*“bring printed copies of the examples for the next week that Friday”*

I can see how this would be helpful. Since I am writing these notes on the fly, and at max capacity this semester, it is hard to finish them early, but perhaps over Spring Break I can get a few days ahead.

*“add some aspects of the homework discussions to any review lectures”*

That’s a good idea. I will try to collect a list of the ‘Essential HW Problems’ and we can focus on those on review days when students questions dry up.

*“separating out the truly bonus topics into their own page … would help make the notes easier to read”*

I’ll try to watch out for that. I didn’t think any of the bonus boxes were essential for HW, maybe you can mention those so I see them better.

*“not having the mandatory group meetings in the beginning for such a long period”*

Maybe I’ll switch to just one early meeting required.

*“my group struggles to agree on times”*

*“incorporate a sorting system based on when each student has free time to meet up to create these groups”*

I’d do that if I knew how; if you have seen this in another class, please point me to the tool used.

*“I like the examples but I feel like not printing the answers in the notes would be much more helpful when walking through them in class”*

But… I feel like you could just not look at the answers if you learn better that way? I personally like to analyze a printed example as my primary learning activity. I’ll try to incorporate more ‘Exercises’ which have the solutions on a separate page.

*“I think a formula sheet on the exams would be reasonable given it would be provided on the final”*

*“I think memorizing formulas is difficult”*

*“I wish we were provided a formula sheet for exams … “I feel like as long as you know how to apply them, memorizing actual formulas isn’t really very important”*

All this is true. You are not memorizing formulas in order to use them in a future application. The main point is so that you “get to know them” better. Formulas can have intuitive meaning: e.g. binomial PMF. Also, if you don’t know them well, it costs time to look them up from a chart during the exam and write in numbers correctly, and that will slow down the process (it is more costly in a 50min test).

I would be much more sympathetic if there were a lot of formulas for raw memorization, but it’s only a handful, and we have largely seen them all now. The conceptual formulas should be known as part of the concepts.

Still, I’ll provide you the PMF / PDF formulas from Unit 01 on the Unit 02 test, so you don’t have to re-memorize those and can focus entirely on Unit 02 content.

*“I think having additional questions with your solutions posted at the end of each week would be helpful.”*

I agree. Each time I teach the course I will develop more add-ons like this. For now you have the textbook problems and solutions. These *will* be useful test prep for your final exam.

*“more time should be spent on either deriving distribution formulas or explaining how they work”* AND *“it might be useful to explain how geometric is similar to exponential, pascal to erlang”*

BUT:

*“There are a lot of deriving problems in the homework which I think aren’t as useful for understanding the material as having more practice example problems for homework.”*

We will revisit those distributions and see how Pascal and Erlang are derived as sums of geometric and exponential. Need theory of sums “X+Y” first.

I enjoy delving into the theory and derivations myself, but the APMA exams (i.e. the final) do not test this very much and so many students feel it is very much a rabbit trail off the path of learning what is needed for exams. The MATH version of this course spends more time on theory. Some conceptual problems are important because ‘getting stuck’ for short periods on a tough problem drives the brain to increase attention and scour the known materials. This deepens understanding and causes review. Being stuck for too long gets inefficient so you should seek help if you can’t solve it on a second attempt.

For more “practice example” problems, those textbook problems are typically in that format.

*“I think that the answer keys to the homework should be posted sooner for review.”*

*“Answer keys to homework aren’t released by the midterm”*

Yes, this is regrettable. The solution sets are a project of one of the TAs, so I can’t promise more than a good effort to get them out timely. At least most solutions were posted in time, and solutions to the practice problems were posted.

*“Sometimes the notes are wrong …”*

Yes, they are new and still contain a lot of typos and other issues. I think it is better than just your hand-written lecture notes + textbook? Over time they will improve as the errors are caught. Please do submit notes about errors via email!

*“… and when class is almost over we rush through them.”*

Yes, this happens sometimes because I am not good at time management especially when explaining things. I doubt it will improve…

*“Maybe post fixed notes examples as an announcement”*

*“Notes with corrected errors and in class notations.”*

I do usually correct the notes afterward online, but it can take a week or two and I don’t announce it because it’s a bit random. I’ll try to include such announcements adding onto other announcements though.

Not sure what ‘in class notations’ means, I write the notes myself. Maybe it means posting the marked-up (annotated) files? Usually I (eventually) post the corrected notes online. Besides corrections, I don’t think my writings on the notes should be part of the notes, I feel it is just scribbling.

*“The vague grading for homework’s can be frustrating”*

I hope the breakdown into Clarity / Accuracy / Logic is more helpful than getting a single number back. I will check the grading times and see if we can add some more TA hours for adding comments particularly when Clarity scores are low.

*“I really struggle to follow the lectures with dense proofs and notation … I prefer a combination of more intuition based learning tied in with proofs.”*

Yeah I really love a good notation…

I think what I’d recommend is reviewing the notes in advance (applicable for Wednesday and Friday). When you are ‘familiar’ with the notation from having seen it once, even if you didn’t understand it the first time, it’s a little easier to swallow in the lecture.

*“Test review - The textbook problems were not an ideal way to study for the tests for me”*

I’ll try to develop more review materials. No guarantees for this semester because I’m maxed out doing the notes.

*“I don’t love having weekly assignments. I wait until the very end every time”*

For other students, not having daily HW is very important to them. I am largely ambivalent between having 2x weekly or 1x weekly HW. I try to go with what is preferred by the majority. Also, fewer larger assignments is (should be) the trend as you move up in class numbers.

*“I feel like the homework is on the longer side for a class this length.”*

*“The number of practice problems (12) is a bit much, given that we are expected to write out our process about our method.”*

Perhaps. It does feel like a biggish number and a big written product you submit each week. (Actually it’s normally 11 – 12 happened only once.) But it’s only once a week and there aren’t a lot of tests or checkpoints to worry about. The class reported average is 4.5hrs per week outside of classtime. I keep an eye on this number. The UVA paperwork expects ~6hrs of work outside class for 3 credits.

Also to recall – I fully endorse working through the HW set as a Study Group. Start at opposite ends. Help each other figure out the tough ones. You have to make your own writeup but you don’t have to ‘crack the nut’ yourself for every problem.

*“maybe try to incorporate some videos or animations”*

Good idea.

*“I’d appreciate if there were more office hour sessions or if they were longer.”*

OH time is decided by the department (4hrs), but (as mentioned in class) I’ll open up some Tuesday afternoon windows for the next few weeks. Also note that Friday there is a longer window.

I could compress and do 2hrs on Tuesday and 2hrs on Friday in single windows. Not honestly sure if students would prefer that on average.

*“Some homework problems are really hard”*

*“The homework problems can be hard”*

True. I hope every student feels challenged in some way. But I do want enough easier problems that the collection is not overwhelming.

*“There was no rubric for grading of the presentations, so it’s difficult to know why and where we lost points so we can prep for second round of presentations.”*

I will think about this issue. I am concerned that if I’m trying to follow a rubric and fill boxes while evaluating each student, the presentations will become more formal and less conversational. I’d interact less.

For the most part I am grading between 90% and 100% (for students who demonstrate having done some preparation), and between there it is *mostly* based on whether you have understood the problem well. If you don’t feel confident in your understanding in advance, you should seek clarity from a TA or peer beforehand. Good organization and explanation can add a marginal increase or decrease to the baseline coming from your revealed understanding.

*“I sometimes find it hard connected what we do in class to the homework”*

I acknowledge that many homework problems are not imitations of problems or scenarios from class, and you have to figure out a new thing. Higher math education is like that, in my experience and perspective. Active solving of novel problems drives deeper understanding.