

MATH20902: Discrete Mathematics

Week 3 Questionnaires, Feb. 2020

On the whole, I was relieved to learn that many students are enjoying the material and are happy with the course: all but nine of the 63 responses I received were either happy with the pace of lectures or declined to comment. There were also a few things about which I had even stronger positive reviews: most people seemed to like the online lecture notes and the simultaneous availability of problems and solutions. Students who were less than completely happy voiced various concerns, some of which are list below, along with my responses and proposed remedies.

Remark/Problem	Response/Proposed Remedy
Pace of lectures: too slow	This was a minority opinion—just one comment—and, especially in light of the many more students who are happy with things as they stand, I'm afraid I can't do much for the person.
Pace of lectures: too fast	This was also a fairly rare complaint—just nine students—so I don't think I'll change much, though I would encourage people who are finding the lectures too fast to look at the notes before lecture.
Handwriting could be larger	This is easy and I'll address it, but I urge you to make good use of the online notes too.
Lecture notes not available	I was a bit mystified by this, but perhaps the person meant that the notes aren't available on Blackboard. That's true, but I'm unwilling to try to maintain two copies of the course materials as they'd almost certainly get out of sync, generating unhappiness and confusion. For clarity, all materials for the course are available at https://bit.ly/MancMathsDiscrete
Examples classes: do more on the board	I get this request almost every year, but it is usually balanced by people who say they like the current model, in which more work gets done one-on-one. This year though, the more-on-the-board crowd seem to be the majority, so I'll start to do that.

How/when will we do exam prep?

Underlying some of the requests for more or different kinds of problems in the example classes seemed to be a view that we should be practicing exam questions. I don't want to do this for several reasons. Mainly, I believe that weekly problem sets should be hard(ish) and that exam question should be easy (at least for people

who have done the problem sets). Weekly problems should be hard because it's more fun to solve challenging problems and during the term we have the time to work on them. Also, I believe one develops deeper insight by grappling with harder problems. But exam questions should be easy because anxious people need to be able to answer them under time pressure. Thus I'd rather devote most of the term to helping people with hard-but-instructive problems rather than (necessarily simple) practice exam problems.

All the same, I do realise that students eventually need to study for exams and want to do well, so I also do the following things:

- Put old exam problems on the Problem Sets and offer verbal feedback about written solutions that students bring to the example classes.
- Provide detailed feedback after each exam. This is available on the same web page as the notes, problems and solutions and, in addition to discussing what students did (or didn't) find difficult, includes some reassuring statistical data about the average and distribution of marks, both on a question-by-question basis and for the course as a whole. Similar feedback is available for the coursework.
- I devote the whole of the last week of the term (this year that'll be 4–8 May) to doing old exam problems on the board. Unfortunately the last Friday of the term, 8 May, is a bank holiday and so there will be only one lecture slot, Tuesday devoted to old exam problems.
- I provide a list of problems from throughout the term that are particularly relevant for the exam. This list typically includes some material that's not on the exam, and may skip a few topics that do appear, but it provides a rough guide, and also cuts down on the need to review every single one of the many problems in the Problem Sets.