Maker Movement</p> <p>(Optional) Calabrese Barton and Tan 2018 Making for a More Just World</p> <p>(Optional) THE RESEARCH IS IN: Students Think Lectures Are Best, But Research Suggests They're Wrong</p>	<p>Final Reflection/ Digital Portfolio DUE Presentations 4-5:45 Feedback Link: https://forms.gle/fhmbaSjJDtcD5aAw6</p> <p>Appreciations activity</p> <p>Walk to Bao for our class dinner, reservations at 6:00</p>

IL 2432 and 2478 Spring 2022 Course Rubric/Grade/Feedback

Area of Growth/ Development	Revisions Suggested/ Needs more attention in this area	Meets Expectations	Exceeds Expectations
(A) Assignments; Discussion Board, Jamboard, Google Docs, etc. posts	Assignments/posts are missing listed requirements and write up briefly discusses how what was learned can be applied to one's own teaching.	Assignments/posts meet all listed requirements and write up discusses how what was learned can be applied to one's own teaching. Draws on course readings.	Assignments/posts meet all listed requirements and write up discusses in detail how what was learned can be applied to one's own teaching. May draw on readings outside of class in addition to course readings.

<p>(ASM) Assessments</p>	<p>Assessments are created mainly to evaluate (rather than support) student learning. Assessment and lesson plan goals are not clearly aligned.</p> <p>Missing listed requirements.</p>	<p>Assessments are created to support student learning, with learning goals, opportunities to elicit student thinking, with multiple ways to be successful, and with considerations of equity and social justice. Assessments and lesson plans goals are aligned.</p> <p>All requirements completed.</p>	<p>Assessments are created to support student learning, with clear learning goals, opportunities to elicit student thinking, provides evidence that moves students' learning forward, activates students as owners of their learning and as resources to each other, with multiple ways to be successful, and with considerations of equity and social justice. Assessments, learning progression, and lesson plan goals are clearly aligned.</p> <p>All requirements completed.</p>
<p>(LUP) Lesson and Unit Planning</p>	<p>Lesson plans include learning goals, some equitable pedagogical practices, consideration of students' backgrounds (tailored to your specific context, setting, culture) with attention to detail, anticipated student responses, supports for students with IEPs, multilingual students, students who may struggle. Lesson plans may not clearly align with assessment practices that inform future plans/revisions of plans depending on what is learned from assessments.</p> <p>Missing listed requirements.</p>	<p>Lesson plans include clear learning goals, equitable pedagogical practices, thoughtful task creation or selection, consideration of students' backgrounds (tailored to your specific context, setting, culture) with attention to detail, anticipated student responses, supports for students with IEPs, multilingual students, students who may struggle. Lesson plans align with assessment practices that inform future plans/revisions of plans depending on what is learned from assessments.</p> <p>All requirements completed.</p>	<p>Lesson plans include clear learning goals, equitable pedagogical practices, thoughtful task creation or selection, consideration of students' backgrounds (tailored to your specific context, setting, culture) with attention to detail, anticipated student responses, supports for students with IEPs, multilingual students, students who may struggle. Lesson plans align with assessment practices that inform future plans/revisions of plans depending on what is learned from assessments. Plans may also be ambitious, innovative to support student engagement, higher order thinking, and ownership of learning.</p> <p>All requirements completed.</p>
<p>(R) Reflections</p>	<p>Minimally reflective in assignment submissions and in classroom discussions.</p>	<p>Consistently reflective in assignment submissions and in classroom discussions. Open to new ideas and critique of own lesson plans, assessments, etc. Draws on course readings.</p>	<p>Highly reflective in assignment submissions and in classroom discussions. Seeks out additional opportunities for feedback (e.g., asking cooperating teacher and others to observe, etc.) May draw on readings outside of class in addition to course readings.</p>

(UACC) Understanding and Applying Course Content	Minimally understands nor applies critical analysis of course readings and concepts to assignments and discussions in class and online (discussion board) and/or misunderstands course content.	Understands and applies critical analysis of course readings and concepts to assignments and discussions in class and online (discussion board).	Clearly and consistently understands and applies critical analysis of course readings and concepts to assignments and discussions in class and online (discussion board). Goes above and beyond to seek out additional resources.
(EJ) Equity and Justice Goals	Has minimal analysis or critique when analyzing course materials, textbook materials, policies procedures at placement, etc. to consider equity and social justice goals.	Has a critical eye when analyzing course materials, textbook materials, policies procedures at placement, etc. to consider equity and social justice goals.	Consistently has a critical eye when analyzing course materials, textbook materials, policies procedures at placement, etc. to consider equity and social justice goals. Goes above and beyond to seek out additional resources.
(CD) Classroom Discourse/ Participation	Unaware of how much “space” or “airtime” one takes up (talking too often, 3 or more times per class, or not enough, 0-1 times per class). Does not refer to specific passages from class readings, relies too much on personal experiences. Contributions do not demonstrate that the individual has been following the “flow of the conversation”	Offers comments on a regular basis, ~2 whole group contributions. Aware of how much “space” or “airtime” one takes up. Refers to specific passages from class readings. Contributions demonstrate that the individual has been following the “flow of the conversation”	Offers comments on a regular basis. Aware of how much “space” or “airtime” one takes up, <i>invites new voices</i> to the conversation. Refers to specific passages from class readings and other sources. Contributions “push” the conversation by adding to, questioning, considering other viewpoints related to concerns of equity and social justice.
(PC) Professional Community	Does not meet professional obligations (e.g. arriving prepared and on time, turning assignments in complete and on time)	Meets professional obligations (e.g. arriving prepared and on time, turning assignments in complete and on time)	Exceeds professional obligations (e.g. arriving prepared and ready to help others, turning assignments early, complete and above expectations). Supportive of classmates.

Overall Feedback:

COURSE POLICIES

PROFESSIONAL ETIQUETTE

Please use appropriate, professional etiquette and communication for your graduate studies. Please refer to me as Dr. Kokka (she/her) and follow standard professional norms for communication. I

have found that it is better to be explicit with students about such expectations, thank you! This article may be of interest: <https://www.nytimes.com/2017/05/13/opinion/sunday/u-cant-talk-to-ur-professor-like-this.html>

INSTRUCTOR INFORMATION:

Dr. Kari Kokka is an Assistant Professor of Mathematics Education in the Department of Teaching, Learning, and Leading at the University of Pittsburgh. She studies Social Justice Mathematics and STEM teacher activism. She has been teaching for the past 23 years in public high schools and university teacher education programs at the University of California Berkeley, St. Mary's College, San Francisco State University, the University of San Francisco, and the Harvard Graduate School of Education. Prior to her doctoral studies, she was a math teacher and math coach for ten years, 2001-2011, in New York City at [Vanguard High School](#), a Title I public New York City high school and part of the [Coalition of Essential Schools](#) and [New York Performance Standards Consortium](#), where she used Complex Instruction and Performance Assessment. She began her teaching career as a mathematics teacher and diving coach at Berkeley High School in Berkeley, CA in 1999. She was also a Mathematics Performance Assessment Development and Research Associate at the Stanford Center for Assessment, Learning, and Equity (SCALE) from 2013-2016. She completed her doctorate at the Harvard Graduate School of Education with Dr. Jon Star (advisor), her M.A. with the Stanford Teacher Education Program with advisors Dr. Jo Boaler, Dr. Rachel Lotan, and Dr. Linda Darling-Hammond, and her B.S. in Mechanical Engineering at Stanford University. She was born and raised in San Jose, CA and attended K-12 public schools in East Side San Jose, CA. She is also co-founder of the [Creating Balance in an Unjust World Conference on STEM Education and Social Justice](#) (founded in 2007), former co-chair (2017-2019) of the [Critical Educators for Social Justice SIG](#), and she has been involved with the [Radical STEM Educators of the Bay Area](#), [People's Education Movement](#), and the [New York Collective of Radical Educators](#). You can hear more about her work with the [Abolition Science podcast](#) and the [Leading Equity podcast](#). You can also learn more about her work at her [University of Pittsburgh faculty profile](#) or at www.karikokka.com.

NAMES and PRONOUNS

Our class community will address you by your name and pronouns Please advise me of this early in the term (since your name and pronouns may differ from the school records) so that I may make appropriate changes to my gradebook. You may email me at kokka@pitt.edu or send me a chat during class, whichever is most comfortable to you! I want to be sure you feel yourself and comfortable in our class community.

ATTENDANCE: The expectation is that you will be **present, on time, and prepared** for every class. Attendance is expected at all scheduled classes. However, I understand there may be a time or circumstance where you may need to miss class, especially during the pandemic. Please contact me if you will not be present in class for any reason. You may make up classwork by emailing me with an appropriate reason for your absence. I will send you the make up work to complete. You may have

one “freebie” where you do not need to make up the work. If you are absent 3 times or more we will need to meet to discuss how you can pass the class.

WRITING CENTER

I highly encourage you to take advantage of the writing center.

<http://www.writingcenter.pitt.edu/graduate-services> They can also be reached at (412) 624-6556.

STATEMENT ON CLASSROOM RECORDING

To ensure the free and open discussion of ideas, students may NOT record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student’s own private use.

ACADEMIC INTEGRITY

As a student, you have the responsibility to be honest and to conduct yourself in an ethical manner while pursuing academic studies. You should cite sources of information for papers, projects, and lesson plans (if,

for example, you obtain an activity from a teacher’s edition of a text, give the source). Since a major purpose of written course assignments is to give you experience in using various available resources, incorporating ideas from the other sources is encouraged and will not lower the evaluation of your work. In some cases, collaboration with peers will be encouraged/expected. In other cases, you will be expected to work alone. Please ask if you have doubts about what counts as acceptable collaboration. Should you be accused of a breach of academic integrity, procedural safeguards including provisions of due process have been designed to protect student rights. These may be found in guidelines on academic integrity: *Student*

and Faculty Obligation and Hearing Procedures. This information may be accessed online at <<http://www.pitt.edu/~graduate>>.

Please note the following academic integrity issues related to plagiarism are especially relevant within the context of this program—

- **You may not represent ideas, text, or other products/work that was created by others as being your own.**

- o This means that you must provide appropriate and complete citations when incorporating ideas of others. Moreover, you should put the ideas of others into your own words when incorporating them into documents. Even so, it is appropriate to cite the source of the idea (honor intellectual ownership).

- o This also means that you may not represent yourself as having contributed to a project when you have in fact not done so.

- o Related to this, you may not allow another class member to represent him/herself as a fully contributing partner on a group project if you have knowledge that his/her contributions were minimal or nonexistent.

o **Finally, you may not submit work that you have submitted previously (in other courses or professional contexts) to fulfill the requirements of a course without obtaining express permission from the instructor(s).**

ACCESSIBILITY

The Canvas LMS platform was built using the most modern HTML and CSS technologies, and is committed to W3C's Web Accessibility Initiative and Section 508 guidelines. Specific details regarding individual feature compliance are documented and updated regularly.

STUDENTS WITH DIS/ABILITIES

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS), 216 William Pitt Union, (412) 648-7890 or (412) 383-7355 (TTY), as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

DIVERSITY AND INCLUSION

The University of Pittsburgh does not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University's Title IX policy. The University is committed to taking prompt action to end a hostile environment that interferes with the University's mission. For more information about policies, procedures, and practices, see: <https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/policies-procedures-and-practices>. I ask that everyone in the class strive to help ensure that other members of this class can learn in a supportive and respectful environment. If there are instances of the aforementioned issues, please contact the Title IX Coordinator, by calling 412-648-7860, or e-mailing titleixcoordinator@pitt.edu. Reports can also be filed online: <https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/make-report/report-form>. You may also choose to report this to a faculty/staff member; they are required to communicate this to the University's Office of Diversity and Inclusion. If you wish to maintain complete confidentiality, you may also contact the University Counseling Center (412-648-7930).

STATEMENT ON SCHOLARLY DISCOURSE

It is essential that we approach our scholarly discussions, both in class and out of class (e.g., online), with our minds open to evidence that may conflict with our presuppositions. Moreover, it is vital that we treat each other's opinions and comments with courtesy even when they diverge and conflict with our own. We must avoid personal attacks and the use of ad hominem arguments to invalidate each other's positions. Instead, we must develop a culture of civil argumentation, wherein all positions have the right to be defended and argued against in intellectually reasoned ways. It is this standard I expect of all of us, and a standard that applies to all inquiry in the university.

SELF CARE

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep, and taking time to relax. Despite what you might hear, using your time to take care of yourself will actually help you achieve your academic goals more than spending too much time studying. All of us benefit from support and guidance during times of struggle. There are many helpful resources available at Pitt. An important part of the college experience is learning how to ask for help. Take the time to learn about all that's available and take advantage of it. Ask for support sooner rather than later – this always helps. If you or anyone you know experiences any academic stress, difficult life events, or difficult feelings like anxiety or depression, we strongly encourage you to seek support. Consider reaching out to a friend, faculty or family member you trust for assistance connecting to the support that can help.

The University Counseling Center is here for you: call 412-648-7930 and visit their website. If you or someone you know is feeling suicidal, call someone immediately, day or night: University Counseling Center (UCC): 412 648-7930. University Counseling Center Mental Health Crisis Response: 412-648-7930 x1 Resolve Crisis Network: 888-796-8226 (888-7-YOU-CAN). If the situation is life threatening, call the Police: On-campus: Pitt Police: 412-268-2121; Off-campus: 911

SEXUAL HARASSMENT

The University of Pittsburgh is committed to the maintenance of a community free from all forms of sexual harassment. Sexual harassment violates University policy as well as state, federal, and local laws. It is neither permitted nor condoned. It is also a violation of the University of Pittsburgh's policy against sexual harassment for any employee or student at the University of Pittsburgh to attempt in any way to retaliate against a person who makes a claim of sexual harassment. Any individual, who, after thorough investigation and an informal or formal hearing, is found to have violated the University's policy against sexual harassment, will be subject to disciplinary action, including, but not limited to, reprimand, suspension, termination, or expulsion. Any disciplinary action taken will depend upon the severity of the offense. For more information, see <http://cfo.pitt.edu/policies/documents/policy06-05-01web.pdf> also the previously listed link is helpful <https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/policies-procedures-and-practices>.

DEPARTMENT GRIEVANCE PROCEDURES

The purpose of grievance procedures is to ensure the rights and responsibilities of faculty and students in their relationships with each other. When a student in TLL believes that a faculty member has not met his or her obligations (as an instructor or in another capacity) as described in the Academic Integrity Guidelines, the student should follow this procedure:

1. The student should talk directly to the faculty member to attempt to resolve the matter.
2. If the matter cannot be resolved at that level, the student should talk to the relevant program coordinator, Dr. Cassie Quigley.
3. If the matter remains unresolved, the student should talk to the associate chair of TLL (currently Dr. Cassie Quigley) or the chair, Dr. Sabina Vaught.

4. If needed, the student should next talk to the SOE associate dean of students (currently Dr. Andrea Zito).
5. If the matter still remains unresolved, the student should file a written statement of charges with the dean's designated Academic Integrity Administrative Officer (currently Dr. Michael Gunzenhauser).

NCTM / NSTA PROFESSIONAL MEMBERSHIP:

You are highly encouraged to **obtain a student membership in the National Council of Teachers of Mathematics (NCTM) or National Science Teacher Association.** To do this, go to their respective website, www.nctm.org <https://www.nsta.org/>. Click on the "membership" tab at the top of the page.