

## FACULTIES OF MATHEMATICS & STATISTICS

### JOINT CONSULTATIVE COMMITTEE WITH UNDERGRADUATES

MEETING OF FRIDAY 13<sup>TH</sup> MAY

*UNCONFIRMED MINUTES*

**Present:** Dr Richard Earl (Director of Undergraduate Studies and Joint Committee for Mathematics and Philosophy; chair), Haengeun Chi (MURC President - outgoing), Charlie Hutchings (MURC President - incoming), Steven Rose (MURC Secretary), Utsav Popat (MURC Treasurer), James Lau (MURC Outreach Rep), Naomi Vides (MURC Diversity and Inclusion Rep), Nicholas Williams (MURC Mathematics and Philosophy Rep- outgoing), Samuel Davies (MURC Mathematics and Philosophy Rep- incoming), Alexander Homer (MURC Mathematics and Statistics Rep - outgoing), Hannah Merwood (MURC Mathematics and Statistics Rep - incoming), Liam Stigant (MURC IT Rep, MURC Questionnaire Rep), Natasha Davey (MURC Fourth Year rep), Brigitte Stenhouse (MURC Publicity and Careers Rep), Dr Janet Dyson (Faculty Teaching Advisor), Dr Neil Laws (Department of Statistics), Ms Bulvinder Gurm (MPLS Division), Dr Rebecca Cotton-Barratt (Admissions Co-ordinator).

**In attendance:** Mrs Helen Lowe (Deputy Academic Administrator)

#### 1. Meeting held on Friday 5<sup>th</sup> February 2016

##### (a) Minutes

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

##### (b) Matters arising

**Bridging Material:** Dr Earl reported that the introduction of a sheet 0 for Part B and B courses was going forwards for 2016–17. Tutors would be reminded in TT about the availability of bridging material for new students to make this better known.

**BSP Presentations and Academic Dress:** other departments had similar concerns about students being required to wear academic dress for presentations. The matter was being passed up to Education Committee by MPLS.

**Student rep at Faculty/Department Meetings:** Dr Earl reported that the proposal for a student rep at Faculty/Department Meetings had not been approved due to concerns about the confidential nature of business discussed at these meetings, and because much of the business is not relevant for undergraduates. It was agreed that there would be a standing item on JCCU agendas to allow the committee to raise any matters it would like to refer to the Faculty/Department meeting. An undergraduate rep could be invited to the Faculty/Department meeting for the discussion of any item referred by JCCU. It was noted that any item discussed at the Faculty/Department meeting relating to undergraduate teaching would also be discussed at Teaching Committee, which does have an undergraduate representative.

**Mid-term lecture questionnaires:** it was confirmed that these would be introduced in Michaelmas term, having been approved at the Faculty/Department meeting. Students would be invited to complete an online form at the end of week 2 and the results, which would be anonymous, would be collated and given to the lecturer. Mrs Lowe agreed to send the draft questionnaire to the MURC committee.

**ACTION: HSL**

**Subject Peer Support:** Bulvinder Gurm reported that, following discussions at UJCF, the MPLS division has been taking forward the idea of introducing subject peer support by instigating discussion with OUSU and existing peer support organisations. It was hoped to be able to trial this on a small scale after the summer. It was noted that the division preferred the idea of having specific training for dedicated subject peer supporters, rather than asking existing college peer supporters to double up as subject peer supporters.

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

### (a) Mathematics

#### (i) Option to take additional options at Part B

Dr Earl reported that for the first time at Part A, students were given the option to do six long options for credit. Take up was small (nine people – post meeting addition: 9 people originally signed up to this, but some later withdrew and only 5 took an additional long option to exam) and the number of students with distinctions at Prelims opting to take an additional option was not as high as expected. Teaching Committee had considered doing a similar scheme at Part B, but the small uptake in Part A would not warrant this.

Liam Stigant suggested that there may be a lack of appeal for doing six options for students interested in pure maths in Part A that may not be mirrored at Part B courses. Dr Earl replied that there are ways of taking additional courses at Part B but without gaining credit. Teaching Committee would keep the situation under review.

#### (ii) Report from Good Practice Committee Survey of Third Years and Focus Groups

Dr Cotton-Barratt reported on the third year undergrad survey and the focus groups held afterwards. The focus groups had concentrated on progression of women in mathematics, as currently more women leave after third year, and there is a gender gap in exam performance.

It was reported that, of those in focus groups, a lot had been to all-girls schools. Overall about a third of female applicants were from all-girls schools, as opposed to 11% of male applicants. It was asked whether this was an effect of private/selective schools being more successful at getting students to apply to Oxford. This was not known, it is the case that there are more all-girl schools than all-boy schools, but it was agreed that there exists the possibility that this is an effect of more single-sex schools being private and offering further maths.

It was noted that funding reforms, which would limit funding to three a-levels per student could be problematic.

It was reported there was a perception of poor career prospects for students who studied mathematics, and also that it is unclear to people how university maths is different to sixth form maths. The department had submitted a bid for funding for a project aimed at writing a simple-to-understand summary of all of the lecture courses, starting the pilot with prelims. A secondary aspect of project was to create a web interface which allows the user to select which optional courses are being taken, and then receive a list of future options they would be able to take. This was welcomed by MURC.

It was reported that a higher proportion of students felt informed about fourth year and that women are now feeling more encouraged by tutors to take fourth year. Though, there is still a lower proportion of women progressing than men. Further guidance would be issued to tutors to help counter the perception amongst women that the Part C workload is too demanding for them.

In focus group discussions, it was clear that women weren't being pushed out of academia, but were being drawn to earning money and generally female graduates received higher salaries than male graduates. Panel events were planned to inform people about graduate funding and graduate careers, in particular PhDs. It was reported that there wasn't a good understanding of what a PhD student does, and this could be explained at such an event.

It was reported that the early advertising of summer projects seemed to have been beneficial to students.

It had been found that the gender of a student's tutorial partner was not important, it was more important that the tutorial partners were at a similar level; this would be communicated to tutors.

It was noted that the department prioritises having female speakers at open days and as first year lecturers. It was asked whether more could be done to provide female role models. The MPLS division is currently running a women in science event however this does not include any women mathematicians. It was noted that there exists a royal society booklet published a few years ago (including Frances Kirwan) about combining careers with families.

It was reported that the 2016 survey had picked up higher levels of perception of academic prejudice based on gender than in previous years. In particular, students reported instances of gender specific pronouns being used incorrectly. The teaching guidance notes would be updated with further guidance.

MURC were asked if they could provide examples of gender bias and it was asked if it would be possible to include gender bias in feedback forms i.e. do you feel your gender has impacted how you have been taught? Concerns about anonymity were raised; but it was pointed out that this would be optional. It was agreed that this would be thought about, in particular considering where such questions were leading.

MURC asked if the gender question had been included on feedback forms for Prelims and Parts A. It was responded that it had and a system was being put in place to allow the data to be analysed.

### **(b) Statistics**

Dr Laws reported that the double unit in Part B called SB1, currently a 2 hour exam, would become a 2.5 hour exam. The other Part B/C exams, which are 1.5 hours, would be changing to 1 and 3/4 hours.

It was noted that the following Statistics Part C options would be offered in 2016–17:

- Stochastic Models in Mathematical Genetics
- Probability and Statistics for Network Analysis
- Graphical Models
- Data Mining and Machine Learning
- Bayes Methods
- Advanced Simulation (if teaching resources allow)

This means 6 (or 5) courses next year, as compared to 5 this year. If Advanced Simulation does not run, the MathGen course could be in HT, otherwise it would be the first 3 in MT, the other 3 in HT.

### 3. MURC Business

#### (a) Part C Mini Projects

Dr Earl asked about the Part C mini project concerns. MURC responded that some who had done mini projects had raised concerns with MURC. A mini survey was conducted and found these concerns were shared by a number of students. Dr Earl asked which courses the concerns related to, as not all of the options examined by mini-project are the Maths Department's responsibility. It was reported that concerns had been raised about Networks and Automata, Logic and Games mini project. With the latter, which is done over the Christmas vacation before exam registration, there had been confusion when registering for exams.

Dr Earl reported that the issue of submitting work for assessments before exam entry was a known problem and he had discussed this with Exam Schools, as it affects the maths education course in third year. An interim solution for the maths education course had been agreed for 2016–17. Dr Earl would talk to Computer Science to ask about how they address these problems.

It was asked if it would be possible to receive the mini-project task and then decide not to register for the exam. It was responded that it is possible to withdraw from an option after receiving the mini-project as long as a student does so before the submission deadline.

MURC also reported general confusion about networks mini project marking criteria, which were difficult to find, and that the criteria that exist are generic and unhelpful. Dr Earl agreed to look into this.

#### (b) Online Lecture Capture

MURC reported that the committee continues to feel very strongly about the introduction of online lecture capture for the following reasons:

- Physics had piloted lecture capturing, which has led to an increase in lecture attendance.
- Students who miss lectures due to illness would be able to catch up.

Dr Earl reported that Teaching Committee's view is that there should be some showcase lectures available for prospective students, such as the Open Day lectures and the first year introductory courses. Teaching Committee were concerned that extending lecture capture to undergraduate courses would impact on lecture attendance. There were also financial implications as the department does not have the equipment needed to capture lectures at present. Teaching Committee would also not want lecturers to feel pressured into having their lectures recorded if they did not want to do this. MURC was sympathetic to this concern, and accepted that lecturers would need to be given the choice, but would prefer it if lecturers had to opt-out rather than opt in.

MURC responded to Teaching Committee's concerns with the following points.

- There exist legitimate reasons to miss lectures which aren't being appropriately considered, such as scheduling clashes and illness.
- Lecture capture extends the use and benefit of lectures.
- Lecture notes are helpful when trying to catch up on lectures but these aren't always ideal when used independently of the lecture itself.
- Recorded lectures would be useful for revision purposes.

It was noted that the University's Education Committee was considering the use of lecture capture across the University and was expected to make a recommendation later in term. This would be discussed at the week 7 meeting of Teaching Committee.

**(c) Printing Facilities**

MURC reported that students sometimes have need to print problem sheets and notes within the Mathematical Institute rather than at college, and hence suggested a system by which undergraduates would be allowed to print up to thirty pages within the department for free and then pay for any additional printing. It was noted that often printing notes is a requirement for courses and notes are sometimes released late so that it is impossible to print them at home. MURC noted that Computer Science offer unlimited free printing but agreed paid-for printing would still be useful. It was agreed that this request would be passed to the IT team and Departmental Committee. If it was agreed then it was hoped it could be set up by MT. MURC asked what possible objections might be made and it was responded that there may be logistical concerns, and concerns about how charging would be managed.

**ACTION: HSL****(d) Finals Forum**

It was reported that the finals forum had not been advertised by email to Part B and C students, though it was listed on the lecture list for Part B. It was noted that the forum is primarily for Part A and Part B students, though it was agreed that Part C students could attend if they wished. Mrs Lowe apologised that an email had not been sent and would try to ensure that an email was sent out next year.

**ACTION: HSL****(e) Maths Website Login**

It was reported that people were having difficulties logging into the Mathematical Institute website, particularly when trying to access the specimen solutions. These would be reported to the IT team. It was noted that the old website would be being removed over the summer.

**ACTION: HSL****(f) Social events (access to the maths institute)**

MURC reported that they had asked if undergraduates would be able to use the AWB for social events after hours. The department had responded outlining logistical concerns that MURC did not feel were justified, particularly given that the Invariants use the building. It was reported that this matter had been taken to Head of Department, and his view is that the Invariants is a Mathematical society holding formal events (lectures). If MURC were holding a mathematical event, the AWB would be happy to host this, but purely social events would be better done in colleges

MURC told the meeting that a social is wanted to allow mathematicians from different colleges to socialise. MURC also told the meeting that they can't foresee colleges agreeing to a social event open to the entire cohort of undergraduates. It was asked if MURC would be interested in adopting the drinks reception after the options fair or being involved in the reception after the welcome event in Michaelmas term. MURC asked why these receptions were always tied to other events; it was responded that there are already staff present in these cases.

It was suggested that the department would be more likely to agree to an event before the building closes, such as lunchtime socials. MURC asked if space could be reserved for this; it was agreed that space could be. It was suggested that there could be events for third years and fourth years in MT to help people find others doing similar options. It was asked if MURC could receive funding for this and it was agreed that funding could be requested if MURC put forward a proposal.

**ACTION: MURC****4. Questionnaires****(a) Hilary Term 2016 statistical summaries**

Feedback this term had been rather good. Two lecture courses had received some negative feedback, but it was felt that the issues with these courses were being addressed. Class feedback had improved (more than 90% positive feedback as opposed to last year's 80-90% in Part C; a slight improvement was also seen in Part B).

Hannah Merwood reported that there were no particular comments on the statistics lecture questionnaires returns.

**(b) Student Barometer**

It was noted that the feedback was generally positive. There was a lower level of satisfaction with career advice provided by tutors, though it was agreed that the Careers Service are best placed to provide careers guidance. It was noted that the Careers Service don't have much advice about academic careers, which should potentially be provided by the tutors.

**5. Open Days and Induction**

It was noted that the remaining open days in 2016 are: **Wednesday 29<sup>th</sup> June, Thursday 30<sup>th</sup> June and Friday 16<sup>th</sup> September.**

Dr Cotton-Barratt reported that the departmental open days saw 433 student and almost 1000 attendees. The department had received lots of positive feedback and Dr Cotton-Barratt thanked students for being around over the lunch.

**6. Part B and C Options****(a) Registration for mathematics Part B and Part C courses**

It was noted that the draft synopses would be published shortly and students asked to register for courses by Friday 1<sup>st</sup> July.

**(b) Mathematics Part B/C options fair**

It was noted that the options fair will take place on Thursday of week 4 from 2pm to 3.30pm (Part B) and from 3.30pm to 5pm (Part C) under the South Crystal on the Mezzanine Level. The Options Fair would be followed by a drinks reception from 5-6pm.

**(c) Projects lecture**

It was noted that this will be given by Dr Earl on Thursday of week 4 from 3.15pm to 3.45pm in L2. The lecture will cover all of the projects options available in Parts B and C.

**7. Induction of First Year Students in MT 2016**

It was noted that representatives of MURC and the Invariants Society are invited to participate at the Undergraduate Induction on Friday of week 0, Michaelmas Term.

**8. A.O.B.**

There was none.