NMU Mathematics GTA Orientation

outline

Wednesday, August 20, 2025

Questions for Discussion

1. What does it mean to teach as a Grad Student?
2. What to expect from your students?
3. How to teach to Mathemaphobes?
4. How to minimize risk & create a respectable environment?
5. What is FERPA? (be careful posting grades)
6. How do I manage my time?
7. How do I manage the classroom?

Advice for first time instructors

1. When in doubt ask Linda or Josh.
2. Get feedback about your teaching from both students & faculty.
3. Learn to cater your teaching to your personality. You DO NOT need to have personality X in order to be a good teacher.
4. Write *legibly*, with awareness of whitespace & don't talk to the board.
5. Teaching feels very immediate and important so it's easy to put lots of time into it. However, you can put an infinite amount of time into teaching and not all of that time will help your students learn. It's important to figure out how to manage and protect your time so that teaching doesn't take over everything.
    - Practice setting time limits on the amount of time you spend on teaching work so that it doesn't absorb all of your time.

- Pay attention to the ways you spend your time that have the greatest impact on student success. Generally, time spent interacting with students (office hours, review sessions, lectures) is much more effective for helping students learn than time spent preparing for interacting with students (writing long & detailed homework solutions, constructing course resources from scratch, etc.)

6. Emphasize more on interaction with students. It is more effective to discuss math in an interactive environment than just deliver or lecture it.
7. It's ok to be vulnerable with your students. They will probably appreciate hearing about the struggles you've had learning math and find that encouraging.
8. Stay organized. It can be very helpful to have electronic copies of all notes, quizzes, exams and handouts. It can be helpful to post some of these materials for students.
9. Learn your student's names, they will appreciate it.
10. Write a detailed syllabus with a policy that the instructor can make modifications to the syllabus at any time during the semester.

General Graduate School Advice

1. Get help from a lot of people – and help others. Don't feel bad about asking any questions.
2. Don't be embarrassed about not knowing something or needing to ask for help from your fellow students or professors.
3. Don't compare yourself to others! Nobody knows what they're doing. While people might sound like they know way more than you, they are probably just as insecure as you are. It matters only that you want to be here.
4. Grades are not as important anymore (within reason). What is important is understanding.
5. During graduate school, you will need people to serve the following three roles: advisor, mentor and advocate. Most likely, one person will not fill all three of these roles. An advisor will help guide your research and your career, a mentor is someone you can confide in and discuss the gritty truth with, and an advocate is someone who will speak up on your behalf when you are not in the room.
6. Work-life balance is important! Find something outside of school that you like to do, so your identity, self-worth and happiness have a buffer against the ups & downs of graduate school.

- For some, this means working every day of the week, but not too much on one day
- For others, this means having at least one full day off

- This balance might mean several weeks of dedicated and focused work, followed by a few weeks of moderation
- Figure out what works by trying new things until something works
- Try to get 8 hours of sleep every night.

7. Take advantage of your time at NMU – connect with the faculty, the community, the lake & the winter.

Achieve (From Dr. Lawton)

1. Assignments are labeled "HW** Section* Title"
2. HW** shows the order in which I would normally present. Three of the assignments in MA115 don't have this because they were added later. Two of those deal with horizontal asymptotes and limits and may not belong where I put them. The last one of those three is on trig identities and could be moved earlier.
3. Section numbers are definitely not in order. They are listed in case the student (or GTA) wants to know. Honestly I would expect lecture material to directly address how to solve the type of homework problems in the homework set, not regurgitate material from the text.
4. Title isn't necessarily the title of the section - it attempts to describe the type of homework question in play.
5. Student exceptions can be entered pretty quickly if you want to extend the assignment - but keep in mind that after the due date has passed without extension, the answers are available. If you extend after this, the questions (and answers) do not change.
6. At present, assignments have a due date of Sunday and a 3-day grace period - so close Wednesday at midnight.

Management (w/help from Dr. Lawton)

7. If you are going to use "testing rooms" please monitor your students. I have had a few in the past couple of semesters who have apparently made good use of not being closely monitored in the testing rooms. If students need accommodation for extra time or quiet, Disability Services is absolutely the right place for that. I have used their testing rooms / services for exams that I take. *So what's the big deal?* Once a student gets too far in the curriculum without the proper background, it's a major issue. Read that both ways. If they don't have the algebra skills (and I'm not looking for perfection) then they may hit a point of no return and need to change majors.

8. “No-show drops” are a thing. You are not doing the student (or yourself) any favors by not dropping them. I cannot think of a single time when I didn’t pull the no-show drop trigger and had a good outcome.

- Withdrawal & Drop Information

9. Need to track attendance for the first two weeks for financial aid purposes.

10. Good to slip into the syllabus:

- No graphing / programmable calculators during exams. Scientific OK. Definitely no phones! You need to tell the students early on - and best to have it in print.
- Here’s what I have used in the past for syllabi - and it cuts down drastically on make-up exams. . .. ” Just a word of warning—make-up exams tend to be more difficult than the original. (Once a test has been given, its content tends to become widely known very rapidly— not to mention I may have already used my best (read nice) problems.)”
- “Subject to change with notice”

11. The Shared Google Drive

- Syllabus
- Lectures
- Exams

12. Creating / updating courses & Educat Integration

- Meet w/Sarah Klein via phone

Teaching Assignments

13. Fall 2025

    - Hunter Hannula - MA111 College Algebra MTWR 1:00-1:50pm
    - Isaac Golden - MA111 College Algebra MTWR 4:00-4:50pm
    - Shane Wein - MA115 Precalculus MTWR 8:00-8:50am
    - Kayla Bittenbinder - MA115 Precalculus MTWR 1:00-1:50pm
    - Alex Eldridge - DATA109 Intro Statistics MTWR 4:00-4:50pm
    - Shelby Juidici
    - MA090 1-1:50pm MTWR

    - MA115 4-4:50pm MTWR
    - Trent Holmgren
        - MA111 College Algebra MTWR 8:00-8:50am
        - DATA109 Intro Statistics MTWR 1:00-1:50pm

Compensation

14. Details regarding your payment, etc have changed.
    - See here.