

# Consultative Committee for Mathematics in the Natural Sciences

*DRAFT Minutes of a meeting held on  
Thursday 13<sup>th</sup> February 2020 5.00 p.m.,  
in Meeting Room 10, Centre for Mathematical Sciences, Clarkson Road*

Present: Dr Sue Colwell (Convenor), Dr Robert Jack, Dr Austen Lamacraft, Ms Beatrice Ricci, Ms Hannah Seabrook

Apologies: Dr Matthew McCullough, Mr Karl Mose, Dr Jorge Santos, Dr Mark Spivack.

## 1. Minutes of previous meeting and matters arising.

The minutes of the previous meeting were agreed.

**2. Part IA, A course:** Mr Mose, who at the last moment had been unable to attend, reported by e-mail.

*Lecture Course: Professor Worster.*

Mr Mose had sent out a mail asking for feedback from the students on the course and received around 10 replies. The responses were very positive, the students liked the lecturer's enthusiasm and style, and also thought his examples were interesting.

He does not provide printed notes, and students have to take their own notes although he does give out scans of his notes later. This lack of lecture notes was the second most common comment in the e-mail responses. One student commented that the lecture notes that are given out aren't always very legible, and they're hard to follow through since it's just a scan rather than typed text. The rep himself has not found the notes very helpful for revising topics either, and has often had to use external sources to revise topics he didn't fully understand during lectures. Other students also stated that they'd found the lack of notes to be a big issue when missing lectures. Some also said they'd like to have notes to follow along with during the lectures. Some suggested that the lecturer release the notes that he seems to be reading from.

[Note: The responses to the second week questionnaire are mostly positive about this, saying that it ensures the pace is slow enough so that people can really understand the maths the he is writing down. They also feel it helps them concentrate and it helps the lecture material to sink in.]

The most popular request, mentioned by almost all of the respondents, was for lecture videos. Some mentioned that they found that the course was very hard to catch up with if they had missed lectures due to sickness or other reasons and felt that filmed lectures would be a great help with this. The rep's opinion was that filmed lectures might reduce attendance to some extent, but that the benefits outweigh the cons, especially considering they do not have any well-formatted lecture notes. Videos could be released with some delay to encourage students to attend lectures, but at the moment there is very little material given out for revision.

One student felt that the lecture hall was very uncomfortable, especially for taller students, and noted that most people seemed to be sitting awkwardly.

Some students mentioned they wished the course was at 10am rather than 9am.

**3. Part IA, B course:** Ms Ricci reported.

*Lecture Course: Dr R Rafikov*

Overall the feedback on this course was very good. The lecturer is engaging and people like his enthusiasm and find his explanations good, but some areas got mixed feedback. He puts up notes with gaps, and fills them in. Some found the notes confusing as there are lots of missing equations and it makes it hard for them to read ahead. The lecturer is audible but some find his handwriting hard to read. He does speak clearly, however, so most people can follow what is being written. He only uses one overhead. He uploads his own scanned notes after every lecture, but as they are scans they are hard to read and can't be edited. The students think this would be fine if the lectures were recorded, but is a problem as they are not. Students would like the complete

PDF for the course to be put up on Moodle, and if that is not possible then they would like the complete notes uploaded in chunks.

There were some comments about pacing. Some people find he is too slow when going over definitions in notes, but too fast when going over proofs so people don't have time to copy and digest. There is also a difference of opinion between Computer Scientists who found some concepts from physics being gone over too quickly and Natural Scientists who thought that e.g. the simple harmonic oscillator could have been gone over faster.

The first half of the Examples Sheet questions (ODEs) half matched up well with the lectures, but the second half (partial derivatives) was too far ahead so people were stuck without questions they could attempt. Some people would have preferred some exam style questions in lectures and on the Examples Sheets.

The attendance is a bit down on last term, but is now stable although it does dip a bit on Saturdays.

#### **4. Part IB course:** Ms Seabrook reported.

*Lecture course: Dr S Cowley.*

In general there was very positive feedback on this course. The lecturer is engaging, and his manner keeps the students alert. He gives good explanations and the students appreciate his topical humour and enjoy his demonstrations. He hands out complete notes so there is nothing to fill in. He writes everything out as he goes along, (sometimes in abbreviated form,) and this means that the pace is good, although some feel he could go more quickly over the parts that are just algebra. The one criticism was that the notes are typographically rather dense and hard to read, and the students would appreciate the font size being a bit larger and the notes spaced out more.

The lecturer is updating old notes, and so only handing out a few sheets at a time. The students would appreciate them being handed out in larger chunks and hope that this will be possible next year.

The lecturer does quite a lot of examples and the students think it would be good if there were some from subjects other than physics.

The Examples Sheets are at the right level. The first Examples Class was not well attended, but there had been some confusion over whether it was actually happening.

Attendance is down a bit on last term, but still good.

Computer Course – There had been comments that it would be more useful if this course was done in something other than Excel. The Convenor said that this was being worked on.

#### **5. Any other business.**

The results of the second week questionnaires had not been circulated in advance but, as usual, were available at the meeting and the student representatives were given time to read them. For the IA B course and the IB course the comments were generally in line with those the reps had received themselves. As noted above there were significant differences for the IA A course, but it was not possible to discuss these in the meeting.

There was further discussion about Lecture Capture. As well as the points made by the students last time, the Convenor had received other requests made to staff members. It seems that all the other IA Nat Sci lectures in the BMS (where the IA B course takes place) are already recorded and so it would require little extra technical resource to record the maths lectures too.

The student reps confirmed that most people hardly used books, relying on their lecture notes or on material on the internet. The IB rep said her DoS had recommended the book by Riley Hobson and Bence, but she does not use it regularly.

Next Term's meeting will be arranged for the middle of the lecture period, probably in the third week of lectures.

As the IA B course rep will be changing to the A course it will be necessary to find a new course representative. The Convenor thanked Ms Ricci for her contributions to the Committee.