# Faculties of Mathematics, Computer Science and Statistics Joint Consultative Committee with Undergraduates Michaelmas Term Meeting • Minutes of Meeting 31<sup>st</sup> October 2014

Present:	<ul> <li>Dr Richard Earl (Director of Undergraduate Studies and Joint</li> <li>Committee for Mathematics and Philosophy; chair), Alexander</li> <li>Homer (MURC President, MURC Mathematics and Statistics Rep),</li> <li>Koen Rijks (MURC Secretary), William Juan (MURC Mathematics and Computer Science Rep, MURC IT Rep), Michael Holloway</li> <li>(MURC Questionnaire Rep), James Lau (MURC Outreach Rep), Ben</li> <li>Spells (MURC Diversity and Inclusion Rep), Dr Neil Laws</li> <li>(Department of Statistics), Dr Rebecca Cotton-Barratt (Admissions Co-ordinator), Ms Bulvinder Gurm (MPLS Division)</li> </ul>
In attendance:	Mrs Helen Lowe (Deputy Academic Administrator)
Apologies for absence:	Ryan Murphy (MURC Treasurer), Haengeun Chi (MURC Publicity and Careers Rep), Rose Ryan Flinn (MURC Mathematics and Philosophy Rep, MURC Fourth Year Rep), Dr Janet Dyson (Faculty Teaching Advisor)

The meeting commenced at 2:05 pm.

## I. Meeting held on Friday 14th May 2014

## (a) Minutes

The minutes of the previous meeting were **accepted**.

#### (b) Matters arising not on the agenda

None.

## 2. Membership of JCCU

#### (a) Senior Members

The Senior members were confirmed as Dr Richard Earl, Dr Neil Laws, Dr Janet Dyson, Dr Rebecca Cotton-Barratt and Ms Bulvinder Gurm.

## (b) Junior Members

The Junior members were confirmed as the Executive Committee of MURC, ex officio. It was noted that this did not yet officially include the holder of the new position of D&I Rep; it was noted further that the Standing Orders of JCCU would be updated to reflect this.

## 3. Report on Matters Raised in Examiners Reports (oral report)

Dr Earl gave the report on the Examiners Reports from the exams of Summer 2014. It was noted that in Prelims, the Mathematics V paper was still found to be the hardest; it was noted further that a working party was looking at how this could be improved for future years.

In Part A, the feeling of the Faculty was noted that splitting courses into separate exams had improved the ability of the Examiners to scale papers, compared with the old cross-sectional papers. The remaining cross-sectional paper, ASO, had posed no particular problems. It was noted that there had been two papers with excessive bookwork.

In Part B, some of the external examiners felt that there were issues with the USM system used, and that more should be done to differentiate between lower- and upper-second-class candidates;

# 4. Reports from the meetings of the Faculty/Teaching/Academic Committee (a) Mathematics

#### (i) Part A Paper Al

It was noted that proposals had been made to split Part A paper A1 Algebra I and Differential Equations I into two separate papers for Algebra and DEs. This would allow scaling to take place separately for each part; it would also end the requirement to produce a separate paper for Mathematics and Philosophy students, simplifying scaling. It was noted that this would enforce students' spending ninety minutes on each, whereas at presents they may choose how to divide their time on the paper. It was also noted that this would lengthen the Part A exam period by one session.

Alex noted that a straw poll had been held in the first MURC meeting of term, in which there was unanimous, but weak, support, for a split. Dr Earl noted that this student viewpoint could be taken to Teaching Committee.

#### (ii) Classification at Part C

It was noted that there had been proposals to amend the classification of Part C to a Pass/Merit/Distinction system, in order to bring it closer in line with standalone Master's courses. It was noted that the Department had now decided to drop these proposals, as it would be impossible to include the Merit grade, and it was not felt that a Pass/Distinction system was desirable.

It was noted that some still find the system of having two classifications for one degree confusing, and an enquiry was made as to whether a single classification could be introduced. It was noted that this had been the system until around 2008 when the current system was introduced, partly in response to student feedback (a dual classification allowing a grade from the first three years to be "banked", reducing the perceived risk of the fourth year).

It was noted that, if only anecdotally, there was a feeling that some students were put off the fourth year by reports that the difficulty had been increased, and that potentially having to "start again" (by having a separate classification) was a factor in this. In response to the concerns about workload, the feeling was noted that perhaps those put off from the fourth year may not have been suited to it in the first place. It was reiterated that the fourth year had previously been considered easier than third year, and that this was considered to be the wrong way around.

It was noted that the number of students taking the dissertation options was increasing; it was suggested that this could be connected to the increase in the number of options taken. It was noted that Teaching Committee would not see this as a negative.

#### (iii) Part C projects

It was noted that the single-unit (five-thousand-word) Dissertation option was to be dropped from the Part C syllabus. It was noted that the reasons were a combination of low take-up of the option, and a suggestion that such a short piece of writing (shorter than the Extended Essay available at Part B) was not desirable in order to achieve depth in the writing. It was suggested by the members of MURC that this would not be a great loss, although also that ideally maximal choice for students should be maintained.

The difference in weighting of the ten-thousand-word dissertations between the Mathematics Degree (one-quarter) and the Mathematics and Statistics Degree (three-eighths) was queried. It was suggested that this was owing to the programming and data analysis portion of a Statistics dissertation. In response, it was noted that some students (including M&S students) felt that the Statistics dissertation did not involve half as much work again than the Mathematics one.

#### (iii) Prelims review

It was noted that a review of the Prelims syllabus had been ongoing. Suggestions (at this point not set in stone) were that Dynamics needed to be made more approachable, and that this could be achieved by lengthening Geometry to fifteen/sixteen lectures. The Applications course would then be removed.

A further suggestion was that Optimisation could be replaced by an expanded Statistics course (from eight to sixteen lectures), although the precise content hadn't been determined. A suggested reason was that the Statistics course could then lead on to later material, whereas some felt the Optimisation course did not really lead onto later material.

It was noted that the MURC's feedback exercise had shown that students clearly felt that Applications needed significant change, and that some students had felt similarly about the Optimisation course.

A question was raised about the timing of the courses; specifically, whether students would prefer two simultaneous eight-lecture courses, or one sixteen-lecture course (at four lectures a week) to run over the first four weeks of Trinity term. The members of MURC suggested that preferable to the latter was a course splitting over Easter, but it was suggested that this would only work if the course had a clear halfway point. It was suggested that a sixteen-lecture course so close to exams could cause issues with learning the material in a short time-scale, although it was noted that the old Mods syllabus had a course (Calculus of Three Variables) taught with a four-lectures-per-week scheduling.

As a final point, a suggestion was raised that some of the material in Optimisation was repeated in Integer Programming, although there was a twelve-month gap between students being taught the two courses.

#### (b) Statistics

It was noted that prizes for Parts A and B would now be based only on those specific years, and that no prizes would be awarded for performance on the two years combined.

It was noted that the Department of Statistics was considering increasing the number of Skype interviews for admissions, for students outside the European Economic Area.

## 5. MURC Business

By way of introduction, Alex noted that, following by-elections in the first meeting of Michaelmas, there was now a full complement of Reps in the Executive Committee. It was further noted that two weeks hence there would be a formal exercise to remove inactive College Reps.

It was noted that, unfortunately, no Freshers were in attendance at the first meeting, and that more would have to be done to encourage their attendance. Dr Earl suggested that perhaps the Invariants could be approached for a member of MURC to advertise a forthcoming meeting during one of their weekly events.

## (a) Class sign-up system

A few issues were noted with the systems by which students at Parts B and C sign up for intercollegiate classes:

- The different systems used by the three Departments of Mathematics, Statistics and Computer Science differed: namely that Statistics and Mathematics both involved students submitted preferences with classes then being assigned by the lecturer, while Computer Science operated a first-come-first-served policy; also that Maths and CompSci classes were selected by students online, whereas for Stats they were selected by paper forms distributed in lectures. Students studying classes from outside their degree hadn't been given information on the different systems.
- Students taking Statistics classes needed to select their preferences after having selected those for Maths, but before having heard back, restricting the range of classes they could (at that point) indicate availability for.
- The Statistics class list was only available from computers connected to the Oxford network, but this did not include eduroam; this meant that, without using VPN, students could not access the Statistics class list from either the Andrew Wiles Building or either of the South Parks Road buildings.
- The sole available class for the Analysis course B4.3 Dynamical Systems and Energy Minimisation was scheduled against a lecture for another Analysis course (namely B4.1 Banach Spaces).

It was noted that the clash of the Analysis clash should not have happened, and that guidance to lecturers would be made clearer on this point in future. Dr Laws agreed to raise the issue of availability of the Statistics class list with the IT staff in Statistics.

Regarding the differing systems, it was noted that the three departments were independent, and had differed on what they considered to be the preferred system for sign-up; it was therefore suggested that a unified system would be unlikely. However, it was agreed that an email could be sent to all students at the start of the 2015–16 academic year detailing the different sign-up arrangements across the departments.

#### **ACTION: NL, HL**

## (b) Gender disparity and the MURC D&I Rep

Alex noted, with regard to the ongoing issue of gender disparity in results, that MURC had appointed a new individual as its Diversity and Inclusion Rep. It was noted that the position would be up for re-election in Seventh Week.

## (c) Part A review

It was noted that Dr Earl had suggested MURC organise a review of Part A. It was noted that MURC was intending to do so, but would wait until later in the academic year, when a second cohort had taken most of the syllabus.

#### (d) MURC bank account

It was noted that MURC's chosen bank, HSBC, had changed its requirements for an account to be set up, and that further changes to the Constitution were required. It was noted that this could be finalised in the next meeting, with a view to having the account set up by the end of term.

It was noted that MURC's old account was still in existence, with money remaining in it; it was further noted that it was potentially still possible to access this, as some of the co-signatories remained in Oxford.

#### ACTION: AH

## 6. Questionnaires

#### (a) Trinity Term 2014 statistical summaries

The tabled statistical summaries of the Trinity Term lecture questionnaires were discussed. Michael noted that there were still issues with Prelims Optimisation and Applications. He further noted that he was happy with Part A

#### (b) NSS Results 2014

The tables results of the 2014 National Student Survey were discussed. It was noted that of particular cause for concern was the figure of 52% of Maths students feeling the criteria used in marking were made clear in advance (Question 5), a decrease of 21 percentage points in two years. It was queried as to why this should be, when the only major change was the introduction on exam papers of breakdowns of marks available for each part-question. It was suggested that students could be comparing their experience at Oxford to their A-level experiences, where full mark schemes for almost all papers were readily available.

It was also noted that, in response to Question 20, only 50% of students felt their communication skills had been improved by their course. It was reported that in the graduate students would be making YouTube videos enthusing about their research, and that something similar could be offered to undergraduate students. It was also noted that a MURC had considered a maths discussion group, and had been in discussions with the Invariants on this topic.

## 7. Open Days

It was noted that applications to all courses had increased, including a 13% increase in applications for Mathematics, an increase of 16% for the joint degree with Statistics, and an increase of 30% for the joint degree with Computer Science. It was suggested that the new building, in which all Open Days this year were held, could have been a factor in this.

It was further noted that there had been three sets of summer schools over the Long Vacation, with 2600 applicants.

# 8. Any Other Business

There being no further business, the meeting was concluded at 3:15 pm.