UNIVERSITY OF CAMBRIDGE
FACULTY OF COMPUTER SCIENCE & TECHNOLOGY

Chairman: Dr David Greaves   **Secretary: Ms D. E. Pounds**

Minutes of the meeting of the Tripos Management Committee
held on Monday 20 January 2014 at 14:15 in SW00

Present

Dr Richard Gibbens *(Representative on Mathematics Faculty Board)*
Dr David Greaves (Chairman)
Dr Robert Harle *(Parts Ia and Ib Course Director and Chair of SSCoF)*
Dr Sean Holden *(Part II and Supervisions co-ordinator*

Prof Ian Leslie
Ms Dinah Pounds *(Secretary)*
Prof Peter Robinson *(Exchange Programme Organiser)*
Dr Simone Teufel

1. **Apologies for Absence**
   Prof Ann Copestake *(Deputy Head of Department)*

2. **Sabbatical and other leave**
   None received

3. **Notification of any other business**
   Review of the Exam Structure Document to minimise confusion.
   Review of Part IA practicals.

MINUTES OF THE PREVIOUS MEETING

4. **Approval of the minutes of the previous meeting**
   The minutes were approved and signed.

5. **Matters arising**
   Replacements for Dr Robin Walker for the roles of Chair of the Directors of Studies forum and as Subject Convenor for Computer Science have been proposed. The appointments are to be confirmed and circulated. **Action DJG, DP.**

REPORTS FROM OTHER COMMITTEES

6. The Committee received the minutes from the Staff-student Consultative Forum. No action was required.

7. **Correspondence**
   Minutes from a meeting of Computer Laboratory lecturers held 13th Dec 2013 to discuss arrangements for practical exercises in Part IB.

EXCEPTIONAL ITEMS

8. **Proposed timetable to introduce a third Part IA paper thus creating a 75% Computer science option for Part IA.**

The Committee discussed the matter at length. It was noted that the proposal had been met with general approval and enthusiasm at a Departmental level discussion meeting. The Committee agreed that a third paper should be compulsory as an optional paper created constraints and core material could not be included. The proposal will now be taken forward for further discussion at Departmental level.

There is significant opportunity for borrowing of course material from the Engineering Tripos. The Engineering timetable does not facilitate sharing lectures or practical Lab sessions but Engineering have expressed a willingness for Computer Science students to use their facilities and resources including laboratory space, demonstrators, lecture courses and examination questions.

The nature of continued linking to the Natural Sciences timetable needs to be studied and not disrupted unnecessarily so that NST candidates can continue to read our Paper 1. We will also continue to 'borrow' Maths for Natural Sciences as the fourth paper in our Part IA. Offering our own Computer Science Maths paper instead would not be a problem if necessary in the future.

Other concerns are summarised below:

  I.   The Chair expressed some concerns that withdrawing the Computer Science with Psychology option, popular with female students, may have an adverse effect on the gender balance of applicants. Retaining a PBS component in the new Part IA, perhaps as an option, will be considered. The Committee also expressed the hope that including Robotics and Artificial Intelligence into Part Ia will prove attractive to both genders and attract a different cohort.

  II.   The possibility of switching in or out of this tripos may be reduced.

  III.   It is hoped that the changes will not affect the MIT exchange programme in that it will not become harder and that MIT students will still have sufficient pre-requisites to enable them to join Part IB.

The Committee agreed that revision of Part IA should be moved forward quickly to ensure the current revision of Part IB can take these plans into account so that any changes made to IB are of a lasting nature as far as possible. However, it was felt that the timetable to introduce changes to IA should consider the admissions process and a preferred implementation date is October 2017.

9. **Revision of Part IB**
   In response to the request for more practical elements within courses, the following changes were agreed:
   I.   C and C++ will expand with four practical sessions added to the present eight lectures using space freed up by the removal of Algorithms into IA.
   II.   It was agreed that all other changes should be self-contained within courses until after the revisions to Part IA are finalised.
   III.   The Committee felt that this Department gives a high number lectures per course and reducing the number of lectures by replacing them with practical work was acceptable. The consensus view was that, where lecturers wished to introduce practical work, twelve lecture courses should become eight lectures and four practical sessions. Dr Robert Harle expressed concern that based on past experience, students do not turn up to practical sessions unless the work is assessed. An increase in ticks to assess practical work is one way forward. One tick per four practical sessions was deemed about

right. Alternatively, practical work can be structured to embody material that is not otherwise lectured and which is critical for the summer examination. The TMC must produce a guidelines/framework document for practical class structures (that also explains how to host practicals on Otter, the automated marker tool).

Dr Richard Gibbens reported on ongoing discussions for the revision of IB Mathematical Methods necessitated following last year's revision of IA. There is now a need for this course to link in with IA Maths for Natural Science and to cover Probability which has been removed from IA. It was agreed to change the division of this course from six lectures for each of the two parts to one section of 10 lectures, offering two exam questions and one part containing six lectures and one exam question, increasing the number of exam questions by one.

10. Changes to Part II
I. **A proposal was received to separate Security II into two courses with Cryptology becoming a free-standing 8 lecture course.**
This proposal did not receive the support of the Committee as small courses give rise to difficulties arranging supervisions and the Committee felt Cryptology was more suited as a Part III course. It was also noted there was substantial overlap between Part IB Security I and Part II Security II material. Chair will hold further discussions with the lecturer as to a way forward.
Action DJG
II. **Chair to update the Committee on cover for Principles in Communications during sabbatical leave.**
The lecturer has confirmed he supports the Committee's proposal for the course to be restructured. The Chair will circulate a discussion document.
Action DJG
III. DJG reported he had received a draft syllabus for Part II Advanced Algorithms from Thomas Sauerwald and that this included much of the graph theory from Principles of Communication.

11. Supervision data (Item 2014-01-20c)
No significant changes are evident in the level of supervision provision.

12. Any other business
I. **Review of the Exam Structure Document to minimise confusion**.
Publishing assessor's initials on the Exam Structure document has caused confusion and encouraged speculation as to the content of the exam questions. The Committee agreed the published document should in future only contain the course titles. **Action DP**
II. **Review of Part IA practicals.** There have been some issues arising from the new arrangements for Part IA regarding the overlap of ML with Java ticking which need addressing for next year. It was agreed that, wherever possible, tickers should be prepared in advance to enable them to tick both courses. The Chair will also ask Dr Andrew Rice to develop the online ticking package to enable students to distinguish which course the ticker is covering.
Action DJG

Date of next meeting: Monday 24 February 2014 at 14:15 in SW00