

# FACULTIES OF MATHEMATICS, COMPUTER SCIENCE & STATISTICS

## JOINT CONSULTATIVE COMMITTEE WITH UNDERGRADUATES

Meeting commenced 1.01pm on Friday 3<sup>rd</sup> February in S1.37, Mathematical Institute.

Present: Dr Richard Earl (Director of Undergraduate Studies and Joint Committee for Mathematics and Philosophy; chair), Helen Lowe (Deputy Academic Administrator), Dr Janet Dyson (Faculty Teaching Advisor), Dr Rebecca Cotton-Barratt (Admissions Co-ordinator), Daniel Fletcher (MURC Arts Rep), Utsav Popat (MURC President, MURC Maths and Computer Science Rep), Sam Davies (MURC Mathematics and Philosophy Rep, MURC 4th Year Rep), Liam Stigant (MURC Questionnaire Rep), Rebecca Burmiston (MURC Secretary), Lily Miles (MURC Outreach Rep), Marianne Cain (MURC Diversity and Inclusion Rep), Matthew Hillman (MURC Treasurer, MURC First Year Rep)

### 1. Meeting held on Friday 28<sup>th</sup> October 2016

- (a) Minutes (attached, JCCU-4-28.10.16-M (1a), **page 1**)
  - i. The minutes of the last meeting were approved.
- (b) Matters arising
  - i. There were none.

### 2. Reports from the meetings of the Faculty and Teaching Committees

- (a) Mathematics
  - i. Maths and Computer Science mini projects
    - 1. In the 4<sup>th</sup> year, some Mathematics & Computer Science students do mini projects in Michaelmas, but don't receive their marks for these until the end of the year. The plan is now for those marks to be released earlier in the year. This will happen from next year onwards for Mathematics & Computer Science and Computer Science students only. The purpose of this is for students who are doing more than one project to gain feedback before their next project is due.
  - ii. Changes to projects
    - 1. For next year, there will be a change in the dissertation format in preparation for the standalone 4<sup>th</sup> year. The number of students taking projects is increasing so the department wants to streamline the way projects are offered. A menu of projects will be offered, but students will still be able to make individual arrangements with individual supervisors. This arrangement will come into place for next year. Richard Earl will write to subject panels – ideally, the department wants a couple of dozen options on the project menu. It was noted the present system is onerous for project committee and cannot easily accommodate many students.
    - 2. There will be a change in the number of tutorials offered per dissertation, from 8 to 6. Teaching Committee has approved of this. This will enable students to take the lead more, and will come into effect for next year in Part C. The word count will be same for next year, but could potentially be decreased to 7,500 words in the future (from 10,000 words now).
    - 3. In the future, dissertations could also be made obligatory. These changes make this possible.
  - iii. 4<sup>th</sup> year MSc

1. This has been passed by various committees but does not have the full go-ahead yet, although there is a “keenness to move forward”. The first 4<sup>th</sup> year MSc entrants starting in 2018 is a possibility.
  2. The maths department is definite in saying that the 4<sup>th</sup> year MSc would only be established with an increase in the number of students. In the first year, there would be perhaps an extra 25 students taking the 4<sup>th</sup> year MSc, in addition to the students taking the 4<sup>th</sup> year of their MMath. This could potentially be increased to 50 students in subsequent years.
  3. It was noted that the 4<sup>th</sup> year MSc is not expected to have an impact in terms of grades given to Part C students, although a slight tightening of Part B to C progression was suggested.
- iv. Request by MURC that examiners are asked to attend throughout exams
1. It can't be made obligatory for examiners to stay throughout the whole exam, but the department agreed that it would be strongly encouraged, and that this request would be passed on to the chair of examiners.

(b) Statistics

- i. Changes to 4<sup>th</sup> year
  1. If the Maths department makes changes to its 4<sup>th</sup> year, the Statistics department will do the same
- ii. Admissions Routes
  1. This is still being discussed, but the Statistics department has suggested a single route into both Maths and Maths and Statistics. Students would apply for a course tentatively titled “Mathematical Science” and then go into either the Maths and Statistics stream at the end of first or second year.
  2. This new approach is favoured by both the Maths and Statistics departments, as it would make the admissions process plainer and stop Maths and Statistics admissions numbers fluctuating (based on people applying guessing which of Maths and Maths and Stats is ‘easier’ to get into).
  3. Students would be asked at the end of first year which stream they want to go into, but wouldn't be locked into this until third year.
  4. A move to this system could also increase the number of students taking Maths and Stats, as the way statistics is taught at A-Level is very different from how it is taught at university, and students may not realise this when applying.
  5. It was noted that “Mathematical Science” was not a well-liked name for the course. It was suggested all candidates could apply for a course just called “Mathematics”.
  6. The prospectus could be changed so that Maths and Maths and Stats have two shared pages between them, not a separate page each.
  7. It is as yet unknown how a move to this system would affect funding for either degree.

### 3. MURC Business

- (a) Lecture notes (archive for lecture notes, lecture notes being uploaded as zip files)
  - i. An archive of notes is likely to be made available, but only for next year

1. The problem with an archive is that the course management system has changed and it is difficult to move files across. This means that the problem should be resolved in a couple of years. It was noted that undergraduates are currently blocked from accessing notes on the old system. This system is the same as in previous years, but in previous years students could not see the archive and were unaware of its existence.
  2. It was also noted that there have been problems in the past with people doing old problem sheets by accident when past notes and problem sheets are made available. It was noted that students could find books or email lecturers if they require additional notes.
  3. It was brought to the JCCU's attention that Maths and Philosophy and Maths and Computer Science have to choose by 10 February whether to take short options, and would like to be able to see what they're like from old notes before they choose. It was decided that a PDF of last year's short course lecture notes (with a warning they're last year's notes) would be sent to Part A students to help them decide. For next year, the procedure would be more systemised.
- ii. Some lecture notes are still being uploaded as zip files
1. This means students are unable to open them on some phones and tablets.
  2. It was noted that if students find notes are uploaded as zip files, it is best to email the lecturer directly (CC'ing Helen Lowe in).
  3. The system does not have an upload limit which converts large files to zip files.

(b) Pay for TAs

- i. MURC noted that they had been approached by a TA who had concerns about TAs' pay and workload, and how this affected undergraduate students. MURC also noted that undergraduates greatly valued TAs, and expressed that they wanted them to be treated well by the department.
- ii. It was noted that TA pay this year has increased 10% over the normal implement.
- iii. The department is discussing pay/hours of TAs currently, and Richard Earl will discuss it when he meets with the Graduate Consultative Committee next week.
- iv. The department is also trying to find ways in which TAs who are doing a good job can be recognised in the same way that class tutors are. However, the department does not want to place unreasonable expectations on TAs (who should also be doing research/a DPhil).

(c) List of graduate reps

- i. MURC noted that they have little to no contact with graduate reps, making it difficult to liaise with them on issues which could affect both undergraduates and graduates in the Maths department.
- ii. It was noted there is a page on the Maths Institute website with a list of graduate reps and their contact details.
- iii. The department do not want to prevent discussion between graduates and undergraduates, but also do not want to create more work for graduates.
- iv. It was suggested there could be a joint JCCU/CCG social, for committees to meet each other and as a thank you for the work they do.

(d) Lecture capture

- i. It was hoped that the lecture capture trial in the Maths Institute would begin at the start of Hilary, although it will now be starting in Trinity. The main problem with this is that there are far fewer lectures in Trinity than Hilary.
- ii. It was noted that even if no lecturers wish for their recorded lectures to be available to students as yet, a lecture could still be reviewed in a MURC or JCCU meeting.
- iii. It was suggested that recordings for the trial could be made in three rooms of differing sizes (for example, L1, L4 and C1) to see how lecture capture worked in different rooms.

(e) Clarification of USM algorithm

- i. MURC noted that a student had approached them with concerns about how the USM algorithm was used to assign marks to papers, the extent to which the examiners used the algorithm when grading papers, and especially how much the algorithm for Parts B and C depended on student results in Part A.
- ii. It was noted the department was unable to provide definitive figures at short notice, although could provide more data if necessary.
- iii. The department said that the algorithm is indicative to examiners of the levels of students who should be scoring within certain bounds on each paper, and although it is the default mechanism it is the examiners themselves who have the final say.
- iv. The algorithm for Parts B and C uses results from Parts A and B in order to decipher whether, for example, a large number of students receiving high marks on a paper is due to an easy paper, smart students or a mixture of the two. However, this algorithm is still only a starting point.
- v. It was also noted it is harder for examiners to set boundaries at Part A, as Part A boundaries are not based on Prelims results.
- vi. Another concern which was raised by students was that in Part A, Maths students were felt to score higher than Maths and Stats students, which could make basing Part B grade boundaries on Part A results unfair to Maths and Stats students. However, no evidence was found that the algorithm is prejudiced based on this, or that it advantages either students who take more pure or more applied courses. In addition, the low number of students admitted to Maths and Statistics makes comparing data from the course to data from Maths difficult.
- vii. It was noted that more clarification could be given on the Examiner's Reports about how the algorithm is used. However, more analysis of the algorithm may need to be done first.

#### 4. Departmental Peer Support

- (a) It was noted that both student and the department would like for more support to be given to Maths students in 3<sup>rd</sup> and 4<sup>th</sup> year, and that college support structures may not be helpful if no peer supporters in college are mathematicians. It was also noted that departmental peer support would be difficult to offer from the maths department alone, so this has also been discussed with the MPLS division.
- (b) It was noted that many peer supporters are in 2<sup>nd</sup> year, so may not know enough about the Maths 3<sup>rd</sup>/4<sup>th</sup> year to offer adequate support. One suggestion was that students could contact MCR peer supporters, but it is often difficult for undergraduates to find contact details for these.
- (c) An idea brought to the peer support co-ordinator was that peer supporters studying Maths at various colleges could be made known to students in the department. However, the peer-support co-ordinator felt this could fragment the structures

already in place, and burden current peer supporters. The peer support co-ordinator also felt that specific Maths peer supporters could also fragment the system.

- (d) A suggestion from the peer support co-ordinator was that the department could hold a termly event where students can come and talk to peer supporters who study Maths. However, it was noted that problems do not just appear once a term.
- (e) OUSU were pro Maths peer supporters, but the Maths department is the only department which has expressed an interest in this kind of initiative.
- (f) An online forum of some kind for Maths undergraduates was suggested. A social event at the start of term for 3<sup>rd</sup>/4<sup>th</sup> year student to meet others in their classes was also suggested, as a way to reduce feelings of isolation for 3<sup>rd</sup>/4<sup>th</sup> year students. However, other kinds of peer support would also be needed.
- (g) Peer supporters for integrated masters students generally was also suggested, although the peer support co-ordinator's primary concern is that there is no pastoral network within the MPLS department, so peer supporters may not know what to do in a crisis situation.
- (h) Richard Earl will raise some of the suggestions the JCCU has with the peer support co-ordinator and the MPLS division.

## 5. Questionnaires

- (a) Michaelmas Term 2016 statistical summaries
  - i. It was noted that most lecturers seem to have done well, and there were no major problems with lectures.
  - ii. The gender breakdowns of questionnaire results are new.
    - 1. There are some slight differences, but the department is unsure what conclusions to draw from these.
    - 2. Women were more satisfied than men in Part A, although there was not a large difference.
    - 3. In Prelims, more men than women said that problem sheets were too hard, although there was only a noticeable difference in pure subjects.
      - a. Generally in Prelims, women were more largely clustered towards the centre, whereas men answered with a wider range of responses.
    - 4. By Part A, there was very little difference between questionnaire responses from men and women, so it remains to be seen whether there will be fewer differences between responses from men and women to the Prelims questionnaires in Hilary.
- (b) NSS Results 2016
  - i. It was noted that there was a 10% decrease in student satisfaction from the 2015 results, although only just over 50 4<sup>th</sup> year students were surveyed so the sample may not be representative.
  - ii. For some questions, it was unclear whether students were thinking about problem sheets or exams when answering.

## 6. Open Days

- (a) The open days in 2017 are: **Saturday 22<sup>nd</sup> April, Saturday 29<sup>th</sup> April, Wednesday 28<sup>th</sup> June, Thursday 29<sup>th</sup> June and Friday 15<sup>th</sup> September.**
- (b) So far, over 200 places have been booked for the first day and over 90 for the second, out of a total of 500.

- (c) This year there will also be a Maths and Computer Science open day, with half of the day devoted to Maths and the other half to Computer Science.
- (d) There will also be an optional lecture at the end of the second day on Maths and Computer Science (in addition to the Maths and Philosophy and Maths and statistics lectures)
- (e) It was noted that the Maths and Computer Science stream is already almost fully booked.

**7. Ask an Intern**

- (a) The careers service holds a jobs for mathematicians event in Michaelmas, and wanted to know if students would find it useful for there to be an intern (or more than one intern) at the event.
- (b) It was noted that students would rather hear about internships from the company rather than an intern, as it was felt one person's experience was unlikely to be generalizable, and it is possible to find out about interns' experiences online.

**8. Lecture list for Trinity Term 2017**

The lecture list will appear on the Mathematical Institute's website

<https://www.maths.ox.ac.uk/members/students/lecture-lists>

- (a) This was noted by the JCCU.

**9. AOB**

- (a) 3<sup>rd</sup> year class system
  - i. It was noted that some dislikes of the class system were widely shared between 3<sup>rd</sup> year students.
  - ii. It was resolved that MURC would send out an email to 3<sup>rd</sup> year students gathering their opinions on the system, liaising with the department on the content of the email.
- (b) JCCU summary
  - i. MURC asked whether it would be possible them to send an email with a short summary of what was discussed at the JCCU meeting in order to increase student engagement with MURC. The department approved this.

The meeting was adjourned at 2.26pm.