

Consultative Committee for Mathematics in the Natural Sciences

*Minutes of a meeting held on
Friday 9th November 2018 at 1.15 p.m.,
in Meeting Room 20, Centre for Mathematical Sciences, Clarkson Road*

Present: Dr Sue Colwell (Convenor), Dr Austen Lamacraft, Dr Jorge Santos, Dr Mark Spivack, Dr Christopher Thomas, Ms Anna Bui, Mr Ross Brown, Mr Fadle Arouna

Apologies: Dr Alex Thom

Dr Colwell left the room whilst the IA B course was being discussed.

1. Minutes of previous meeting and matters arising.

The minutes of the previous meeting were agreed.

2. Part IA, A course: Ms Bui reported.

Lecture Course: Dr Dalziel.

There had not been much feedback. The lecturer uses handouts which are complete except for the examples, and he goes through them in the lectures. The students think the pace is generally fine, and his explanations are good, but some think he spends too much time recapping from the last lecture, and that he focuses too much on the easy material, and then goes over the harder material too fast. The handout is good for looking things up in afterwards so they do not mind. The examples he does in lectures are not representative of Tripos Questions and the students would prefer if some of them were. The examples sheets are fine with a reasonable balance of difficulty.

The lecturer is sometimes hard to hear, but is usually audible, and sometimes he writes too fast. Attendance has dropped slowly over time, initially the room was full, but now people don't need to use the balcony. People tend not to come on Saturdays and some people leave about 5 mins in to the lecture if they realise they have seen the material before.

3. Part IA, B course: Mr Ross reported.

Lecture Course: Dr S Colwell

The course representative had sent out a questionnaire. Generally, students are happy. The most common request was for lectures to be recorded and students think it'd be particularly useful for the more difficult bits of the course. Discussion of this was deferred to AOB.

The lecturer provides handouts with gaps in -- during the lecture she goes through these and fills in the gaps. Around half think the lecturing style is okay whereas half think it's too mundane because the lectures are repeating topics they covered at A-level. The option of replacing one of the IA NST courses with a pure maths course was suggested, particularly now that it won't be possible to take 25% computer science.

The lecture handouts are on Moodle. Some of these are orientated incorrectly and so have to be rotated before reading. There were requests for more complete (fuller) handouts, more like those for course A. Some thought that it'd be useful if the provided printed lecture notes were hole-punched.

The example sheets are fine. Some students would like extra optional supplemental questions to stretch those who are finding a topic straightforward.

The lecturer is using a microphone. She is a bit quiet at times but this is getting better. Handwriting can be a bit small from the back. To start with there weren't enough seats in the lecture theatre and now it's roughly 80% full.

4. Part IB course: Mr Fadle reported.

Lecture course: Professor N Peake.

The lecturer produces handouts with gaps, and fills them in during the lectures. The filled in handout then goes up on Moodle. He uses one visualiser (note: although there are two visualisers and three projectors in the room, it seems impossible to use two visualisers at once). People are generally happy with the style and think the lecturer explains concepts well, but they would like a few more example questions during the lectures as at present they are pretty much all proofs. People think he should have spent less time on the basic material at the start of the course to leave more time for the hard stuff. The rep said that the real-world examples are not only all about physics, but require knowledge from physics, and as he didn't do physics he felt this was inappropriate. He also said that physics knowledge was needed for some examples sheet questions, and one exam question. The staff members commented that the cleanest examples usually came from physics, but that a great deal of care was taken, especially with examination questions, to ensure that no physics-specific knowledge was needed, so this exam question must have slipped through the net.

The students would like scheduled drop in sessions for the MathComP part of the course.

The Examples sheets are fine, and the examples classes (of which there has been one so far) are useful. The students would like these to be recorded even if lectures are not.

The attendance has hardly fallen from its initial level. The room is still full, although people no longer have to sit on the steps (or would not have to if people moved to fill up empty seats).

5. Any other business.

The results of the second week questionnaires had not been circulated in advance, but were available at the meeting and the student representatives were given time to read them. The comments were generally in line with those they themselves had received.

The student reps asked whether the Undergraduate Office could provide more help in sending out questionnaires for them. The Convenor reported that the Maths for Natural Sciences Teaching Committee had asked that that student representatives be encouraged, where possible, to provide feedback and suggestions for the Faculty questionnaires, in favour of circulating their own. Where they do produce their own the reps are asked to filter their results and give a narrative report, rather than just quantitative feedback which is already covered by the second week and end of term questionnaires. There was a brief discussion of other means of gathering feedback using social media. etc. The Staff members pointed out that the lecturers would be happy to allow the student reps to address their classes (briefly) to remind students who they were, and to ask for feedback in their preferred form.

There was a discussion about Lecture Capture. The students feel that it would give them a chance to go over lectures again, in particular to repeat the bits they had initially found difficult, or missed whilst they were trying to make notes on their handouts. They pointed out that it is standard in other departments, and that many lecture theatres are already equipped for it. The staff members were doubtful that it was appropriate for mathematics lectures, and pointed out that a maths lecture, like any live performance, would inevitably contain small mistakes or infelicities, and might not bear continued repetition. They pointed out that videos specially made for distribution were usually condensed from many hours of raw material. They also thought that it might encourage students not to attend the lectures. The students asked that it at least be given a trial for a couple of weeks, and if that is not possible, they would like more discursive handouts.

The student reps also reported that most people did not use books, but those that did found the book by Riley Hobson and Bence to be useful.