

Consultative Committee for Mathematics in the Natural Sciences

*Minutes of a meeting held on
Thursday May 18th 2017 at 1.00 p.m.,
in Meeting Room 20,
Centre for Mathematical Sciences, Wilberforce Road*

Present: Dr Sue Colwell (Convenor), Dr Jorge Santos, Dr Mark Spivack, Dr Christopher Thomas, Mr Tom Benn representing Mr Dobrik Georgiev, Mr Sridhar Prabhu.

Apologies: Dr Austen Lamacraft, Dr Alex Thom, Mr Alex Petrosyan.

* Dr Santos left the meeting whilst the IA A Course was being discussed.

1. Minutes of previous meeting and matters arising.

The minutes of the previous meeting were agreed.

The Convenor reported that she had consulted the Head of Department about the issue of lecture capture and he had stated that "This is an issue the Maths Faculty has discussed on several occasions and we have decided it is not something we wish to pursue at this time". The Convenor also pointed out that there is a high level University Committee, the Digital Teaching and Learning Sub-Committee (DTLSC) of the Student Information Systems Committee, which is examining this issue and there is a Lecture Capture Project being trialled in some departments.

2. Part IA, A course: Mr Benn reported.

Lecture Course: Dr Santos

The feedback has been very positive, and most people are happy, although some think the course is too easy, and some think it is too hard. There is the usual split between those who have seen the material before, and those who have not. There have been a lot of comments on how good the lecturer is, and how he makes things interesting. He is audible and legible, although he doesn't actually write much, he just highlights or circles material on the slides. The only criticisms were that the lecturer sometimes jumps straight in to the algebra instead of treating things more intuitively and one lecture was too fast (, but that was the exception).

There were some requests for recording of lectures (but see above). The lecturer delivers handouts in batches of about five lectures but some people would prefer them in bulk as they would be easier to handle. They are bare in detail, just printouts of the slides shown in the lectures. Some students think they are good and clear, but some would prefer a 'booklet of the course' which some lecturers produce. There was a request for a course summary.

The examples sheets are fine with a good mix of hard and easy questions. It was noted that there was no example of calculating the inverse of a matrix. The lecturer did not hand out a paper copy of the examples sheet, but the students would have liked one.

The attendance is good compared with previous terms, and is estimated at about 120 people.

Part IA, B course: Mr Prabhu reported.

Lecture Course: Professor Allanach

The student representative had circulated a questionnaire and had had about seventy responses.

The lecture is legible and audible. He uses two projectors and keeps the previous slide up when he moves on to the next one. 65% think this is good, and 35% think it is not, as it can be difficult to see from the edge of the room, and the projectors produce a skewed image.

The course content is generally not trivial, especially suffix notation. The lecturer is now doing pdes. The pace is good given that the material is significant. The handout was distributed all at once. It is almost complete; the students just have to fill in the examples. The examples sheets are short, one per week. The balance of questions is fine. The questions are not the same style as Tripos questions, and although the lecturer does solve problems in class, he does not do

Tripes Questions. There are no examples classes, and the students would like some practice with exam questions.

The attendance is noticeably less than last Term, the room is 70/80% full. The student rep thought the missing students might have moved to the A course, but Dr Santos thinks this is not the case.

4. Part IB course: Mr Petrosyan, who was unable to attend the meeting reported later by e-mail.

Lecture course: Professor Kent.

Overall, the feedback has been positive. Students often remarked that the course was moving at a much quicker pace than the previous two. Some people thought that the Normal Modes section could be shortened, however other people regarded it as useful revision for Physics B.

There have been various technical problems and on one occasion the projector was unusable, so the lecturer had to use the blackboard. The lecturer's handwriting is sometimes illegible, especially in the digital slides. As these are rarely written in real time, the students suggest he typeset them before the lectures. Similarly some students find the lecturer hard to follow because of his manner of speech. The Lecturer encouraged active participation, often asking the students questions about what the next step might be. They found this very helpful, especially when covering examples or applications of theory.

The handout was well received; it is complete and generally thought to be as good as an introductory textbook. The students request more contrast in formatting, to identify non-examinable sections.

The example sheets were thought to be reasonably good, but some questions were too short, while others were tediously long. The students would appreciate some visual indication of the length or difficulty of a question.

The examples classes were very well received. They focused on one topic at a time, and were more frequent, and managed to cover more information than the examples classes for the previous two courses. This was because the lecturer prepared his notes in advance and only spent time explaining difficult concepts so he was able to cover more ground. The students commented that having two slides visible during the examples class would have saved the lecturer the trouble of flipping back and forth, and using bookmarks within the presentation would also have helped.

The overall verdict was that "the timing is good, the delivery has a few minor flaws, but the course is otherwise brilliant".

5. Any other business.

There was a general discussion about the difficulty of the IA courses, and the student representatives said that the level was appropriate, and did challenge them sufficiently. The Computer Scientists thought that the examples in the previous terms were too physical, and they found them confusing, but this term's were better as they were more algorithmic.

The student representatives reported that although people don't use books much, the book by Riley, Hobson and Bence was still found useful.

The Committee thanked the student representatives for their efforts throughout the year and wished them well in their examinations.