

Minutes of the biannual meeting of the Directors of Studies in Mathematics

Held Tuesday 17 November 2009 at 2:00 PM in the West Lodge, Downing College

Present: Adriana Pesci (DOW, chairwoman), Stephen Siklos (Je), Richard Samworth (SN), Matthias Dörrzapf (SN), Orsola Rath Spivack (LC), Jan Saxl (CAI), Tadashi Tokieda (TH), Berry Groisman (SID), Nikos Nikiforiakis (SE), Vladimir Dokchitser (EM) Irena Borzym (CTH), Vicky Neale (Murray Edwards (NH)), Stuart Martin (M), Colm Caulfield (CHU), Annamaria Sinkovics (N), Maciej Dunajski (CLH), Hugh Osborn (T), John Lister (T), Ruth Williams (G), Julia Gog (Q), Robert Hunt (CHR), Jack Button (SE), Rachel Camina (F), Simon Wadsley (H), Chris Warner (R) and Paul Russel (CHU). Also present was Prof. Thomas Körner who attended in his role as chairman of the Faculty Board.

1. **Apologies** Apologies for absence were received from the following Directors of Studies: Gareth Taylor (CC), Andras Zsak (PET), Julius Ross (SID), Mark Spivack (EM and HH), John Stewart (K), Nilanjana Datta (PEM), and James Norris (CHU).

2. Minutes of the previous meeting

The minutes were accepted and signed.

4. Tripos matters: Parts IA, IB and II

(a) Report of the Faculty Teaching Committee:

The Directors of Studies discussed sections 2.4, 2.5, 2.10, 2.11, 3.1 and 5.1 of the report.

[(2.4)] The discussion focused on the difficulty and length of the Tripos' short questions. The consensus was that the questions have been progressively getting harder and longer. Moreover, there is a widespread belief among the students and DoSs that (i) the β questions are so hard that they are better off trying to get β merit marks by attempting to solve α questions (ii) it is impossible obtain even a third without at least one α despite the published criterion of $2\alpha + \beta$ on merit mark. Recommendation: Ask the faculty to make a concerted effort to keep the β questions short and simple.

[(2.5)] Classification criteria. The DoSs agreed that the formulae should be published.

[(2.6)] The DoSs expressed concern over the wide range in the relative difficulty of questions in different subjects, in particular in the Tripos Part IB. The DoSs felt as a whole that the examiners and checkers, on their own, should solve the questions to verify their suitability, in particular the length and difficulty. It was also emphasised that checkers should work independently rather than reading model answers; and that perhaps checkers should not be given model solutions. Another issue discussed at length was the availability of the post examination statistical analysis, and how it would be useful to see data for Lecturers as well as for DoSs. Recommendation: Ask the FB to make a concerted effort to spread the information accrued from the statistical analysis to Lecturers and DoSs, and mention in the FB that it would be useful to have a set of guidelines for examiners and checkers.

[(2.10)] appeals: Upon the discussion over the number of appeals brought up by individual is transpired that DoSs do not perceive any problem with this number of cases. The consensus was to take no action on the matter.

[(2.11)] With regards to the schedules and the publishing of the class boundaries in it the DoSs agreed that was useful as long as a clear wording is used to indicate the possibility of yearly changes in the cut off of the marks' ranges for the different classes.

[(5.1)] CATAM and the use of non-integer marks: If this change on the CATAM marking scheme is operating this year we may need to put in a form and conduct. The issue of the solution for the model project was brought up. Recommendation: Find out if the use of non-integer marks applies to this year, and also request that the DoSs receive the solution for the model project.

- (b) Transfers from other universities: The DoSs agreed that the policy outlined by the Faculty Admissions Office was appropriate; no change is necessary.
- (c) MIT exchange program: In the past the DoSs have voted not to continue the scheme. This time before voting it was made clear that there would be support for the exchange if it were to operate **after** Part II. A vote was taken and the DoSs unanimously voted against the continuation of the exchange program as it exists now, but leaving open the possibility of accepting a new, different scheme.
- (d) Algorithm used to determine percentage marks in Tripos. The following issues were brought up: (i) proper ranking of students in the upper band of the different classes and (ii) Consequences of this ranking when Cambridge students are compared with students from other Universities. Given that (i) the ranking algorithm is being revised the DoSs agreed to request that the FB make available the revised version of the algorithm for discussion in a future DoS meeting.
- (e) Policy on Part IA students' workload for the summer "vacation". There was a discussion about the amount of work required from the students during their summer break and also about how to help them to fulfil their obligations during this period. Some suggestions were: (i) make the 3rd term courses easier (ii) have notes available on line so that the students can work by themselves. Dr Borzym asked that the DoSs consider thinking about these issues.
- (f) Changes to applied courses in Part IB: level of difficulty of Variational Principles and the new sections added to Methods. There was a widespread consensus regarding this issues. Several colleges' experience suggest that even strong students struggled with the courses and that not many prepared it over the summer. The teaching committee is aware of the situation and a lively discussion ensued: both regarding the situation for the current year and the future consequences. A decision was made to communicate our disquiet to the FB.

5. Tripos matters: Part III

- (a) The FB representative announced that the new regulations for the Part III course had been approved and should start on 1 Oct 2010. It was immediately noted that the option of applying for four years does not exist anymore when doing it through the UCAS form. The Faculty Admissions Officer agreed to investigate and ensure that the correct information is given on the UCAS web site in time for next year's application.

- (b) Internal admissions to Part III. Prof. Körner in his role as the FB representative explained the position that requiring a first for any student who wishes to continue to Part III gives strength to DoS to decide on admissions to their Colleges. It was suggested that Colleges can and should clearly state and publish their own admission to Part III policy in order to avoid confusion and litigation. As an example of such policy was mentioned that Trinity accepts candidates with first in Part II or at least top 40% in both, Parts IB, and II.

A vote was taken on the following proposition: Request an official statement from the FB on the requirement of a first, with wording : “For admission to Part III it is required to have achieved a first class ranking or to show strong evidence of first class potential.” The vote was unanimous in favour.

With regards to the issue of each College having its own policy it was stated by the Magdalene DoS that the lawyers in his College saw no conflict with any laws. However it was emphasised that the policies must be clearly stated and must be in writing.

A vote was taken the following proposition: To accept the recommendation of the FB only as a guide and leave the specific policy to each individual College. The vote was unanimously in favour.

6. Admissions

- (a) Winter pool procedure

The proposition that while at the round table of the winter pool Directors of Studies need only express an interest (not state Interview or Offer) when the names are read out was agreed by unanimous vote.

- (b) Faculty Open days

The DoS were advised that the dates for this coming year for Faculty Open days are: Saturday 24th April and Saturday 1st May.

- (c) Cambridge pre-U:

The DoS were shown the relevant information in the Cambridge Assessment official brochure.

- (d) A* grades in mathematics and further mathematics

It was pointed out that the A* only requires 90% in two modules out of six for Mathematics, and three for Further Mathematics, rather than 90% overall.

7. STEP

- (a) Easter school The DoS were informed that Easter school is going to proceed in 2010

- (b) 2009 Examinations: The report from the chief examiner was noted.

- (c) Dead dogs: In previous years, when the examination was managed by OCR, Directors of Studies expressed concern that STEP candidates were awarded additional marks on standard scales if they suffered adverse circumstances (death of a pet, illness, etc). There was a risk of double counting if colleges also received representations.

Now that the examinations are managed by Cambridge Assessment, there is no provision for additional marks. The Directors of Studies did not object.

8. Other matters

Induction meeting: The report was noted.

9. Any other business

A concern about taking candidates from the pool without interview was voiced. It was agreed that further discussion was necessary and that this issue could, in principle, be brought up in the next meeting.

10. Date of next meeting

Proposed date and place: 11 May 2009 in Downing College at 2:00 PM.