

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 11th October 2011** in the Todd–Hamied Room, Chemistry Department, Lensfield Road.

Present: Dr J Keeler (Chairman), Professor M Carpenter, Dr S Fulton, Professor H Griffiths, Professor R Horgan, Professor J Morton, Professor A Mycroft, Mr J Norris, Dr R Padman, Professor D Ritchie, Dr N Rutter, Dr T Tiffert, and Mrs E Oliver (Secretary).

Apologies: Dr M Aitken, Dr A Alexandrova (representing Professor J Secord), Dr P Barrie, Professor S Redfern, Dr S Russell, Mr T Towers.

603) MEMBERSHIP OF THE COMMITTEE

Dr Keeler reminded the Committee that he had originally agreed to act as Chairman for 12 months but was prepared to continue in this role for the next 12 month period. This was unanimously agreed.

A current list of members was circulated (**CM.718**). Several members would complete their terms in December 2011 and the relevant Schools had been approached. Dr Keeler welcomed the Chairman of Examiners for Part IA (Professor Michael Carpenter), and the Chairman of Examiners for Parts IB, II and III (Professor Jenny Morton) to their first meeting. Mr Patrick Barrie had returned to the Committee and Dr Anna Alexandrova would be representing Professor Jim Secord.

The Committee also wished to formally renew the membership of Professor Horgan as a co-opted member for Mathematics, to which Professor Horgan agreed.

604) MINUTES

The minutes of the meeting held on 3rd May 2011 were circulated and agreed. Corrections had been made to minute 598 since the original circulation. The meeting originally scheduled for 5th July 2011 had not been held since the Chairman had determined that there was insufficient time-sensitive business to warrant holding this meeting at what was an extremely busy time of the year for the Secretary.

605) MATTERS ARISING NOT ELSEWHERE ON THE AGENDA

A summary sheet of action points and matters arising from the meeting of 3rd May (**CM.719**) was circulated.

Minute 596.

The Committee would be interested in learning of any progress in the trial of electronic devices in lectures proposed by Dr Schwiening.

Action: Secretary to request an update from Dr Schwiening.

Minute 597.

The Biological Sciences Committee (BSC) had reaffirmed that Chemistry A Level was required for Biology of Cells. The Management Committee asked the Biological Sciences Committee to reconsider this decision making sure that it reflects the consensus view across the relevant departments.

Action: Professor Griffiths to raise at the next meeting of the BSC.

The changes to the examination structure in Part II Experimental and Theoretical Physics and Half Subject Physics were forwarded to the June meeting of the General Board's Education Committee and were published in the Reporter of 20th July. Physics reported that the modularisation of Part II examinations had worked well and that the units of further work would also be modular in the future and therefore appear on each student's transcript. Some further liaison was needed with the Board of Examinations to ensure that the initial generic choice in the Michaelmas Term was in place for both Part II and Part III so as to reduce the number of changes in the Lent Term.

Open Day publicity has been finalised and printed. After discussion with the Course Organiser for Elementary Mathematics for Biologists it was decided that the quiz document was more appropriate for candidates without A level Mathematics that had received offers than for prospective students attending the Open Day.

Minute 598.

The Committee's comment on the proposed 'twin Triposes' had been forwarded to the Deputy Academic Secretary.

Minute 599.

The CamSIS development team had been informed of the Committee's support for changes to the interface for the Part II Subject Allocation and would be in contact in the Michaelmas Term 2011. Further discussions took place with CamSIS in July with regards to the processing of information within the Part II system. Clarification was awaited from CamSIS on the extent of any changes which might be considered for 2011-12. It was noted that resources are limited for CamSIS developments and this might affect the rate at which these developments are made.

Action: Secretary to liaise further with CamSIS and report back to the next meeting.

Minute 600.

The paper proposing a process for determining the extra amount of time in practical exams needed for students with particular special needs had been forwarded to the Disability Resource Centre. An initial response was received but further discussion was needed. The Committee noted that it was important that the process was kept as simple as possible and preferably worked in unison with the current system for extra time in written examinations.

Action: Secretary to continue discussion with the Disability Resource Centre.

606) REPORTED AND STRAIGHTFORWARD BUSINESS

A paper of reported business was circulated (**CM.720**).

- i. The Minutes of the meeting of the Physical Sciences Education Committee held on 10th May 2011 were noted (**CM.721**).
- ii. The Minutes of the meeting of the Biological Sciences Committee held on 11th July 2011 were noted (**CM. 722**). The Committee welcomed the removal of references to a BBS-specific viva. Minute 402 queried whether specific policies were in place for the scheduling of exams and lectures outside of Full Term. Start dates for each part of the Tripos are given in Statutes & Ordinances. It was not clear which Part this related to; Parts II and III would be outside the remit of this Committee. It was agreed that the Secretary would liaise with the Chairman of the BSC Committee to obtain further details with a view to possible review.

Action: Secretary to contact the Chairman of the BSC Committee.

- iii. Changes to regulations. On behalf of the Committee, the Chairman had approved a change in the examination requirements for Part II Astrophysics. The 90 minute paper has been removed and questions from all courses would be included in the four remaining examinations so as to ensure equal weight is given to all courses. The regulation change was reported to the General Board's Education Committee and was published in the Reporter of 20th July 2011.

On behalf of the Committee, the Chairman had approved a change in the examination requirements for Part III Materials. The length of the research report now excludes appendices and bibliography and the dates in the process have been revised. The regulation change will be reported to the General Board's Education Committee of 19th October and was published in the Reporter of 20th July 2011.

- iv. The updated Notice on the use of Electronic Calculators in University Examinations was circulated and noted. **(CM.723)**
- v. The NST website had been updated with the exception of the pages referring to Examinations and the Part II subject allocation procedure. A copy of the page which details additional course costs was circulated and noted; it was understood that levels of subsistence were currently under consideration by other Committees. **(CM.724)**
- vi. The Open Days on 7 and 8 July were well attended with 1,036 visitors registering their interest in Natural Sciences. There were displays on all Part IA subjects in the central marquee and most departments participated by offering tours, giving talks or mounting additional displays. Staff and students were present throughout the day at the central display. The revised documentation had been well received. The Committee felt that this was a good format which worked well.
- vii. The format and design of the Undergraduate Prospectus were being revised for 2013 entry. Departments had been asked for comments and the draft version which had been submitted for proofing was circulated. **(CM.725)** A web version with slightly longer subject entries was also in preparation. The Committee were asked to send any amendments to the Secretary as soon as possible.
Action: Committee members to forward amendments to the Secretary
- viii. The Part IA Practical Allocation had run relatively smoothly and a more even distribution of practical times for some subjects was helped by the relaxation of the Computer Science requirement. It was noted that the subject(s) in which pressure points arose appeared to vary from year to year. The process of emailing students and departments was not completed until the early hours of the morning, and suggestions for improvements would be included in the report to be circulated ahead of the next meeting. A request was made for the text received by students to be modified so as to make the practical timetable easier to interpret. The Committee thanked CARET and the Secretary for their contribution to the allocation process.
The introductory lectures had been well attended and were still deemed to be worthwhile. The Committee thanked Dr Fulton for delivering the session for the biological sciences students.
- ix. The on-line lecture listing had been generally well received and a report was being prepared for the General Board's Education Committee in November. An extract covering aspects relevant to NST would be circulated for the November Management Committee meeting. Committee members felt that the system was easy to use and

provided a single reference point accessible to all. The facility of being able to synchronise content with individual electronic calendars was appreciated by students.

- x. A copy of the Agreed Supervision Norms had been circulated (**CM.726**). This had been distributed to College Tutorial Offices to inform supervision arrangements for 2011-12. It was not felt necessary to compile a separate document for NST this year. It was noted that the information for IB should refer to 3 sessions per week but that the total was correct. The data would also be used in the development of the Key Information Sets (KIS) which are comparable sets of standardised information covering aspects of each course and which will be published on websites from September 2012. Further information about data collection for the KIS would be circulated in due course.
- xi. A paper which was provided to the Undergraduate Admissions Committee had been circulated for information (**CM.727**). It listed the target admissions for each Tripos for 2010-14. Whilst the information contained in this particular document may not have been the final version it was still possible to see that the numbers for Natural Sciences represented a small growth and did not exceed 650.

Action: Secretary to obtain and circulate confirmed version.

607) SCIENTIFIC COMPUTING IN PART IA

A paper was tabled (**CM.728**) which summarised the arrangements so far for 2011-12. Dr Andrew Jardine had joined Professor Emilio Artacho for the delivery of this module, the material had been reviewed, and a substantial change made to the ambition for the course. In addition to the six lectures students would also have three practical sessions for which they would sign up electronically. Dr Rachael Padman was thanked for her contribution in negotiating the student licence for MATLAB which would enable students to have the package on their own computers. It was hoped that progress would be made towards a single site licence for the following academic year. The Committee would be interested to hear how the practical sessions had worked and whether the timings and the proposed split between the Titan Teaching Room and the Cockcroft lecture theatre (a session for those with their own laptops) proved to be successful. Professor Mycroft reported that Computer Science Tripos students were continuing to take the Scientific Computing component this year as the marks awarded for it were part of NST IA Mathematics. If the marks were to be separated in the future the Scientific Computing component could be made optional for Computer Science Tripos students. The Committee recognised that the separation of marks had been the original intention and would keep this in mind; however, for the moment the key thing was to establish a functioning course.

Action: Secretary to request a brief report on progress for the next meeting of the Committee.

608) MATHEMATICS TEACHING

A request had been received from the Faculty Board of Physics and Chemistry following receipt of the report of the Learning & Teaching review of Physics. The review Committee recommended 'that the area of mathematics teaching is looked at in conjunction with other departments, both those involved in the NST, and those from other Schools and the colleges'. The Faculty Board of Physics and Chemistry supported this recommendation and felt that such a review might best be coordinated by the NST Management Committee and had therefore written to ask the NST Management Committee to consider taking the lead in addressing this recommendation. The Committee noted the request but felt that it was not appropriate to take this forward at this stage for a variety of reasons. The report from the Learning & Teaching review of Physics had not yet been considered by the General Board's Education Committee and it would be appropriate to await the outcome of those discussions. Further discussion could then take place with a view to targeting the most appropriate way forward. Mathematics had

also undergone a Learning & Teaching Review in 2010-11 and the report was awaited. Materials had also been reviewed in the same year and both Chemistry and Earth Sciences would undergo reviews during 2011-12.

Action: Secretary to advise the Faculty Board of the Committee's response.

609) IA TIMETABLE CHANGES

The Computer Laboratory is considering changing the time of the Computer Science Tripos IA Paper 1 lectures from 10.00 on Mondays, Wednesday and Fridays, to 11.00 on Mondays, Wednesdays and Fridays. This would mean that NST IA students would no longer be able to take both Computer Science and Earth Sciences, but would no longer be prevented from combining Computer Science with Biology of Cells. The increasing importance of Bioinformatics (processing DNA analysis and modelling cellular pathways) is the motivation for this change. The Committee felt that the view of Earth Sciences should be considered and Professor Carpenter undertook to draw the attention of the Department to this proposal. It was agreed that the combination of Biology of Cells and Computer Science would be helpful to students considering taking Part III Systems Biology. Any changes to the timetable would however require careful coordination. Professor Mycroft thanked the Committee for their comments and would relay these to the Department. Further consultation would be needed with the Biological Sciences Committee and the Faculty of Mathematics (for those students taking papers from the Mathematical Tripos) before any formal proposal could be made.

610) MASTER OF ADVANCED STUDIES

A verbal report was provided on the suggested changes to the awards of merit and distinction following discussions with the Faculty of Mathematics. The aim was to ensure consistent standards across the University and it had been agreed that MASTs in the Physical Sciences should align with Mathematics in the award of merit and distinction. Further clarification was needed so that the information could be passed on to students. There was no disagreement from the NST Management Committee.

611) ANY OTHER BUSINESS

The Part II subject allocation process had proceeded smoothly this year and a short report would be prepared for the next meeting.

612) DATE OF NEXT MEETING

The next meeting will take place at 2:00 pm on Tuesday, 22nd November 2011, Todd-Hamied Room, Ground Floor, Department of Chemistry. In the absence of Dr Keeler, Dr Padman has agreed to Chair this meeting.