HOW TO BE THE BEST MATH STUDENT YOU CAN BE

Toward an Undergraduate degree in Math, and further

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Your new environment

♦ Your place
♦ Your time
♦ Your energy
♦ Your instructors
♦ Your classmates
♦ Your friends
♦ Yourself!
Your new challenges

- Finding a place to recharge your batteries and recover
- Managing your time
- Allotting your energy
- Getting the best from your instructors
- Teamwork (Getting the best from your classmates)
- Support
- Stress management
How do you get started?

Tools for the journey
Managing your time (and how to use a syllabus)

- Don’t miss class! Take notes. Rewrite them!
- Read the material ahead of time
- Do as much homework as you can
- Spend some time trying to figure out the exercises you can’t solve completely
- Discuss your incomplete exercises with classmates (two heads think better than one!)
- Ask questions in recitation. Ask questions even in lecture! Use office hours. Use the Help Room.
- Budget at least 2 hours working at home for each hour you spend in a math class
Allotting your energy

- Get enough sleep! (You can’t do math tired!)
- Party wisely! (You need to be awake and alert in class next day!)
- What you less like to work on is what needs your work most. Do this first!
- Know when you need to rest (mind cleanup)
- Find out if you are better focussing on one thing at a time or having several plates spinning. Budget your time and energy accordingly
- There is no math gene! Rely on effort - not ability!
Getting the best from your professors, advisors, instructors

♦ Value us
♦ Listen to our advise. We will purposefully teach you techniques *and* educate your intuition!
♦ Ask questions in class. Come to office hours!
♦ Be pleasing to work with
♦ Make yourself noticed. Find mentors. Find reference writers!
♦ Use the opportunity to develop and refine social skills
♦ There’s more than math to learn from us!
Getting the best from classmates

- Work on homework in groups. Discuss the exercises you can’t solve!
- Discuss the content of the lecture
- Different people think differently. Enrich your intuition and technique watching how others work
- Learn how to explain and showcase your work. Refine this skill! Learn to talk to a group
- Be pleasing to work with. Be fair. No arrogance!
- Use the opportunity to develop and refine networking skills
Friends

- Be and feel connected to others
- Learn to connect - don’t close off. Especially when bad things happen!
- Choose friends and partners who value your dreams and goals, and who will support you in growth
- Avoid friends and partners with rigid expectations for who you should be or what you should do
- Be a good friend!
The trouble slide… (or what to be prepared to find…)

♦ What a pile of never ending (home) work!
♦ This stuff is darn hard!!!
♦ Am I really that good at math?
♦ Killer midterms and finals!!!
♦ I’m alone against all this!
♦ The rest of my life in addition to all this!!
♦ Do I still deserve help?
♦ I’m one among 200!!!
The cheer-up slide… (or remember then…)

- Confusion is a natural part of learning!
- Failure is part of success!
- Choose to learn new things
- Pick goals that push you to work hard
- Use fear to provide the energy to sustain you through a difficult effort
- Fear is worse than what you fear.
Attitude... Now and always...

- Absorb new ideas
- Adapt to change...
- Cope with ambiguity...
- Perceive patterns...
- Solve unconventional problems...
- Think for a living...
And beyond…

Preparing for graduate school
What you will encounter in graduate school

- Some counseling exam – prepare now for it
- Request of foreign language (French or German)
- Need of good writing (Thesis (MS or PhD), papers, reports, grants. Job applications!!!)
Working in that direction early on

What you can do now to be your best when starting graduate school
Building a strong and flexible foundation

- As soon as you can take courses that focus on proofs (600 level analysis, modern algebra)
- Take linear algebra
- Take your first topology course soon
- Learn a foreign language (French or German)
- Take writing classes. Learn to write well!
And last...

- Keep enjoying doing math (this will keep you going when the going gets tough)
- Ask for help and support
- Have fun
WELCOME!! 😊