

## **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 31<sup>st</sup> January 2012** in the Todd–Hamied Room, Chemistry Department, Lensfield Road.

Present: Dr J Keeler (Chair), Dr M Aitken, Dr A Alexandrova, Dr P Barrie, Professor M Carpenter, Professor H Griffiths, Professor R Horgan, Professor Colin Hughes, Professor J Morton, Dr R Padman, Professor S Redfern, Dr N Rutter, Dr T Tiffert, and Mrs E Oliver (Secretary).

Apologies: Mr G Cottiss, Dr S Fulton, Professor A Mycroft, Mr V Oleinikovas, and Professor D Ritchie.

### **628) MEMBERSHIP OF THE COMMITTEE**

An updated list of members was circulated. **(CM.755)**

The Faculty Board of Biological Sciences had appointed Mr Gareth Cottiss, from Robinson College, as the biological sciences junior member for the Committee.

The Faculty Board of Physics and Chemistry had appointed Mr Vladimiras Oleinikovas, from Girton College, as the physical sciences junior member for the Committee.

The Committee approved these appointments.

The Committee noted that the following appointments had been agreed by the General Board:

Dr Rachael Padman (School of Physical Sciences) reappointment  
Professor Howard Griffiths (Faculty Board of Biology) reappointment  
Dr Anna Alexandrova (History & Philosophy of Science) - in place of Prof. Jim Secord  
Dr Patrick Barrie (Chemical Engineering & Biotechnology Syndicate) reappointment  
Professor Alan Mycroft (Computer Laboratory) reappointment

and that the General Board's agreement for the appointment of Professor Colin Hughes (School of Biological Sciences) as a replacement for Dr Steven Russell was pending.

New members were welcomed.

### **629) MINUTES**

The minutes of the meeting held on 22<sup>nd</sup> November 2011 had been circulated and were agreed.

### **630) MATTERS ARISING NOT ELSEWHERE ON THE AGENDA**

A summary sheet of action points and matters arising from the meeting of 22<sup>nd</sup> November **(CM.756)** had been circulated.

**Minute 615.**

Initial changes had been made to the documentation for Part IA Biology of Cells defining A Level Chemistry as 'Highly desirable'. Further changes would be made as part of the normal updating process.

The request that practical sessions for Part IA Scientific Computing be allocated earlier, to avoid clashes with supervisions, had been noted for the future Part IA allocation process.

**Minute 616.**

iv) Form and Conduct notices had been updated to refer to Part IA Computer Science and had been published in the Reporter of 14<sup>th</sup> December 2011.

v) A correction to the Notice listing further work for Part III Experimental and Theoretical Physics and the M.A.St in Physics had been published in the Reporter of 14<sup>th</sup> December 2011.

**Minute 617.**

The Committee's response to the General Board's Education Committee's Working Group on Gender Attainment had been forwarded to the Education Section. An email had been forwarded to Part II Course Organisers suggesting that candidate gender be included on examination spreadsheets.

**Minute 618.**

The minute reporting the Committee's support for the online Lecture Listing had been forwarded to CARET and to the Education Section. The Management Committee would be kept informed of future developments.

**Minute 619.**

The Annual Report had been circulated to the General Board's Education Committee, relevant Faculty Boards and Schools.

**Minute 620.**

The Committee's comments on the Part IA Practical Allocation process had been forwarded to CARET and an initial meeting would be held during the Lent Term to discuss the process for 2012/13.

**Minute 621.**

A trial run-through of the Part II Subject Allocation process with CamSIS had taken place at Greenwich House in December. This had resulted in various requests for changes to improve the current system which included the change of name from 'Part II Restricted Subjects' to 'Part II Subject Allocation'. It was hoped that these changes would be made before the system went live in March 2012. Departments were in the process of providing subject data for the current year; the updated guidance had been circulated with this agenda.

**Minute 622.**

i) The Part IA Chairman of Examiners' report had been forwarded to the Board of Examinations and attention had been drawn to relevant sections.

The Board of Examinations and Student Records (together with the Education Section and the Board of Graduate Studies) were currently undergoing re-organisation. In addition to the usual

annual review, procedures such as collection and delivery of scripts, and storage of papers, would be looked at in the light of the new arrangements.

Whilst it would not be possible to include the CRSids in Candidate Lists this year the Examinations Office had agreed to supply an additional list which will include both CRSids and Blind Grade Numbers. This list would be circulated to Senior Examiners by the Secretary.

With regards to examination software, the Secretary had met with John Norman, Director of CARET in January who had agreed to undertake a survey and estimate the possibilities of centrally managed examination software. The scoping phase was under way and John Norman had attended the Part IA Interim Examiners' meeting as an observer. CARET would be able to use the experience acquired from a similar exercise with MML to assess what was achievable. There were two stages to be considered; a) the gathering of subject marks at the initial stage, possibly via a web-based entry system, and b) the compilation of the subject marks to enable easy transfer to an overall spreadsheet and subsequent entry into CamSIS. The second stage was viewed currently as high risk because of its dependence on one person and the complexity of the macro-driven spreadsheet, but any improvement to that stage of the process should leave open the opportunity for developing a system which could also do the initial gathering of marks. Some departments already had such systems, and some were in the process of developing them; some relied on standard Excel spreadsheets. CARET would need to consult with departments to ascertain their current processes, so as to ensure compatibility. In terms of timescale it was likely that a full analysis would take 3–6 months. This would include surveying the current process and preparation of an initial mark entry template which could be trialled immediately after the Easter Term 2012 examinations to check its suitability for all subjects. The results would feed into the development programme which would hopefully produce a system that could be trialled in parallel for the 2013 exams and, assuming all went well, used on its own for the 2014 exams.

The Committee were appreciative of the assistance offered by CARET for help with spreadsheets this year should this prove necessary.

**Action:** Secretary to continue discussions with CARET.

These comments had been reported to the Interim IA Examiners' Meeting on 24<sup>th</sup> January.

ii) The Part IB Chairman of Examiners' report had been forwarded to the Board of Examinations and attention had been drawn to relevant sections.

IB Senior Examiners had been asked if they wished to explore changing the date of their Easter Term examinations and the outcome had been forwarded to the Board of Examinations.

A CamTools site had been set up for Part IB Examiners which included links to relevant examination guidance, copies of documentation and copies of IB Subject Examiners' Reports submitted in June 2011. Equivalent CamTools sites for Parts IA, and Parts II and III, were being developed.

These comments had been reported to the Interim IB Examiners' Meeting on 23<sup>rd</sup> January.

iii) Examination and classing statistics had been circulated with the Annual Report.

**Minute 623.**

Guides for Senior Examiners for Part IA, Part IB, Parts II & III and the Exam Administration Timetable had been finalised and circulated to relevant Examiners; the examinations section of the NST website had been updated.

**Minute 624.**

The Committee's response to the National Student Survey data had been forwarded to the Education Section. It was regrettably not possible for additional questions to be directed towards specific years of the course. Details of the exact format of the data to be collected in 2012 would be provided for the February meeting of the Committee.

**631) REPORTED AND STRAIGHTFORWARD BUSINESS**

A paper of reported business had been circulated (**CM.757**). It included:

**i. Faculty Board of Biology, Biological Sciences Committee (BSC)**

Minutes of the meeting of the Committee held on 24<sup>th</sup> November 2011 (**CM.758**).

415.04 There was some surprise that the plagiarism detection software Turnitin could not be used in a formative capacity and whilst this had been the advice received, it was suggested that Departments should seek clarification if they had a particular reason for using Turnitin in this way.

416.01 The BSC had been strongly in favour of any changes to the IA Timetable that would remove the current clash between Biology of Cells and Computer Science. It was thought that whilst ultimately the NST Management Committee may need to make a decision on changes to the timetable, the matter remained currently under discussion within the Computer Laboratory who would inform the Management Committee of any firm proposals.

416.03 The working group to consider percentile rankings in Part IB would meet shortly.

417 It was suggested that staff in the Unilever Centre for Molecular Sciences Informatics (based in the Department of Chemistry) should be contacted regarding bioinformatics training requirements.

418 and 420 It was noted that, whilst the NST Management Committee had made a response to the Education Section with regards to Gender Performance and the National Student Survey, Faculty Boards were also expected to make a separate response.

422 An update on the current status of the plans for changes to the examinations in Part II Neuroscience was requested. **Action:** Dr Aitken to follow up.

**ii. Preparation for Part II process.**

The information provided to students was circulated for information (**CM.759**). In response to comments made last year, the front page of the student guidance had been modified. The reverse, which gave guidance on CamSIS entry, would be updated in line with the changes made to the CamSIS system. The Committee approved the documentation which would be circulated to Colleges and updated on the NST webpages mid-February.

**Action.:** Secretary to complete updates and disseminate Part II information

**iii. External Examiner Reports 2010/11**

A paper had been circulated (**CM.760**) which gave a summary of comments from reports received from External Examiners in 2010/11 together with departmental responses. The table mainly contained queries and suggestions from External Examiners and there were no particular themes apart from the frequent occurrence of comments regarding marking of projects. It was noted that many of the subjects who were in receipt of such comments had

expressed an intention to modify their process in some way for this year. It was agreed that progress in this area should be kept under review. Overall, however, it is clear that the External Examiners were broadly satisfied with our processes.

**iv. Form and Conduct Notice**

On behalf of the Committee, the Chairman had approved the text of an additional Form and Conduct Notice for Part IB Neurobiology which had been published on 14<sup>th</sup> December 2011:

Paper 2 will no longer consist of multiple-choice questions but will contain twenty short-answer questions of equal weight; candidates are required to answer all twenty questions. All other parts of the examination remain unchanged.

Full details of the examination will be found by following the appropriate links from <http://www.bio.cam.ac.uk/teaching/nstneurobiology/>

**v. NST representation on the Psychological and Behavioural Sciences Tripos Management Committee**

On behalf of the Committee, the Chairman had approved the nomination of Dr Mike Aitken to serve on the newly formed Psychological and Behavioural Sciences Tripos (PBST) Management Committee. The draft entry in the 2013 Undergraduate Prospectus for the new Tripos was noted **(CM.761)**.

**vi. Review of mathematics teaching**

The Committee was reminded that, at its October meeting, it had not felt it appropriate to take forward the suggestion of a review of mathematics teaching which had been suggested by the Faculty Board of Physics and Chemistry. At its meeting on 14<sup>th</sup> December, the General Board's Education Committee had agreed that discussion of the recommendation to review mathematics teaching should be postponed until a later Education Committee meeting, following receipt of the report on the Learning and Teaching Review of the Department of Mathematics which was expected in Lent Term. It was noted that the outcome of that meeting would be reported to the Management Committee.

**vii. Part III Entry – Physics**

At a recent Teaching Committee meeting the Department of Physics had agreed to move the entry requirement for Part III Experimental and Theoretical Physics from a 2.2 to a 2.1 with effect from October 2013. The annual Entry Requirement Notice for 2013-14 had been recently circulated for update and subject to approval at a future Management Committee would be published in the Lent Term. The change for Physics would be included in this Notice.

**viii. Part III Entry - Process**

Draft guidance for students considering continuing to Part III had been circulated **(CM.762)**. It was proposed that this would be linked from the current NST web page and circulated to Colleges and Directors of Studies. This additional information would help explain the change in process for Part III progression now that this was entirely separate from the choice of Part II subject. The extent to which admission to Part III should have central attention had been discussed. Whilst for the majority of students the transition from Part II to Part III was relatively straightforward since it involves no change of subject, there will be some students who will change subject and/or Tripos, and indeed some might apply for more than one subject at Part III. It had been suggested that a central email could be sent to all Part II students but it was thought that this may cause confusion with the procedures in individual subjects. It was therefore proposed that additional information be added to the NST Part III web page which would list the application process for each subject so that students could take the appropriate

action. It was also agreed that it would be helpful if application dates could be aligned across several subjects. A full list of all Part II NST students would be obtained and circulated to all Part III subjects to enable a checking process. In the absence of any central registration process within CamSIS, it was agreed that the proposed method should be tried for this year.

**Action:** Secretary to complete data and to circulate information to Colleges, Directors of Studies, Part III subjects and upload to web.

### **632) KEY INFORMATION SETS (KIS)**

Initial data had been collected for NST as part of the preparation for the Key Information Sets and a paper had been circulated that explained the process and gave the initial results on the learning and assessment data (**CM.763**). It was explained that KIS data was a legislative requirement which would be compulsory with effect from September 2012. A year of study was based on 1200 hours which meant that the percentage of Guided Independent Study (obtained by deducting the number of scheduled Learning & Teaching hours from the total of 1200) appeared disproportionately high. The Committee took a relaxed view on the matter and did not feel that it would pose a risk to the University's reputation. It felt that the quality was more important than the quantity, and hoped that a general explanation could be provided on the University website as to e.g. the high value of contact time in the form of supervisions. The Committee was content with the method of calculation that had produced the overall data for the Tripos.

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

### **633) EXTRA TIME IN PRACTICAL EXAMINATIONS IN PART IA AND PART IB**

Following consultation with the Board of Examinations, the Disability Resources Centre and relevant Departments, a revised paper outlining a suggested process for extra time in practicals for students with specific learning difficulties (SpLDs) had been circulated (**CM.764**). The process was specifically aimed at subjects with a 'true' practical paper and did not affect the standard procedures that operated for written examinations or written practicals. Those candidates identified as having a SpLD would automatically receive the additional time defined for that particular practical examination as set out in the paper. Directors of Studies or Tutors would only need to make contact with practical organisers for those candidates with additional needs e.g. physical adaptations. The new protocol would simplify the process and could be put into operation for the 2012 examinations, with the Board of Examinations taking responsibility for notifying colleges of the change. The Committee approved the suggested change and was content for it to take effect for the examinations in the Easter Term 2012. It was suggested that any other Part II practical examinations may wish to adopt similar practice e.g. Earth Sciences.

**Action:** Secretary to notify the Board of Examinations that the process had been agreed.

### **634) SUPERVISION DATA**

A paper by Dr Paul Chirico together with data from CamCORS had been circulated, together with a previously circulated table of supervision norms (**CM.765**). The Senior Tutors' Standing Committee on Education would return to discussion of this matter at the start of the Easter term and would welcome any comments on comparison of data against norms by the end of Lent term. The Committee noted that across all subjects the hours per student showed a modest reduction for the most recent data and that NST had played a part in that reduction. The data show that postgraduate and post-doctoral students continue to be major contributors to supervision, and that the most common group sizes were two and three. The significant numbers of one-to-one

supervisions for some subjects in Parts II and III were thought to be related to supervision of projects or dissertations.

In respect of the table of supervision norms there was some question as to whether the data for biological subjects had been updated as requested. The Committee discussed whether the term 'norm' was intended to indicate a quota or an average number, and it was concluded that it was likely that different Departments interpreted the number slightly differently. Overall, it was not felt that these data raised any particular concerns in respect of the NST.

**Action:** Secretary to forward the Committee's response to the Senior Tutors' Standing Committee on Education.

### **635) ANY OTHER BUSINESS**

Dr Aitken announced the appointment of Dr David Good to the role of Director of Education for the School of Biological Sciences, and the appointment of Deputy Directors of Education for NST (Dr Aitken) and for MVST (Dr L McVinish). It was proposed that Dr Good be co-opted on to the NST Management Committee in order that both Physical Sciences and Biological Sciences had their Directors of Education present. This was agreed by the Committee.

**Action:** Secretary to contact Dr Good and arrange for him to be appointed as a co-opted member.

### **636) DATE OF NEXT MEETING**

The next meeting will take place at 2:00 pm on Tuesday, 28<sup>th</sup> February 2012, Todd-Hamied Room, Ground Floor, Department of Chemistry.