Advice for Students in a Moore Method Class

Fall 2021

The following is a selection of advice from students who have taken Moore Method classes at Haverford in the past. Yes, some of it is contradictory (especially in the "budget your time" section), and you will have to find your own path (with my help, if you ask).

- Stay on top of the material by preparing before *every* class, even if you're not presenting. Many, many students echo this sentiment; here are a few comments:
  - "Do most or all of the propositions in advance. Working them out on your own will help you to get the most out of class discussions, and is really the point of the course. This means — start early. Like, a week early."
  - "Keep ahead of the material; although it is not expressly stated, being ahead of the game is what's expected."
  - "Do the problems ahead of schedule; It gives you an extra attempt to understand the problem and there's a good chance you'll have the homework finished before it is even officially posted."
  - "Try to do at least one problem that's going to presented in lecture before every lecture. Sometimes people will have really different ways of framing and/or proving a problem and you can't take advantage of that without working out at least one proof beforehand."
  - "Going to class is so much more fun and interesting if you have already tried solving the proofs."
- Don't forget to think about material *after* it has been discussed as well:
  - "You will almost certainly not understand someone else's proof fully the first time you read it, so make sure to read it until you are sure you understand it."
  - Stay on top of the material by not letting rewrites pile up.
- Budget your time:
  - "Try not to take this class with a very busy course load if possible. You'll get the most out of [this class] if you really dive in and try to do as many proofs and presentations as possible."
  - "[B]e hard on yourself. Analysis[1] is rigor, sternness and convolution in one big bowl, and you can't go through that with half-assed work and a last-minute, lackadaisical work ethic. Burn yourself out or be burned – there is no easy way."
  - "Try to spare some time for this class everyday."
  - "Don't put this class on the back burner! I know it is so easy to even if you really like math and stuff. It is easy to because this class doesn't instantly penalize you for not doing work but your other classes do, so

[1]This comment refers to Math 318, but goes for 335 as well.

it is probably human nature to focus on the classes that do penalize you."
  - "Also, realize you don't have to do everything, so you don't have to spend all your time on this. Budget out time to work on it, but put it down after you used that time."
  - "Remember that while this structure pushes you to work as hard as possible, it similarly gives you more leeway to take a breather if you need it, as compared to other classes at a similar level."
- Strategize about what proofs you think about at any given time:
  - "Work hard on the main theorems and propositions, but don't forget the incredible importan[ce] of the examples."
  - "The beginning of sections often have simpler proofs and examples; don't be ashamed to use them!" Many students echo this advice about presentations.
  - "Always try to prove the things that you think are most difficult to prove; even if you cannot prove them, you will more fully understand classmatesÕ presentations. At the same time, do not ignore what you think are easier proofs — often these will help you think about the harder stuff."
  - Take advantage of opportunity to come up with new conjectures / counterexamples / generalizations, esp. early in the course.
- Some other inspirational / random comments:
  - "Allow yourself to get obsessed and prove as many things as possible when you have the time because that is when your understanding of the material really develops."
  - "Presenting is easy — if you get into a jam, then the class will help. So don't worry about that" and "Don't be afraid to present because it's the only way to get better."
  - And my personal favorites:

"**Don't be afraid**"
"**Be bold.**"