

COMMITTEE OF MANAGEMENT FOR THE NATURAL SCIENCES TRIPOS

Unconfirmed minutes of a meeting of the Committee of Management for the Natural Sciences Tripos held at **2:00 pm on Tuesday 24th November 2009** in the **Seminar Room, Pathology, Tennis Court Road**.

Present: Dr N Holmes (Chairman), Dr P Barrie, Dr S Dalziel (representing Dr P Duffett-Smith), Dr M Fiore, Dr S Fulton, Professor H Griffiths, Professor R Horgan, Dr L Kassell (representing Professor J Secord), Dr J Keeler, Dr M Mason, Dr R Padman, Professor S Redfern, Professor D Ritchie, Dr S Russell, Dr N Rutter (representing Professor T W Clyne) Dr C Schwiening, Mr A Norman, and Mrs E Oliver (Secretary).

Apologies: Miss S Zhang

503) MINUTES

The minutes of the meeting held on Tuesday 13th October were approved.

504) MATTERS ARISING NOT ELSEWHERE ON THE AGENDA

A summary sheet of action points and matters arising (**CM.579**) was circulated and noted.

505) REPORTED AND STRAIGHTFORWARD

A paper of reported business was circulated (**CM.580**).

i. Faculty Board of Biology, Biological Sciences Committee

The minutes of the meeting of the Committee held on 8th October 2009 (**CM.581**) were noted. The NST Management Committee were asked to support the proposal under Minute 311 that a dedicated messenger service be set up during the examination season which would be responsible for delivery of scripts from Colleges to Departments. It was felt that this would help overcome a longstanding problem by enabling delivery of scripts in a timely manner. The Committee supported the proposal.

Action: Secretary to advise the Secretary of the Biological Sciences Committee of the NST Management Committee support.

ii. Part III Systems Biology Planning Group

The minutes of the meeting of the Planning Group held on 5th October 2009 (**CM.582**) were noted.

iii. Part IA Allocation Process

The contents of the circulated report (**CM.583**), which provided a summary of the process and quantitative information from the perspective of individual courses, were noted.

iv. Notices: Form and Conduct

An updated notice listing changes to examinations in 2010 was circulated (**CM.584**). A minor change to regulations for practical work was approved.

Action: Secretary to forward Notices to the University Draftsman.

v. Amendments to Class Lists and Allowances for Examinations

Attention was drawn to the extract from the Reporter of 11th November listing allowances to candidates and amendments to class lists.

506) **ANNUAL REPORT FOR 2008-9**

The Committee approved the Annual Report (**CM.585**) for circulation to the Education Committee of the General Board and Faculty Boards, subject to a minor correction.

Action: Secretary to circulate Annual Report and Statistics.

507) **TRIPOS EXAMINATIONS 2008-9**

i. Part IA

Dr S Dalziel presented his report in his capacity as Chairman of Examiners in Part IA in 2008-9 (**CM.586**). Overall, the examination process had gone smoothly. Some concern had arisen when it was learnt that Examiners collecting papers at Reprographics had not been asked for any form of identification. In section 3, the report listed various points for discussion by the NST Management Committee:

1. Computer Science had been included as a separate IA subject within NST for the first time which had raised issues on how marks for both sets of students should be treated. This had been carefully considered with a view to treating students fairly and the adopted method of combined norm-referencing agreed by the NST Management Committee. The Computer Laboratory practice of negative marking which had rarely been required in previous years had also caused problems. Following queries from Directors of Studies the marks had been reviewed and the marks for 4 students adjusted. Discussion took place on whether NST Part IA Computer Science (Paper 1 of IA Computer Science) should be treated as a borrowed paper or whether it was appropriate for the two cohorts to be combined. CST results were processed together with NST marks in the initial stages. Given that negative marking would no longer be used, it was recommended that the current process should continue. The Senior Examiner and the Chair would be empowered by the Management Committee to use their discretion as to whether the CST cohort should be included or not.
2. Agreement had now been reached with the Computer Laboratory that the Part IA CST Examiner would participate in the meetings of NST Part IA Senior Examiners in the role of Assessor (and therefore not sign the class list). This new arrangement would be built into the processes for both Triposes.
3. It was agreed that uniformity of rounding of numbers should be adopted and that subject values should be produced, processed and incorporated with a single decimal place of precision.
- 4,5. The presentation of subject paper marks in scaled form to a scaled total had led to some problems where the total had exceeded the maximum available. A discussion took place as to whether the raw marks should be made available and whether the rank in each subject should be included. Other subjects such as Maths use merit marks. It was agreed that both raw marks and scaled marks have value but that there was limited space available on transcripts for explanations to be provided. Two points were deemed essential for transcripts 1) that the totals should add up and 2) that the classes conformed to the boundaries. It was recommended that the marks be scaled for the College Markbook and the transcript, and that the rank for each subject be provided. The overall list of rankings would not be altered as a result of representations but an approximate rank would be provided for the student in the event of their marks being significantly changed.

6. It was agreed that the College Markbook could include USN and gender information and that a statistical summary was a useful addition.

7. Following requests from some departments this year, the Committee agreed that a copy of the College Markbook could be supplied to Departments in future years.

8. Development and maintenance of the processing system was currently being discussed by the Schools and there were developments with regard to CamSIS in the area of reporting marks and grade rosters.

9. The recommendation that more continuity within Departments in the form of someone to oversee the process of examinations by providing informed support was agreed and should be encouraged as best practice. It was recognised that some Departments already operated in this manner.

10. A report is in preparation on the processing of examination scripts following issues that arose in both IA and IB this year.

11. It was recognised that Examiners were confused by the multiplicity of guidance originating from Departments/NST/Board of Examinations and that more clarity on the priority of these documents was needed.

12. Delays in handling of Representations had occurred both at the level of the Board of Examinations and through absence of Senior Examiners, and methods to speed up these processes would be helpful.

The Chair thanked Dr Dalziel for the outstanding job performed.

Action: Secretary to pass on information to current Chairs of Examiners and to amend guidance as appropriate.

ii. **Parts IB, II, III**

Dr R Preece's report in his capacity as Chairman of Examiners in Parts IB, II and III in 2008-9 (**CM.587**) was circulated for discussion. Whilst the initial process had proceeded satisfactorily, queries following the posting of the Class List had revealed that marks in Mathematics had been incorrectly transcribed from one electronic file to another at the subject level. This incident had been taken very seriously within the Department and discussed at the highest level within the Faculty. Thanks were also due to Dr Dalziel for his help in resolving the matter and for suggesting the introduction of various measures to avoid any repetition. This would include the introduction of an electronic cover sheet which the Committee approved.

An explanation for the inclusion of an inappropriate term in a particular question had been received; however the Committee felt that it was the duty of the Examiners to know what was being examined.

Further checks on the processing of marks had revealed that another subject had been incorrectly scaled although this had not been reflected on the information submitted. It would be helpful if Senior Examiners could be provided with a template spreadsheet for submission of marks and a check could be incorporated into this. It was the responsibility of the Chair to check that the distribution was appropriate.

Action: Secretary to pass on information to current Chairs of Examiners and to amend guidance as appropriate.

iii. Statistics

A paper showing classing of candidates in Parts IB, II and III of the Tripos compared with classes obtained in the previous year's examinations (**CM.588**) was circulated and noted.

iv. Part IB

Following the outcome of the Working Group on Part IB Classing, draft revised guidelines were tabled (**CM.589**) and discussion ensued. The Chair summarised the changes whereby raw marks were used unless appropriate targets were exceeded, in which case reference would be made to the performance of the same cohort at Part IA. Whilst the Committee was content with the principle it was felt that the guidance presented needed further work.

Action: Committee members to forward comments to Dr Holmes, Dr Schwiening, or Mrs Oliver.

Action: Dr Holmes and Dr Schwiening to meet to discuss details.

v. Reports of External Examiners for the Tripos

It was noted that the majority of the reports had now been received by the Secretary and distributed to the Departments for their comments; in general, External Examiners are happy with the overall process. A summary of comments and responses would be prepared for the next meeting.

508) **SCIENTIFIC COMPUTING IN PART IA**

The final proposal from the Working Group on Scientific Computing was circulated (**CM.590**). This document specifically relates to administrative matters and is an addendum to the report previously circulated. In summary the proposal is for a stand-alone computing module to be taken by as many NST IA students as possible. In addition to Part IA Mathematics, Mathematical Biology had also expressed interest. Elementary Mathematics for Biology had not yet been approached. The Computer Laboratory was not involved in the Course Management Committee at present but could join later if staff were available to teach. Other Triposes taking NST Maths (Education, Maths with Physics, Computer Science) should decide whether they wished to participate in this module. The cost for the licence had still not been confirmed but it was hoped that it would not be necessary to make any charge to students. Regulation changes would need to be prepared to include the additional subject. The Committee approved the proposal.

Action: Secretary to prepare regulation changes and advise other Triposes.

Action: Course Management Committee to finalise content and assessment details and liaise with the Course Organiser for Elementary Mathematics for Biology.

509) **CHANGE OF TITLE FOR TWO PART IA SUBJECTS**

An extract from the minutes of the meeting of the Council of the School of Physical Sciences held on 29th October was circulated (**CM.591**). This approved the proposal by which 'Materials and Mineral Sciences' would become 'Materials Science', and 'Geology' would become 'Earth Sciences' with effect from October 2010. The management and ownership of 'Materials Science' would be placed in the hands of the Department of Materials Science and Metallurgy. The Committee approved the changes of title.

Action: Secretary to report the change to the Cambridge Admissions Office, the Education Committee of the General Board, the University Draftsman and in due course to update the NST website.

510) **THE FUTURE OF ORDINARY EXAMINATIONS AND THE ORDINARY BA DEGREE**

A paper on the future of Ordinary Examinations and the Ordinary BA Degree was circulated (**CM.592**). The view of the General Board's Education Committee is that these are no longer appropriate in their current form and the Committee was asked to consider the proposed recommendations. Essentially this would mean for NST, that students who had proceeded thus far with honours, could be automatically awarded an Ordinary BA at the end of Part II. It would however remove the option of an Ordinary at IA or IB which was rarely awarded in NST. Discussion took place on whether there was any value in retaining the Ordinary, how the award was viewed and whether alternative awards might be appropriate. There was no clear consensus of views but no strong objections to the proposed recommendations.

Action: Secretary to inform the Education Section of the outcome of the Committee's discussion.

511) **NATIONAL STUDENT SURVEY 2009**

Data and anonymised student comments specific to Natural Science Tripos subjects was circulated (**CM.593**). The General Board's Education Committee had requested that the data be considered and a brief response provided. In general data was good for all NST students. It was noted that a relatively poor result had been achieved for question 17 on the University's own bank of questions which related to volume of work. This was not unexpected, however, and was consistent with the view that the Natural Sciences was a challenging degree. It was noted that some of the anonymised student comments were from MVST students taking Part II and therefore not necessarily representative of all NST students. Clarity of marking criteria for biological subjects had elicited a variety of comments which was surprising given that the information was on the same webpage. This may reflect a difference in expectation. Cambridge encouraged independent study, for which supervision support was provided. It was not felt that there were any areas for concern or any areas that needed further investigation.

Action: Secretary to report the Committee's response to the Education Section.

512) **ANY OTHER BUSINESS**

The terms of appointment for the Junior Members would terminate in December 2009 and the Chairman thanked Mr Andrew Norman and Miss Sophia Zhang for their contribution.

513) **ITEMS OF RESERVED BUSINESS**

The Membership of the Committee as proposed by the Schools was agreed.

Action: Secretary to forward the suggested names to the General Board for appointment.

514) **DATE OF NEXT MEETING**

The next meeting shall take place at **2:00 pm on Tuesday 2nd February 2010** in the Greaves Room, 1st Floor, Department of Pathology, Tennis Court Road.