

Consultative Committee for Mathematics in the Natural Sciences

*DRAFT Minutes of a meeting held on
Monday 10th May 2010 at 3.30 p.m.,
in Meeting Room 11, Centre for Mathematical Sciences, Clarkson Road*

Present: Dr Ben Allanach, Dr Robert Best, Dr Sue Colwell (Convenor), Miss Theresa Kreiger, Miss Laura Howell, Miss Lindsey Tate.

Apologies: Prof Steve Gull, Dr Harvey Reall, Dr Mark Spivack.

1. Minutes of previous meeting and matters arising.

The minutes of the previous meeting were agreed.

2. Part IA, A course: Miss Howell reported.

Lecture Course: Dr Jardine-Wright.

The feedback from this course has been very positive overall, and the students think the lecturer is the best so far. She is very audible (indeed one might say that she shouts), and she made it clear at the beginning how she was going to run the lectures, i.e. she would start at 9.00 and not wait for latecomers. She has stuck to this, and the attendance is very good, even at 9.00. The starting pace of the lectures was good, and she is the only one of the lecturers who has gone at the right speed for those who had not done Further Mathematics A level. Even those with Further Maths appreciate it as there has been a long gap since they last met matrices.

The notes are very good. They summarise key concepts initially, and then go in to more depth. The notes have gaps for the students to fill in and they are not comprehensible until this has been done. The full notes are not yet on line, and the students hope that they will be soon. The lecturer does worked examples in the lectures; she puts up an example, gives everyone a few minutes to try it, and then goes through the answers. On average she does one example per lecture. The examples sheets are good, and they contain a manageable number of questions of varying difficulty.

The only negative comments were that the lecturer ran out of time for the last part of the matrices section, and went over eigenvalues and eigenvectors too quickly. The students also feel she didn't spend enough time on suffix notation.

The final comment was that the lecturer doesn't seem to be very happy about giving the course, and the students would prefer her to be more obviously enthusiastic about it.

3. Part IA, B course: Miss Tate reported.

Lecture Course: Prof. Papaliozou

The course got off to a bad start as the lecturer initially had trouble seeing what he was writing on the OHP, and he also overran as he could not see the clock. He has not changed the printed notes from last year's, which were written by the previous lecturer, but he is delivering the course in a slightly different way, and is adding bits to the notes as he goes. He puts the partial notes up on overheads, and fills in the gaps in red. The students then have to copy down the red bits, which is fine, but he then annotates or underlines bits, and sometimes writes extra material on plain acetates. The students find it difficult to work out where the extra material fits in to the existing notes, and the lecturer does not always give the students enough time to copy it all down. Also, his handwriting is sometimes difficult to read, especially when a lot of suffices are involved.

The students find the material too pure mathematical, and think that the lecturer spent too much time talking about axioms, and in setting things up. One student had been told by her supervisor to ignore the first eight pages of notes (about two lectures) as the material would not come up in the exam. The senior members of the committee commented that the material was necessary for a proper understanding of what followed, even if examination questions on it were

uncommon. The students thought that the lecturer treated matrices too much as abstract mathematical objects, although he did do examples.

The course representative had had no comments on the examples sheet, so she took that to mean it was generally satisfactory.

The attendance at the course had dropped markedly after the first couple of lectures but is now stable. (There has been no net increase in numbers attending the A course.)

4. Part IA, Computer Techniques and Applications: Miss Tate and Miss Howell reported.

Lecture Course: Dr King.

Despite concerns voiced in earlier terms, in the end the students were adequately briefed, and did know what was expected of them. The logistics of the submission process worked well. The exercise was fairly straightforward apart from the last part. Eleven of the twelve solutions to the problem were easy enough to find, but finding the twelfth solution had been tricky and required a lot of work. Some students had heard that they would lose a mark for every solution they failed to find, and felt that they were required to put in a disproportionate amount of work for the last mark. Other students had thought that the problem was fair.

5. Part IB course: Miss Kreiger reported.

Lecture course: Prof. Green

The feedback about this course had been extremely positive, and the lecturer was thought to be the best so far. He is working with somebody else's handouts, but he puts up slides with his own summary of the handouts. He is audible and legible, but what the students value more is that he comes over as very knowledgeable and enthusiastic and they feel he is talented at conveying the knowledge and its importance.

The attendance has not been as good as last term. It has gradually declined, and the room (Arts School Room A) is now about 60% full. Some students prefer to concentrate on revision, and are planning to ignore the last two questions on the exam paper. The convenor commented that in her opinion this was a mistake as the questions on the final part of the course were sometimes quite easy. There was some criticism of the fact that there were four questions on the Easter Term's course, but it was pointed out that this was proportional to the relative number of lectures in the Easter Term.

By contrast the examples class had not gone very well. The lecturer had not told the students in advance what questions he was going to cover, and he repeatedly said that he would rather answer students' questions than just go through the examples. There were few questions so there was a feeling of struggling to find something to talk about. In the end they went over three exam questions in two hours. The attendance was not good, and many of those who did come left early. The students request that they are told in advance which questions will be covered. There were no comments about the examples sheets.

Initially people had been concerned that they would not be able to cope with the material in the course, but they have actually found it quite manageable.

6. Any other business.

There were some comments of the variety of different electronic systems that the students had to use to obtain their course materials and information. Although most departments use CamTools, each department seems to have a different approach to how it stores e.g. old exam papers, or additional course materials, or even organisational information. The convenor commented that this was in the nature of the Natural Science Tripos. The students agreed that it did not matter a great deal, providing the various different sources of information were consistent (which was not always the case).

The students confirmed that the book list in the schedules remains a useful guide, although in practice people do not use books much, but rely on their lecture notes.

The convenor thanked the student representatives for their efforts throughout the year.