

Minutes of the Mathematics Undergraduate Admissions Committee

Meeting held at 13:00 Tuesday 11 October 2016 in MR10

Present: Stephen Cowley (SJC, Chair), Margaret Duff (MD), Julia Gog (JRG, Subject Convener), Julia Hawkins (JEMH), Eve Pound (EP), Orsola Rath-Spivack (ORS, Faculty Admissions Officer), Julius Ross (JAR), Stephen Siklos (STCS), David Tong (DT), Simon Wadsley (SJW), Chris Warner (CDW).

1) Welcome

- a) *Apologies.* All members of the Committee were present.
- b) *Remit, membership, Chair and appointment of co-opted members of the MUAC.*
 - i) The terms of reference and classes of membership had been circulated in the meeting's papers.
 - ii) It was reported that over the summer the members of the MUAC had agreed that, with the support of the Subject Convener and the Faculty Admissions Officer, Stephen Cowley would Chair the Committee for the academic year 2016-17.
 - iii) It was reported that over the summer, after consultation, the Chair had confirmed Margaret Duff's two-year appointment as a student member until 30/09/17.
 - iv) It was reported the over the summer that the Chair had invited applications from amongst the Part IB students for appointment for two years as a student member of the MUAC. Seven applications had been received and, after consultation, the Chair has invited Eve Pound to join the MUAC until 30/09/18.

Action: Undergraduate Office (for WWW)

- v) It was reported that over the summer it had been agreed that David Tong and Simon Wadsley would be appointed by the Faculty Board, with dates of membership to be confirmed.

Action: Undergraduate Office (for FB and WWW)

- vi) The Committee agreed to co-opt Julia Hawkins and Stephen Siklos for a further year (until 30/09/17).
- c) *Minutes of the MUAC meeting 6 May 2016.* It was reported that no Minutes could be found.
- d) *Progress on follow-up to DoS Extraordinary Meeting.*
 - i) ORS offered to see if it was possible to obtain information on outcomes of the Oxford MAT.

Action: FAO

- ii) It was agreed that because of the changes in AS-levels, etc., an examination of de-selection numbers by College should be postponed.
- iii) JRG reported that the structure of the standard *Interview Form* was under consideration across all subjects, so discussions on what we would like would be timely this year. In particular, since this review might result in a more meaningful metric than the current interview scale (where different Colleges have different practices), it was suggested that the committee might usefully have a conversation about this "offline".

Action: JAR

- iv) It was reported that the guidance document, that included an agreed statement on what the Colleges are looking for in selecting applicants, had been finalized and approved by the DoS meeting. However, it had not yet been posted on the WWW; ORS agreed to do this after the deadline for Oxbridge applications this year on 15/10/16.

Action: FAO

- v) Concerning the transparency of interview format (by College); it was reported that the *Guide to Admissions* had been updated.
- vi) It was reported that prior to the summer pool, the Subject Convener had circulated further statistics on how students with different STEP scores had performed in the Tripos. She had also circulated Key Points to both Directors of Studies and Admissions Tutors (as detailed in the circulated *Report from Subject Convener on conclusion of 2015-16 admissions round*).
- vii) It was agreed to take no direct action on more cooperative sharing between Colleges, although it was noted that there is an apparent increase in the overlap between interviewers for different

Colleges.

- e) There were no matters arising that were not covered elsewhere.

2) Subject Convener's Report (JRG)

- a) The Subject Convener (SC) was thanked for her detailed *Report from Subject Convener on conclusion of 2015-16 admissions round*, and there was a full discussion of the report.

- i) It was agreed to send thanks to the staff at the CAO who did a difficult job over the period of the summer pool because of a systematic error in the marks recorded for the STEP papers.

Action: Chair

- ii) It was reported that Cambridge Assessment are developing new procedures to ensure that in future there is not a repeat of the difficulties experienced with STEP this summer.

- iii) It was reported that the SC was investigating whether it would be possible to have question by question STEP results electronically.

Action: Subject Convener

- iv) It was reported that the SC was investigating whether it would be possible to have STEP script-reading starting a day earlier.

Action: Subject Convener

- v) It was reported that for the first time in a number of years, the target figure of 250 for UG admissions had probably been exceeded (at the end of August the figure stood at 258, but there was usually some attrition between that figure and the start of term).

Chair's note: the figure as of 14/10/16 is 252.

- vi) Concerning gender it was reported that females were 26% of applicants, 23% of offer holders and 17.4% of those admitted (based on 258 admissions); this is an increase in admissions over last year. It was noted that for this one-year snapshot, the number of offers by gender is not unexpected given the applications, although acceptance-to-offers and acceptance-to-applications are both different to expected. It was also noted that there were differences between the percentage of females making their offer and the percentage admitted, and between the percentages of "home" and "not-home" females. It was agreed that these differences should be examined with multi-year data. Concerns were expressed that the ongoing changes to Year 12 and 13 in English and Welsh schools might result in fewer students taking Further Mathematics, and that there might be a gender bias in this effect.

- vii) For the current one-year snapshot, it was noted that for "offer-to-admit", overseas candidates were more likely ($p < 0.01$), and home less likely ($p < 0.05$), to be successful (this was not so in the case of "apply-to-offer" or "apply-to-admit"). Within home candidates, by school type (comprehensive, grammar and independent schools, and sixth form colleges are the groups large enough for snapshot statistics to be looked at),

- for the "apply-to-offer" stage, candidates from comprehensives are less likely, and those from grammar and independents are more likely, to be successful;
- for the "offer-to-admit" stage, candidates from independents are more likely to be successful;
- for the "apply-to-admit" stage, candidates from comprehensives are less likely, and those from independents are more likely, to be successful.

It was agreed that these differences also should be examined with multi-year data.

- viii) The Chair reported (based on his own calculations using the late August figures)

- that just over 60% of the admitted cohort was "home", compared with 65% of application cohort;
- that just under 9% of the "home" admitted cohort was from quintiles 1 and 2 of Polar3 neighbourhoods, compared with just over 18% of the "home" application cohort.

Chair's note: The University's OFFA targets are in Section 7 of <http://tinyurl.com/OFFA-17-18>.

- b) The Subject Convener reported on a briefing by the Director of Admissions.

- i) It was reported that an "open offer" proposal was about to be considered by the Admissions Forum. The Subject Convener hopes to offer an update at the DoS meeting. An aim of the proposal is to increase the numbers of students from disadvantaged backgrounds.

- ii) The Admissions Forum is consulting about a change in the pool picking procedure whereby priorities would be re-calculated after each round of offers. The MUAC was against this proposal for use in the mathematics pool, due to the scale of the mathematics pool (more candidates are fished

than any other subject in both winter and summer pools); a proposal that slows the meeting down for marginal gain is not ideal.

Action: Subject Convenor

- iii) The SC proposed that the Director of Admissions should be invited to a MUAC meeting; the MUAC agreed.

Action: Subject Convenor

- iv) The SC reported on the changes this admissions round, including the loss of UMS in sciences (and hence no UMS quintiles) and the fact that interview scores will be needed centrally.

3) STEP matters

- a) The STEP Coordinator's Report was discussed. It was noted that the physical marking of the STEP scripts might move from the CMS to a Cambridge Assessment building next year; the question would then arise as to whether marking would be as attractive to CMS PhD students.
- b) *STEP Support Programme*. The report was received.
- i) There was a discussion of the proposed criteria for selection for the STEP Support Programme for the coming year. One of the questions was whether the post-offer support should be extended to all state school students, rather than just those in POLAR Q1 to Q4. It was agreed that this was desirable, but it was also recognised that the resources were not expected to be available for this year. It was suggested that it might be worth investigating how great the reduction in the number of Q5 students would be if such students from state schools with known established STEP programmes were excluded; this might be a feasible way to reduce offerholders given that such schools may have more than one offerholder. Moreover, a student getting no STEP support was more likely to benefit than students with established programmes. Hence if resource was available, the MUAC hoped that some students from Q5 could be invited if, for example,
- there was no established school, or other local, support programme;
 - a student from the same school, but from POLAR Q1 to Q4, was to be given support;
 - the student fell into a group where there was objective evidence of disadvantage regarding STEP support.

Action: JEMH

- c) *STEP Syllabus*. There was a discussion of the knock-on effects of the new A-level syllabi that will be examined for the first time in 2019. The setting process for the 2019 STEP papers begins in January 2017, so any changes to the STEP syllabi must be agreed by that date.
- Under the changes there will now be a common syllabus for the entire single mathematics A-level, covering pure mathematics (about 2/3), mechanics (about 1/6), and statistics (about 1/6); it was noted that aspects of the new statistics syllabus were not of great use for STEP purposes.
 - For Further Mathematics, there is an agreed common core of pure mathematics which comprises 50% of the syllabus. The other 50% can be pure/mechanics/statistics/discrete and each examination board will offer a range of possibilities for students/schools to choose from (e.g. the AQA draft syllabus is 2/3 pure with the final 1/3 comprising two from mechanics, statistics, and discrete, while edexcel's draft syllabus has a wider range of possibilities including 100% pure). These syllabi have not yet been agreed.
 - For Further Mathematics AS, 30% has to come from the common (pure) core for Further Mathematics A-level, and 20% is specified (e.g. AQA is 1/2 pure and a further 1/2 consisting of choosing two options from mechanics, statistics, and discrete, while in edexcel's draft syllabus the second 1/2 is one of pure/mechanics/statistics/decision).

At present both STEP Paper 1 and STEP Paper 2 have the same syllabus based on the common core of Mathematics A-level (i.e. C1-C4), plus the syllabi of the mechanics and statistics modules M1, M2, S1 and S2 (although students can take at most two of these modules, and the syllabus are not uniform across boards). It was agreed that the STEP Paper I syllabus should be based on the single A-level syllabus, and that the Paper 3 syllabus should be similar to the present syllabus (comprising, to leading order, the union of pure, mechanics and statistics FM A-level syllabi). Paper 2 presents a problem. With the new mathematics syllabus, the amount of mechanics and statistics material is essentially halved, and hence it would be difficult to set a total (for Papers I and II) of 6 mechanics and 4 probability/statistics questions on the common single A-level syllabus.

In discussion some argued that the Paper 2 syllabus should continue to be based on the single A-level core, others argued that the syllabus could be extended to include the pure FM AS-level syllabus, reducing the total number of mechanics and statistics questions, while others argued the syllabus could be extended to include the union of pure, mechanics and statistics FM AS-level syllabi. No consensus was reached in the time available.

Action: STCS

d) *STEP Fees*. The proposed increase in fees was noted.

4) Faculty Admissions Officer Report

By the time that this item was reached, and subsequent items, the meeting had overrun, so subsequent reports were very brief.

- a) *Website*. It was reported that work was continuing with the website, and that improvements were incrementally being made.
- b) *UCAS Code and Unistats*. It was noted that the new MMath Regulation did not achieve the proposed aim. ORS was looking into the issue.
- c) *Open Days 2016-7*. It was noted that the Faculty Open Days would be held in the CMS, and this would require additional administration support to manage booking by participants directly with the Faculty for the different sessions. A draft programme was circulated; comments from the members of MUAC were invited.

Action: Members of MUAC

5) Athena SWAN

- a) *Progression Statistics*. JRG reported that after considerable effort the data had now been obtained and rewritten into a useable form; this had proved more difficult than expected. An update will be presented at the next MUAC meeting.

6) Other matters

- a) *Competitor analysis*. The Chair noted that we should continue to monitor the actions of comparable institutions.
- b) *Advice to students thinking of reapplying*. It was agreed to send comments on the proposed draft to the Chair.

Action: Members of MUAC

7) Date of Next Meeting. It was agreed that this would be early in the Lent term.

Action: Chair

8) AOB. There was no time for AOB.