

First Steps for Mentored Reading

If you have any questions you can always email us: drp@math.ucdavis.edu

Faculty mentor: Laura Starkston

Organizers: Connor FitzGerald, Mary Claire Simone, Peyton Wood, Lisa Johnston

Suggested First Meeting Format:

- 10 minutes of chatting and getting to know each other! We want to recognize everyone as a person first and a future mathematician second. (See questions below)
- 5-10 minutes talking about courses and math the mentee has enjoyed. Try to get an understanding of their mathematical background during this time. But remember not to quiz them, this is just a conversation.
- 5 minutes about the mentor's area of math. Explain things at a non-technical level, possibly with a toy example--you don't need to explain everything. The mentee should just get inspiration and is not expected to fully understand your advanced coursework or research.
- Discuss [possible readings](#) and try to determine which readings you might both be interested in. (The mentee can look over the options after the meeting before making a decision.)
- Schedule a regular time for the pair of you to meet.

How to pick a reading that you will both enjoy:

- Mentor: come into the meeting with some suggestions based on the mentee's form with a few possible topics to explore and readings. You may decide after the meeting that none of your choices were the right fit. That is okay!
- Mentor: explain in a few sentences the idea behind some of the possible readings. Mentee(s): express which readings sound appealing to you, or whether you would prefer a different topic or are worried about the level.
- Choose 1 or 2 readings by the end of the meeting and specify which portions the mentee(s) should read in the next week to decide if one of those readings is a good fit. Then reassess when you reconvene the following week. Often, the reading can be overwhelming at the beginning. Two ways to readjust are: **slow down** (go through a smaller amount of material each week) or change to a more accessible reading. This could be in the same topic or a different topic. You can consult with DRP organizers, faculty advisors, or grad students, postdocs, or other faculty in that subfield to get suggestions on readings.
- **Be flexible!** Remember that whatever you choose does not have to be the thing you read about for the rest of their undergraduate career or even for the rest of the year. You can always readjust if needed.
- If you're struggling to find material, check out this link full of great starter texts ranging from short papers to full course textbooks
 - https://drive.google.com/drive/folders/1Nb0yGDq9N_uqbKwizy8IO6j-HLAa5rVi?usp=sharing
 - <https://docs.google.com/document/d/1N-rr8R4I7DrJwkh5mUu-lGNFGgQh8vr1tNX0b8acBjE/edit?usp=sharing>

Suggested Questions

Getting to know each other:

- Introduce yourselves and exchange your preferred pronouns.
- What are your goals after college? (They may not know this yet, and that's okay)
- What is a funny thing that has happened in one of your classes?
- Coffee or tea? (What's your go-to coffee shop order?)
- Do you prefer wind, fire, earth, or water?
- Do you have any Davis biking stories?

Mathematical interest questions:

- What do you like about studying math?
- What has been your favorite mathematical topic you learned in a class?
- What has been your favorite math class?
- What has been your favorite math textbook? Why?

Logistics questions:

- How would you describe your optimal learning style?
- How busy are you this quarter?

Expectations

- Both the mentee and the mentor will always keep their required coursework as their priority.
- The mentee and mentor will try to meet once a week, with the option to skip 2 weeks each quarter during busy times (e.g. studying for midterms or finals).
- Mentees will do their best to come prepared with whatever they've decided to prepare for the next meeting.
- Mentors and mentees will be understanding of each other recognizing everyone is here because they enjoy math and want to learn more.
- The mentor will check in with the student at the beginning of their meetings to see how they're doing to give the mentee the opportunity to give feedback.
- **Sample Timeline**
 - Mentor and Mentee connect over email (October 11 - 14)
 - Welcome Event (October 14 4-5:30pm)
 - Mentor and Mentee have their first meeting and begin to decide on a reading project (October 11 - 18)
 - Mentee submits half-page plan for your reading project (Nov 8)
 - Social event (end of Fall quarter)
 - Restart readings (beginning of Winter quarter)
 - Complete your reading project (Week 5 of Winter quarter)

- Prepare your poster/talk (Week 5-8 of Winter quarter)
- Final presentations (Winter quarter Week 8)