

MINUTES OF THE BIENNIAL MEETING OF THE DIRECTORS OF STUDIES IN MATHEMATICS

Held Tuesday 17 May at 12pm in the Games Room, Robinson College

Present: Chris Warner (R, chairman), Irena Borzým (Cth), Christopher Brooks (CC), Rachel Camina (F), Sophia Demoulini (Dow), Vladimir Dokchitser (Em), Peter O'Donnell (StE), Maciej Dunajski (Cl), Thomas Forster (StE), Berry Grossman (Sid), Robert Hunt (Chr), Tom Körner (TH & Part III coordinator) Ross Lawther (G), John Lister (T), Stuart Martin (M), Vicky Neale (ME/NH), Hugh Osborn (T), Adriana Pesci (Dow), Jan Saxl (Cai), Stephen Siklos (Je), Gareth Taylor (Je), Tadashi Tokieda (TH), Simon Wadsley (H), Richard Weber (Q), Ruth Williams (G), András Zsák (P), Tim Dokchitser (R, secretary). Also present was Stephen Cowley who attended in his role as chairman of the Faculty Board.

1. **Apologies.** Apologies for absence were received from Jack Button (Se), Nilanjana Datta (Pem), Matthias Dörrzapf (JN), Julius Ross (Sid), Richard Samworth (JN), Annamaria Sinkovics (N), Mark Spivack (EM & HH), and Christopher Tout (Chu).

2. **Minutes of the previous meeting.** The minutes were accepted and signed.

3. **Matters arising from the minutes.**

(4c) Part II General Relativity lectures. It was noted that despite the comments from the DoSs, the Faculty Board decided to expand the course from 16 lectures to 24 lectures. The DoSs expressed their collective disappointment at the FB decision.

(6c) Mathematics numbers in recent years. The failure to reach the target number of 250 first-year students was discussed at the Faculty Board meeting on May 5. The DoS statement that this was not a problem was not well-received, and the FB wants to discuss the issue again. SC noted that this is a non-trivial financial issue, so it is important to try and meet the quota.

The DoSs reviewed the reasons for the lower numbers of students and discussed various possibilities of improving the situation: (marginally) encourage all colleges to take one or two extra students (CW), recruit more overseas students (TT), relax offers apart from Step 3 (CW). After a lengthy discussion it was agreed that this is a difficult issue, and it is unclear how to resolve it without compromising the quality of the intake. It was agreed that the issue should be raised again in the November meeting. **Action** (SS): Try to produce more mathematics specific data for the November meeting.

- (6e-ii) Winter pool – rules concerning best practice. It was noted that the FB discussed the small differences between our rules and the Admission Forum recommended model and gave their full support of the DoSs.

4. Tripos matters: Parts IA, IB and II. Faculty Board documents FB10/33 (Revised Mathematical Biology schedule), FB10/34 (Revised Algebraic Topology schedule), FB10/35 (Revised schedule for Applied Probability) were circulated and noted.

- (4d) Timetabling in IB. The DoSs discussed the possibility of adding IB Numerical Analysis to the list of IB courses suitable for IA students, currently GRM & Complex Methods. SS reported that timetabling was already tight and it would be difficult for all three courses to be available. The DoSs confirmed that having GRM a year early is definitely a good thing. After having discussed the preference between Complex Methods and Numerical Analysis, DoSs decided that they prefer the existing situation.
- (4e) CATAM supervisions. SC presented the case of the Computational Projects Assessment Committee that there must be no supervisions on examinable material (e.g. because of plagiarism issues), and this includes CATAM projects. So while it was alright for the colleges to supervise and otherwise give help for the introductory project, set up their own projects etc., it is unacceptable to offer any help for the CATAM project itself. A few DoSs opposed this strongly (notably IB who demanded it to be minuted, so here it is), reasoning that (a) the colleges should be allowed to supervise whatever they want, especially if the purpose of supervisions is just to give general advice, (b) the students do not understand complexity and need help to figure out how to handle it in the project, (c) the introductory project does not quite work, and it is unreasonable to expect the colleges to organise similar projects themselves.

There was a heated discussion on the possible restrictions on the CATAM supervisions, e.g. by declaring that colleges must only use experienced supervisors who are aware of the delicacy of the balance between giving general help and solving the problems for the students. In the end it was decided by a vote (11 for, 3 against) that the DoSs agree with SC, but that the introductory project needs to be improved.

Action (All) There must be no CATAM supervisions except on the introductory project. However, please give suggestions to SC how to improve the introductory project.

Action (SC) Arrange additional help for the students during the introductory project in the form of an open class.

The request for additional comments concerning CATAM (4e (a) (b) (c) (d)) was noted.

5. Part III matters.

- (5a) Faculty Board document FB10/31 “MAST merit marks” was circulated and noted.

(5b) It was noted that MAST event was perceived to be successful.

(5c) Part III supervision arrangements.

IB requested that Part III lecturers indicate the expected number of supervisions or examples classes for their courses, as it would help the colleges in their supervision arrangements.

HO requested that there should be an attendance sheet for every class for record purposes, and that it should be submitted to the Faculty Office.

Action (TK) Recommend to the Faculty Board to sort out both issues, and report on them in the next meeting.

6. Admissions.

(6a) FB document FB10/32 on the predictive effectiveness of metrics in admission to Cambridge was circulated and noted.

(6b) A document “A2 and equivalent examinations topics by examination board” was circulated and noted. The DoSs are very grateful to Sally Waugh for the help in producing the document.

(6c) A document “On Foreign Students” was circulated. The DoSs noted that while Step III was a very good predictor for home students, it does not work so well in assessing the quality of overseas students. It is unclear what should be a better one, but it was agreed that we should try to do better than we do now in attracting and choosing good students from overseas.

Action (CW) It was agreed that the FB should be asked to set up a small committee, preferably involving TK, to consider the recruitment of overseas students.

d) HO raised the possibility of using BMO outcomes when assessing the applicants. It was agreed that because of the timing of BMO results and other factors, this cannot happen.

7. Other matters. SC reminded DosS that the classification for Tripos examinations will change next year: allowances towards the Ordinary B.A. degree will no longer be awarded by either the Applications Committee or Examiners. (It will still be possible to end up with an Ordinary degree; for example, an application can be made to the Applications Committee for a student who fails Part II.)

SC reported that according to the Teaching and Learning Review, while many things are really good, there are a few issues that should be considered:

a) The course appears to be designed for the top third.

b) Quality control on the lecturers could be improved.

c) There should be a “Gender and equality review”.

Action (All) Give SC useful information concerning gender-related issues.

Dates of next meeting. The dates of the next meetings were noted:

Tuesday 15 November 2011 at 2pm, Clare College

Tuesday 8 May 2012 at 11am, Clare College