

## Welcome to Peer Mentoring in STEM - Computer Science!

Course Facilitators:	Austin Zang	<a href="mailto:ayza2020@mymail.pomona.edu">ayza2020@mymail.pomona.edu</a>
	Elshiekh Ahmed	<a href="mailto:eoaa2021@mymail.pomona.edu">eoaa2021@mymail.pomona.edu</a>
	Prof. Birrell	<a href="mailto:eleonor.birrell@pomona.edu">eleonor.birrell@pomona.edu</a>
	Prof. Chen	<a href="mailto:tzuyi.chen@pomona.edu">tzuyi.chen@pomona.edu</a>

Syllabus heavily structured after work done by Phys009 Sp'23 facilitators - Yaru L., Lukas K., Noah B., Prof. Choi

### Course Goals

Students at the Claremont Colleges have the unique opportunity to mentor their peers in official capacities. This course seeks to prepare students with evidence-based and inclusivity-motivated teaching strategies to bolster their existing teaching abilities. Through this course, you will develop both your teaching skills and your practical awareness of the many factors impacting students' experiences in STEM classes. Furthermore, you will aid in the creation of tangible deliverables, generating new resources to continue evolving our peer mentoring processes.

### Pre-Class Expectations

Students are expected to read weekly assigned readings (see [course website](#)) and write a 200 word personal reflection on the readings' content (students can additionally include personal reflections on mentoring/TA-ing, or other experiences that week) and turn it in on Gradescope (Code: **B27KBB**) by 11:00 AM PDT on Friday. Grading will be based on effort and completion.

*\*Note: Up to 2 Assignments can be excused! Email us as soon as possible to excuse an assignment. For any personal reflections you prefer graders not read through, mark them as "Personal" or "Private" and the assignment will be marked complete without further question.*

### In-Class Expectations and Attendance

**Reflection Sharing:** At the beginning of each discussion, students will share main takeaways from their readings online as a warm-up to group discussions.

**Class Participation:** We are here to learn both from the literature but also from each other! As a discussion-based course, your participation and insight is not only valuable to your peers but imperative to our success as a class. As such, your attendance is imperative for the discussion nature of this course. **Alongside completion of assignments, Pass/Fail will be based on effort and consistent attendance - there is no set number of allowed absences, but absences must be communicated in advance.** Email the facilitators if you have to miss a class - again, it's generally ok, but advance notice is needed!

**COVID-19, Unexpected Romances, and Emergencies:** We will accommodate in every way we can. You are all adults, we respect that, and we will not strictly police you and require proof since that is a practice resulting from the prison industrial complex. However, we will note the number of total absences when we read reflections and take attendance and reach out if we notice you are excessively absent. Students should contact the instructor as soon as possible.

## Semester Activities

**Beginning of Semester Mentor/TA Mixer:** Get to know other mentors, TAs, and students interested in mentoring in PO-01 ID009 (Physics)! Date TBD

**Feedback:** Both giving and receiving feedback is an important part of mentoring! We will dedicate one week to this.

**Tangible Deliverables:** As a group or in groups, we will develop concrete materials to aid in future peer mentoring (you can see projects from previous semesters of Phys009 [here](#) - expect CS examples soon!). This can be either an individual or group project. Final versions of these documents will be due in our final class session. In addition, smaller deliverables separate from the final project will be spaced throughout the semester













## This Syllabus is Malleable and We Want to Hear from You

Please share any resource you think we could learn and be patient if changes are made to this syllabus. We are open to substituting readings, adjusting meeting formats, and shifting forces when beneficial.

## A Final Note

This course is an opportunity for us all to practice pedagogy and inclusivity. Our discussions provide a perfect opportunity for ingraining positive habits and playing with new educational techniques. Certainly, this course should be primarily fun, not stressful – if this stops being the case, we can apply the lesson we're studying to magnify why that is the case, and see how we can get things back on track!

## Tentative Schedule

DATE	TOPIC	READINGS
Week 1: 1/20	Introductions	
Week 2: 1/27	Mentoring Strategies	<ol style="list-style-type: none"> <li>1.  Lang2016(ch6) Small Teaching - Self-explanation.pdf</li> <li>2.  Horii. Strategies for guiding student problem solving in PMA...</li> </ol>
Week 3: 2/3	Peer Mentoring 101	Workshop
Week 4: 2/10	Failure	<ol style="list-style-type: none"> <li>1.  Henry et al. 2018. Fail is not a four-letter word.pdf</li> </ol>
Week 5: 2/17	Reevaluating Education Systems	<ol style="list-style-type: none"> <li>1.  Kleinman and Vallas. 2001. Science, Capitalism, and the Rise ...</li> <li>2.  Lim. 2007. Characteristics of mathematics in Shanghai.pdf</li> </ol>
Week 6: 2/24	Mindset	<ol style="list-style-type: none"> <li>1.  Yeager and Dweck. 2020. What Can Be Learned from Growt...</li> <li>2.  Dweck. 2015. Carol Dweck Revisits the 'Growth Mindset'.pdf</li> </ol>
Week 7: 3/3	Feedback and Midterm Review Sessions	<i>Send feedback to a class you are mentoring and/or provide feedback for this class!</i>
Week 8: 3/10	The Myth of Meritocracy & CRT	<ol style="list-style-type: none"> <li>1.  Cimpian and Leslie. 2017. The Brilliance Trap.pdf</li> <li>2. <a href="#">Cox, E. <i>What is imposter syndrome and how can you combat it?</i> (Optional)</a></li> <li>3.  O'Hara. 2022. STEMing the Tide A Critical Race Theory Anal...</li> </ol>
Week 9: 3/17	Spring Break	Rest well. :)
Week 10: 3/24	Impact of Mentoring & Introduce Final Projects	<ol style="list-style-type: none"> <li>1.  Ward et al. 2014. Mentor Service Themes Emergent in a Ho...</li> </ol>
Week 11: 3/31	César Chávez Day	Look into brainstorming final projects if you have a chance! Form a group, start a longitudinal survey, etc...
Week 12: 4/7	Inclusivity	<ol style="list-style-type: none"> <li>1.  Dounas-Frazer and Chini. 2019. Active Learning Isn't Enou...</li> <li>2.  Gamrat. 2021. Fostering Inclusive Practices among Teaching...</li> </ol>
Week 13: 4/14	Class choice	(Possible topics: power, language, stereotype threat, STEM identities,

		indigenous ways of knowing, implicit bias, transfer of institutional knowledge, emotional support, etc.)
Week 14: 4/21	Final Projects	Group work during class.
Week 15: 4/28	Project Presentations	Presentations or Short Video. Projects due Wednesday, 5/3.
Week 16: 5/5	Reading Days	Best of luck with the end of your semester!



Denotes a class session with no assigned reading.

Reflections (on learning/teaching experiences) are still required unless otherwise specified.



Denotes a week with no class session. Reflections are not necessary.