# Faculties of Mathematics and Statistics Joint Consultative Committee with Undergraduates Trinity Term Meeting • Minutes of Meeting (UNCONFIRMED) 16<sup>th</sup> May 2014

Present:	Dr Richard Earl (Director of Undergraduate Studies and Joint
	Committee for Mathematics and Philosophy; chair), David Abed
	(MURC President), Alexander Homer (MURC Secretary), Ryan
	Murphy (MURC Treasurer), William Juan (MURC IT Rep), Lewis
	Morgan (MURC Mathematics and Computer Science Rep), Michael
	Holloway (MURC Questionnaires Rep), Rachel Ahlquist (MURC
	Outreach Rep), Haengeun Chi (MURC Publicity and Careers Rep),
	Perry Wang (MURC First Year Rep), Dr Janet Dyson (Faculty
	Teaching Advisor), Dr Neil Laws (Department of Statistics), Dr
	Rebecca Cotton-Barratt (Admissions Co-ordinator)
In attendance:	Mrs Helen Lowe (Deputy Academic Administrator)
Apologies for absence:	Joel Cawte (MURC Fourth Year Rep)

The meeting commenced at 2:03 pm.

# I. Meeting held on Friday 7th February 2014

## (a) Minutes

The minutes of the previous meeting were accepted.

# (b) Matters arising

There were no matters arising from these minutes that were not covered elsewhere on the agenda.

# 2. Reports from the meetings of the Faculty/Teaching/Academic Committees(a) Mathematics

## i. Review of Prelims

Dr Earl noted that the Prelims Review Committee had already met once, and were due to meet again in the next couple of weeks. He noted additionally that members of the Faculty are usually asked for their opinions on courses at the end of each term.

It was noted that this committee was meeting now in order that minor and/or cosmetic changes can take place in time for next year, but that anything more substantial would have to wait until the 2015–16 academic year to allow for changes to exam regulations.

It was noted that MURC had collected feedback from members of the university via its College Reps, who asked for freeform responses from students in their college. Alexander presented this feedback, noting in particular that:

• Little feedback was received on the pure courses and the courses on Probability and Statistics; it can be assumed that these were generally found by students to be OK;

- Issues had been raised in particular with the applied courses in Trinity Term, which were felt to be somewhat more disjoint;
- The courses in Dynamics and Applications were in particular found to be too difficult, with too much material; by contrast, the Constructive Mathematics and Optimisations courses had been found, if anything, to be too easy;
- Some students found the Computational Mathematics courses to be too difficult;
- Several suggestions were received for particular changes to the course; among other comments, it was suggested that transforms should be moved into the Metric Spaces and Complex Analysis course, and that material on ring theory should be added to the first year syllabus.

Dr Earl noted that many of the issues raised by this feedback were already being discussed, and some had already been resolved.

It was additionally noted in particular from the feedback that some material (in particular the Euclidean Algorithm) was not covered in the Prelims courses taken by Mathematics and Philosophy students, but were assumed knowledge in some second-year courses open to these students. It was agreed that this was less than ideal, but fairly easily remedied were the relevant Part A lecturers to be asked to include a brief review of this material.

As this related to some of the suggestions for change, it was noted that the Differential Equations I and 2 courses were to be revised; in particular, the material on transforms was to be removed from these courses entirely and placed in a new Transforms short option, to be taught in the first part of Hilary Term and assessed along with the other short options on Paper ASO. This would allow Mathematics and Philosophy students, as well as Mathematics and Computer Science students, to study this material. It was also noted that the department was considering introducing a single lecture introducing rings to the Algebra I course in Part A, as this course was now felt to be fairly light.

## ii. Chance to do 5 or 6 long options

It was noted that the Part A course has now changed to be significantly more modular, and that this had taken away the incentive for students to take more courses than they were obliged to. It was noted that the Department are considering introducing the possibility for students to take an additional course in Part A, and to take this for the exam; the best five courses out of six would count towards the overall classification, but the result of the sixth would still be recorded on the student's transcript. It was noted that this would mainly be targeted at students working at around a first-class level.

Members of MURC generally approved of this suggestion. It was noted that if a student thought that he/she was likely to do less well in a particular unit, this would reduce the risk of taking it (as long as they would still do reasonably well, as the result would still be present on the transcript). It was also noted that, even when additional courses are taken at present, the revision for the exam was an integral part of the learning process, and that it was consequently often harder to take future courses that had these as prerequisites.

It was enquired as to whether this would be in line with university policy; Dr Earl noted in response that the idea was to be raised with the Division.

# iii. Classification at Part C

Dr Earl noted that the Department was considering introducing a Distinction/Merit/Pass/Fail grading system for Part C instead of the present system of awarding "conventional" classifications. It was noted that many felt that the intermediate grade of "Merit" was necessary; were it not present, it would be possible that students aiming for a Pass (and significantly below a Distinction) would be incentivised to reduce their work intensity as to do so would likely make no difference to their grade. However, it was noted that the University has previously refused to allow Merit grades in courses.

It was noted that a Distinction/Pass/Fail system was already being introduced for the MMathPhys course, and that this would also allow the Part C year to be taken as a standalone MSc.

It was noted that this had been briefly discussed at a MURC meeting, and was generally felt to be a good idea, particularly as there were difficulties with citing one's classification to employers. It was also noted that, even with the grade of "Merit", it was important that marks of 59 and 40 were not equated, and that without this grade it could provide a disincentive for students who had achieved borderline first-class candidates to take the MMath year.

# (b) Statistics

Dr Laws noted that there was noting further to add from the Faculty of Statistics.

# 3. MURC business

## (a) Gender disparity

It was noted that MURC are considering introducing a new position responsible for gender-related and similar issues, potentially to be titled "Equal Opportunities Rep". The hope that this could bring more continuity to this work was noted. It was agreed that this could be positive, and that there were no issues in principle with adding another member to JCCU.

As an aside, it was noted that the MURC Constitution now requires the President-Elect, in Michaelmas Term, to attend JCCU meetings; again, this was agreed not to cause any problems in principle, and that in particular it was likely that this student would likely already be a member of JCCU by virtue of holding another office in MURC.

## (b) Changes to fourth year

MURC members raised the feeling among students that the fourth-year, in which the course requirement had been increased from six to eight, now seemed to have to high a workload. It was noted that feedback had been collected among students, who were in general found to be having issues with the workload, with many feeling the need to compromise on either consolidating material or on problem sheets. It was noted further that Joel had been intending to present further feedback on this, but that he was unable to attend.

Dr Earl noted the feeling among the Faculty that the fourth year needed to be harder; additionally, that previously some students had even found it easier than third year, which was felt to be the wrong way around. He noted that the number of problem sheets and classes was supposed to have reduced, so that now there were 24 classes instead of 21, with the increase in workload being proportional to this. However, it was noted that some lecturers had retained the same problem sheets or simply reorganised the existing questions among fewer problem sheets, potentially

meaning a greater-than-intended increase in workload. It was suggested that this should not be difficult to change.

It was noted that the MMathPhys will include ten units; it was noted in response that counting units does not always make for a useful comparison, as the units can vary in length. Members of MURC suggested, however, that seven instead of eight units could potentially help; it was noted that this could be considered.

It was agreed that further feedback on this could be presented in the JCCU meeting in Michaelmas Term, when the newly-elected MURC Fourth-Year Rep would be present.

## (c) Specimen papers

David noted that the Part A specimen papers were now online, and thanked Dr Earl and the Faculty more generally for their work on this.

# (d) Model answers

David noted that discussions had previously been held with regard to providing model answers for each classification. It was noted that this had not yet been put together, but that it was quite hard to do so with the wide range of courses.

It was suggested that this could be done for a core course, perhaps in the form of a partial answer to a question. However, it was noted that it is possible to deduce roughly what kind of answers correspond to what classifications by working backwards from the marks allocated to each section of a question.

# 4. Questionnaires

# (a) Hilary Term 2014 statistical summaries

The Hilary Term statistical summaries were presented by Michael. It was noted that the figures for Prelims had improved significantly on last year.

# 5. Open Days and Induction

The dates of the remaining open days in 2014 (Wednesday 2<sup>nd</sup> July, Friday 3<sup>rd</sup> July and Friday 19th September) were noted.

It was noted that departmental open days had taken place on Saturday 3<sup>rd</sup> May and Saturday 10<sup>th</sup> May. It was noted that around five hundred individuals had attended each day, and, as a result of the larger building, that this included a larger number of parents and other accompanying adults than had previously been able to attend. Thanks were given to those students who had taken part, and in particular to Rachel for her presentation; it was also noted that more staff than previously had been in attendance. It was agreed that the days had been a success.

It was suggested that there was some confusion with regard to the college tours following the open days; specifically over whether students were intended to make their own way to the colleges, or whether it was intended that they be picked up at the Andrew Wiles Building by a student from each college. It was noted in response that the former was intended, to avoid a "bidding war" between colleges for prospective students.

It was noted that the information stands were somewhat hidden away in the South Crystal, and suggested that more tables could be placed in this area to lead people in their direction.

Rachel noted that a number of girls, and parents of daughters, had asked her about whether the course was male-dominated. It was suggested that perhaps more female lecturers could be encouraged to give talks, particularly if Rachel's successor as Outreach Rep were to be male.

# 6. Part B and C Options

# (a) Registration for Mathematics Part B and Part C courses

It was noted that students would be asked to register by the end of Tenth Week for courses; it was emphasised that these selections will not at this point be set in stone, and that students will be able to register for up to ten courses.

# (b) Mathematics Part B options fair

## (c) Mathematics Part C options fair

#### (d) Projects lecture

It was noted that the options fairs for Parts B and C, as well as the lecture on projects, will take place on the Friday of Eighth Week. It was noted that this date was during exams, and that complaints about this had been raised, but that it was difficult to avoid scheduling the fair against something else. It was suggested that students should be able to organise their revision to allow them to attend.

It was suggested that holding the options fair for Part C after all Part B exams are completed might encourage non-attendance; however, it was conceded that any choice would likely cause problems. It was noted that attendance is usually high.

# 7. Induction of First Year Students in Michaelmas Term 2014

It was noted that the Induction would take place on the Friday of Week 0 of Michaelmas Term, and that MURC was invited to participate along with the Invariant Society.

# 8. Any Other Business

# Gender disparity statistics

Dr Cotton-Barratt presented some statistical analysis of the correspondence between gender and Part B results, and also of that between Prelims and Part B results. It was noted that Prelims were a significantly bigger factor than gender, suggesting any problem may well occur between interviews and Prelims.

It was suggested that the issue might be absolute rather than relative; it is likely that Prelims scores will have a large impact, but there might still be a small but significant impact from gender. It was noted that various statistics were available for further analysis.

## Alumni cards

Helen noted that University Alumni Cards had been sent to the department, and that the External Relations Manager was keen to have a formal presentation of these; MURC were asked for their feedback. It was suggested that it was a good idea, and done in other departments, but perhaps not practical for this year.

## **Differential Equations I**

It was noted that issues with the Part A Differential Equations I course had been raised at the previous meeting; an enquiry was made as to whether any additional support would be given. It was suggested that this could be provided by tutors in revision tutorials; it was noted that the specimen papers for this course had been specifically designed to cover the most-problematic material.

#### **MURC Equal Opportunities Rep**

It was noted that in the next meeting the MURC Constitution will likely be amended to introduce the position of Equal Opportunities Rep (or equivalent). An enquiry was made as to whether there were any departmental committee on which that rep could sit. It was noted that the Steering Committee on Good Practice was the closest committee, but that their work is not always particularly related the undergraduates. It was noted this committee was aware of MURC's interest in the issue of gender disparity.

There being no further business, the meeting concluded at 3:22 pm.

AH 16/05/14