

Mentoring guidelines

Specific to mentoring graduate students in Mathematics

Mentoring Math PhD students

- Take the time to think about your PhD advising style, and your expectations from your grad students. A good place to start is the PhD Advising Questionnaire, available
- Explicitly discuss your expectations with your students well in advance.
- Being a PhD thesis advisor may or may not include mentoring beyond the contents of the thesis; be sure to discuss with your student what they may or may not expect from you in their professional development.

Administrative procedures

- It is recommended that you familiarize yourself with the formal graduate program requirements as detailed in the graduate student guide, which can be found at <https://math.illinois.edu/academics/graduate-program-mathematics>
- Specific points of interest in the graduate student guide are in Chapter 2; in particular:
 - 2.1 Comprehensive requirements
 - 2.2 Prelim exam
 - 2.3 and 2.4 PhD thesis
 - 2.5 Annual progress review

Mentoring across difference

(Source/inspiration: diversity.edu goals and competencies for mentors, advisors...)

- Good communication is especially important across difference.
- Mentoring and advising are in practice not neutral with respect to identity, and people from groups traditionally underrepresented in mathematics face unique challenges. You can still search for similarities underneath the obvious differences to make connections and establish rapport with your mentee/advisee. Be sure to use appropriate identity terminology, and ask when unsure. Engage comfortably in conversation about differences and don't let uncomfortable issues become the elephant in the room.
- Be aware of potential biases, myths, and stereotypes, conscious or unconscious. Do not assume that all mentees of a certain identity group face the same challenges and obstacles.
- Advocate on behalf of your mentee:
 - Let them know of opportunities for fellowships, scholarships, awards, job openings, etc., for which they qualify (or soon will). Don't assume they already know, or that they're not interested. Offer information and ask questions, but **let the mentee/advisee be the decision maker.**
 - Help them form professional connections; introduce them to people, suggest them as speakers at conferences, etc.

- Keep an eye out and speak out on behalf of your mentee regarding biased decision-making that affects their career.
 - Keep an eye out for your own or your colleagues' heightened scrutiny of your mentee/advisee.
- Ensure that your mentee is aware of the unwritten expectations and rules for success in their chosen career path.
 - Share your background, path to advancement, and your understanding of the department's and profession's expectations.
 - Share the mistakes you have made, experiences you have found challenging, and lessons you have learned.
 - Encourage your mentee to share with you (or with someone else they feel will understand), any confusing or upsetting incidents, or incidents related to a microaggression, negative bias, or stereotyping.
 - Share the unwritten rules of success with your mentee, and encourage others in the department to do so.
 - Beware of giving soft performance reviews and counsel to your mentee or advisee. Instead, provide detailed and constructive feedback for continued growth and improvement.