

Consultative Committee for Mathematics in the Natural Sciences

*Minutes of a meeting held on
Thursday 22nd February 2018 at 12.00 noon,
in Meeting Room 10, Centre for Mathematical Sciences, Clarkson Road*

Present: Dr Sue Colwell (Convenor), Prof John Richer, Dr Mark Spivack, Dr Jorge Santos, Ms Astrid Berge, Ms Cecelia Catuogno-Cal.

Apologies: Dr Alex Thom, Dr Christopher Thomas, Ms Evelina Polyakov

1. Minutes of previous meeting and matters arising.

The minutes of the previous meeting were agreed.

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

Lecture Course: Dr Borzym

The major comment was that the students felt the lecturer was pitching the course at too high a level. They feel she is lecturing to them as if they are Maths Tripos or B course students, and telling them things they don't need to know to pass the exams. As the lecturer previously gave the Lent Term B course lectures there is a suggestion that she has not modified her approach enough, and has not taken in to account the differences in the Michaelmas Term's A and B course material (e.g. multiple integrals are taught in the B course, but not in the A course). There is a widespread view across the Colleges that many students are confused and do not understand what is going on. The second week questionnaire bears this out; although it is natural that the A course will attract the mathematically weaker students, the percentage finding the material always or usually comprehensible is much lower than for the other courses.

The lecture notes are complete and are felt to be good, but rather dense. Some think it would be helpful if they had to make their own notes, and if the lecturer wrote down more.

The Examples Sheets are quite hard, and students feel there are too many questions on them. Some supervisors do not understand that students do not have to attempt them all. The lecturer has got ahead with handing out answers, and there was some technical difficulty with finding Question Sheet 2 on Moodle.

The lectures themselves are good, she tries to engage her audience, makes sure that she is pacing things appropriately, and keeps asking whether people are following. She is audible, and legible although she doesn't write much.

The attendance has fallen off recently, to about 75% of its initial level. Some people have changed from the B course to the A course, but not very many.

3. Part IA, B course: Ms Cecelia Catuogno-Cal reported.

Lecture Course: Dr R. Rafikov

In general people are very satisfied with the course, and the rep had found it difficult to get much feedback. The lecturer is very good; he speaks clearly, interacts well with the people in the room, and stops at regular intervals to make sure he is making sense. He uses handouts with gaps, and he always circles the important points. There were some technical issues with the handouts not arriving on time but that has now been rectified. He does extra examples that are not in the handouts.

The main complaint is that the course doesn't go far enough. Many people feel they have covered much of the material already in Further Maths, and that despite the initial warnings, Further Maths A level is not a prerequisite for the course. The Examples Sheets are basically fine, and cover everything in the notes but people do not like Question 10 on the first sheet (a technically complicated question about an ode representing an electric circuit).

The attendance has been maintained and the room is still full. People feel that they're not going to learn as much if they don't go to the lectures.

The course is as hard as expected, i.e. challenging but not impossible.

4. Part IB course: Ms Polyakov who was, at the last minute, unable to attend the meeting reported later by e-mail.

Lecture course: Dr C. Thomas.

The student rep. had circulated her own survey, and had received 38 responses. The students feel that the speed of the lectures is fine, and that the lecturer's writing is legible (apart for some confusion between Zs and 2s). He displays two screens at once so that students have plenty of time to copy things down.

The students feel the notes are well organised, although some would like them to contain more motivation for certain steps, e.g. why a certain substitution should be used.

He takes short breaks in the middle of lectures which he uses to present e.g. biographies of mathematicians whose work features in the lectures. The students appreciate the breaks, but they would prefer other material such as maths curiosities, stories about the 19th century Tripos exam and so on.

The examples classes were found to be useful if a bit slow. Some students would prefer it if he emphasised the key points but skipped most of the algebra. They would appreciate a distinction being made between explanatory comments and the detail expected in an exam answer.

The students would like the examples sheets to be structured so that they could attempt a few more questions after each lecture rather than having to wait and then suddenly being able to tackle a lot.

In general the students feel the lecturer is good, explains the material well, and generates interest and enthusiasm.

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 IA A course rep said that she was enjoying this term's course more than last term's even though people struggled more. The lecture notes are more comprehensive than necessary, so people don't need books. The IA B course rep said that she felt there was no need to consult textbooks, but it would be helpful if the annotated notes could go up on Moodle.

One of the lecture courses was affected by the strikes, and the students expressed the hope that the department would sort out replacement lectures or the university would reach an agreement with the union as soon as possible (especially as some international students are paying very significant fees).