Oxford University Department of Materials
Academic Committee

DMAC 35 Minutes of the Academic Committee held at 2.00 pm on Monday 8\textsuperscript{th} May 2006 in the Wolfson Meeting Room.

Present: GT, KAQOR, AJW, JMS, HEA, CRMG, AOT (Chair).

In attendance: ICS (Secretary), Sarah Haigh (JCCG Chair) (Items 1-3), Semjon Terehrov (JCCU Chair) (Items 1-3), RD (Item 7i), MRC (Item 7ii).

1. Apologies

None.

2. Report from the Chair of JCCG (SH)

SH reported that JCCG thought that it would be helpful to have access to electronic versions of Part II and DPhil theses. AOT further reported that last year’s (2004/05) Part II external examiner had suggested in his report that it would be useful for external examiners to have access to previous theses, and suggested that an electronic format would facilitate this. HEA, from the point of view of an examiner, suggested that there would need to be a definitive version of the thesis for examining purposes and it was agreed that this should be the three bound hardcopies submitted in the normal manner. It was agreed that in future years the Part II students should be required to hand in a pdf file of their thesis on CD-ROM as part of the sign-off procedure, and that the Part II Organiser should include an instruction to this effect in the Part II handbook and at the induction course.

Action: ICS

3. Report from the Chair of JCCU (ST)

i. Easter Tour

ST reported that the 2006 Easter Tour to Toulouse had gone well, and on behalf of the JCCU thanked the Department for its sponsorship and PRW for accompanying the students. Japan has been proposed as the destination for the 2007 Tour. Volunteer organisers have agreed to look into the viability of Japan as a destination over the summer vacation and will meet with AOT after prelims.

ii. Industrial Visits

JCCU have requested that a record of satisfactory Industrial Visit reports for both 2\textsuperscript{nd} and 3\textsuperscript{rd} Year students is published. ICS reported that a record had been placed on the Teaching Laboratory noticeboard on one occasion only in the interests of the cohort sitting Part I in 2004/05. ICS, as Industrial Visits Organiser, agreed to post an up to date Industrial Visit report record on the noticeboard at the beginning of each term.

Action: ICS

iii. Electrochemistry

JCCU request that AIK’s lecture notes are made available on the Web. AOT reminded the JCCU that publication of lecture notes is a matter for individual lecturers. The request will be passed on to AIK.

Action: ICS
iv. Kinetic Theory of Gases
ST reported that students had complained in the lecture questionnaires for this course that they were expected to copy too much material into their hand-outs.

v. Nanomaterials I & II
JCCU requested that it be made clear that the two Nanomaterials options are independent of each other and that they are renamed to prevent confusion. It was reported that attendance at Nanomaterials II had been low because students found Nanomaterials I difficult. DMAC agreed to change the titles of the two options appropriately.

**Action:** AOT

4. Minutes of DMAC 34
The minutes of DMAC 34 were accepted.

5. Shortened Minutes
Consideration of confidential items to be removed from the minutes to be published on the Department of Materials website.

6. Matters Arising

*From DMAC 24:
*Minute 11 SENDA – in progress.

*From DMAC 27
*Minute 4 Report from JCCU Chair:
Practical Classes: Possibility of submitting reports in word-processed format. JMS has provided a lead on information on software for the detection of plagiarism. AOT is investigating its use and will attend a half-day workshop on plagiarism in June 2006.

**Action:** AOT

*From DMAC 27
*Minute 7 Matters Arising:
7(c) Programme Specifications on the Web – PS are now online (under ‘Research and Teaching Forms and Documents’ at http://www.materials.ox.ac.uk/local/index.htm).

*From DMAC 30
*Minute 8i - Practical Review – AJW stated that he was not aware that construction of the end of term practical questionnaire had progressed, but confirmed that it was still desirable. AOT requested AJW to jot down some ideas from which ICS and AOT would draft a questionnaire.

**Action:** AJW/ICS/AOT

*From DMAC 32
*Minute 11iv Report from the Faculty: Guidance to Supervisors AOT and CRMG will adapt the guidance from EPSC.

**Action:** AOT/CRMG

*From DMAC 33
*Minute 3i Maths Review A working group comprising CMB (Chair), AJW, JMS, SCB, and JaMS will report to DMAC by MT06. If at their initial meeting major changes are thought to be urgent they will report to DMAC in week 7 TT. Prof J Woodhouse (Earth Sci) will be invited to contribute to the group.

**Action:** CMB
**Minute 3ii Quantum & Statistical Mechanics (DMAC34/2)** An informal working group has been set up comprising PRW, SH, MRC and JaMS (Chair). The working group has met, report will be made to DMAC 36, JaMS will inform Year 2 UGs of which parts of the course delivered in 2005/06 are not for examination purposes in TT 2007.

**Action:** JaMS

**Minute 7 Prelims Regulation Amendments** The amendments have been put forward to division.

**Part 1 Amendments** – Faculty has agreed the amendments suggested at DMAC 31 and the amendments have been put forward to Division.

**Minute 12 Report from the EMS Standing Committee** LJFJ reported that the EMS course was proceeding well. LJFJ agreed to warn the standing committee that CRMG will not give his 4th Year course. Action completed (ICS).

*From DMAC 34*

**Minute 5 Election of New Member(s) of the Nominating Committee (for the Appointment of Examiners)** The current members of the Nominating Committee are GT (Chair), GDWS and SGR. GT proposed that the committee should comprise the Head of Department, the Chair of Faculty and the Director of Studies (all _ex officio_). The proposal was carried and will be put forward to Faculty in TT06.

**Action:** AOT

**Minute 6 Workshop on Tutoring** S. Speller has agreed to develop and lead the workshop.

**Minute 10 Revision of the Schedule of Part I MS Regulations (DMAC 34/6)** AOT proposed that the Schedule should be simplified to contain the titles of papers only (details being covered in the course handbook). DMAC agreed to this proposal. The amendment has been put forward to Division.

**Minute 12v Admissions Offers** At DMAC 32 LJFJ reported from the Tutors Committee that a minimum standard offer of AAA had been agreed, but RIT had informed AOT that the tutors actually meant a _typical_ minimum offer of AAA. JMS confirmed that tutors would not wish to close the door on making a lower offer. AOT has sought clarification. The Department of Materials Admissions Criteria now state, “There is no standard condition but in recent years most offers have been AAA”.

**Minute 14 Any Other Business** Confidential item removed from the minutes to be published on the Department of Materials website.

7. **New 3rd Year Options Scheme: Details of “Introduction to Modelling in Materials Science” and “Characterisation of Materials” Modules (DMAC 35/1&2)**

   i. **Introduction to Modelling in Materials Science Module**

CRMG asked if there were any implications for the provision of hardware. RD replied that the module could be run for up to 12 students using existing equipment in the MML. There would be no set minimum number of students.

AJW expressed concern that there was a greater loading in the Modelling module than in the Characterisation module, and indeed that the Modelling module is overloaded whilst the Characterisation module is underloaded. AOT commented that the difference in load was not as great as it seemed from first sight of the paperwork. KAQOR asked if the uptake of the Modelling module was low then would the Characterisation module be able to cope with the resulting number of students. RD replied that MRC had suggested that the Characterisation
module could cope. AJW noted that there was just enough instrument time available in the Characterisation module for 30 students.

CRMG asked how long the afternoon tutorials would be. RD replied that there was no limit but they will perhaps consist of 2 hours of demonstration followed by 1 hour of self-help tutorial.

KAQOR enquired how much writing of code would be required of the students. RD stated that only small pieces of code would need to be written. KAQOR suggested that writing this into the module description might aid attracting students to the module. KAQOR further suggested that DMAC’s concern over student uptake might be a result of the style of language in which the module has been presented, and that presenting the module in terms that the students would recognize would aid the attraction of students. CRMG felt that the module should be given the best chance of attracting students to it, and that it should be badged as a core skill in modern materials science. AOT suggested there should be a short briefing in say the middle of MT for the leaders of the two options to describe the modules. CRMG offered to give a 5-minute introduction to how important the two areas of materials science are at the briefing.

AOT reminded DMAC that the Modelling option would be trialled with postgraduates in 2006/07. Following the comment by RD that the ‘modellers’ felt it very important that all four types of modelling were included, he suggested that if the experience of the postgraduates is that the course is overloaded then load is lightened by cutting out one of the two mini projects and moving the FEA taught material to Monday of the 1\textsuperscript{st} week.

KAQOR noted that the lectures were compulsory in the scheme of the module which is at odds with the University rule that lectures cannot be made compulsory. GT suggested that the lectures in the module be badged as extended practical briefings. KAQOR raised concern about how the compulsory nature of such briefings could be policed. CRMG stated that there was usually some flexibility in compulsory elements.

**ii. Characterisation of Materials Module**

HEA raised whether there was a Health & Safety implication for including practical XRD in the Characterisation module, i.e. the normal practice of attending the University safety lecture and registration as a radiation worker. CRMG and AJW replied that it is normally possible for XRD work to start prior to attendance at the University safety lecture, hence there is in-built flexibility, and that in any case the work would be supervised by a demonstrator. AJW/CRMG raised concerns however over the reliability of the Characterisation instruments, the XRD equipment in particular.

CRMG expressed disappointment at the range of techniques covered in the module given the extent of techniques available in the Department. AOT and GT reminded DMAC that the original idea (as proposed by SGR) was that the module should provide more experience of the basic techniques. AJW and CRMG felt that even this module could not be sufficient to provide real competence, and hence the introduction of a greater range of techniques would not be substantially detrimental to the students’ competence in the basic techniques. AJW raised whether the introduction of the Characterisation module would allow the 2\textsuperscript{nd} year practical load to be reduced. AOT suggested that a relaxation in the limitation of the number of techniques available could provide the opportunity for students to use 4 techniques instead of 3.

MRC expressed no concern over expanding the range of techniques covered except for the practicalities involved including training. CRMG made the specific suggestion that each student should identify an appropriate advanced technique for their portfolio (explaining the rationale of their choice to the Senior Demonstrator) and a time slot would be provided where work could be done for them but in their presence so that they can see the instrument in operation. CRMG further noted the advantage that including a wider range of techniques...
implied a wider range of samples to be investigated. CRMG and MRC agreed to go to Begbroke to see and discuss what instruments might be appropriate and available there.

**Action: CRMG/MRC**

AOT suggested that in providing such time slots MRC might need to reconsider the balance of the first week.

AJW asked whether sample preparation had been considered. MRC replied that pre-prepared sample sets would be supplied and thus sample preparation would be minimal.

KAQOR suggested that the value of the module could be increased by making the practical element more like a real-life commercial laboratory in which work needs to be done to a budget. She suggested introducing a credit system in which the students would be given a number of credits and they would be charged a varying number of credits for the use of each technique.

MRC agreed to rework the module based on the extension of the number of techniques if logistically possible. He will seek SGR’s comments on these changes.

**Action: MRC**

It was agreed that a review of the first running of the module would be held in TT08 to include consideration of whether it was possible and/or desirable to cut any related 2nd year practical content.

8. **Examiners’ Reports: Availability in the Library**

AOT reported that the Examiners’ Reports were not currently available, but that under EPSC guidance they should be. In the run up to the recent EPSC review AOT had found that we should be making anonymized reports to all students and that JCCU are supposed to discuss the Examiners’ Reports. AOT proposed that two bound sets from last year (2004/05) are made available in the library. DMAC agreed to the proposal.

**Action: AOT**

9. **New DMAC Members**

i. **To replace GT (DMAC & UG Panel)**

AOT asked DMAC if there was a member of staff that they would like him to approach. CRMG suggested offering the opportunity to one of the Career Development Fellows (CDF). AOT reminded DMAC that the Department had committed to not burdening the CDFs with large amounts of administration. It was suggested therefore that a CDF should be co-opted for one year starting with Catherine Bishop. DMAC had no further suggestions with respect to replacement for GT.

AOT asked JMS if he would stand as Chair of Faculty, and thus on DMAC, for an extra year (to 2009) in order to facilitate replacement of DMAC members on a regular cycle. JMS agreed to consider the proposal.

ii. **To replace HEA (DMAC & Grad Panel)**

To further facilitate replacement of DMAC members on a regular cycle, AOT suggested that HEA remain a member of DMAC for one further year. CRMG noted that HEA would be joining ROG. HEA stated that she did not wish to sit on both DMAC and ROG, and further more wished to step down from the Grad Panel.

AOT will seek nominations for membership of DMAC to replace both GT and HEA, and will hold an election if necessary.

**Action: AOT**
10. General Scheme: Replacement Lecturer(s) for Courses Given by GT

AOT stated that he hoped to present the General Scheme for 2006/07 at Faculty in TT06.

AOT reported that he had discussed with Peter Nellist (new University Lecturer at Corpus Christi) the possibility of him talking on the courses currently given by GT. He reported that Peter Nellist did not feel willing or able to take on these courses, and that he would definitely not want to teach Macroplasticity & Metal Working. AJW suggested that Peter Nellist should be able to teach the postgraduate Optical Microscopy course. GT suggested that as a physicist Peter Nellist ought to be able to teach Elastic Behaviour in Isotropic Materials. GT further suggested that Paul Butler (Departmental Visitor) would be able to teach Macroplasticity & Metal Working. CRMG stated that he did not see any reason why Paul Butler should agree to take on this course, but JMS noted that Paul Butler had been previously interested in teaching. ICS confirmed that Paul Butler had given two lectures as part of the old Design & Manufacture of Materials Course and AOT noted that he had co-supervised a Team Design Project in MT05.

11. Report from EMS Standing Committee (ICS)

ICS reported that he had informed the EMS Standing Committee that CRMG would not be giving his 4th year EMS course, and that the Engineering Science EMS lecturers would be willing to give the course instead. ICS further reported that he had discussed this briefly with CRMG following the Standing Committee meeting and had reported back to the Chair and Secretary of the Standing Committee that CRMG’s course was based on his personal research and that a better approach would be remove the lecture course altogether and to include additional question(s) based on the remaining lecture courses on the exam paper.

ICS also reported that the Chair of the Standing Committee would be contacting AOT to enquire on the current status of arrangements for the Team Design Projects (TDP) for MT06. AOT reported that he had requested projects from potential TDP supervisors and that TDP organisation was on track according to the usual schedule.

The membership of the EMS standing committee will remain the same until the EMS course was finally closed.

The student representative on the Standing Committee had reported that there had been a small number of clashes in lecture course timetabling. Dr Jane Frew (Academic Administrator for Eng. Sci.) will obtain lecture notes for EMS students that are forced to miss one lecture course because of a clash with another.

AOT reported that, as a general timetabling issue, there is now restlessness among students concerning ad hoc timetable changes after publication of the Lecture List. CRMG agreed and stated that such timetable changes indicate a lack of commitment to the core function of teaching. AOT and CRMG will consider the issue further.

**Action: AOT/CRMG**

12. Chairman’s Report

i. Teaching Excellence Awards

AOT reported that the Department’s proposal for administering the new Teaching Excellence Awards had been submitted. The Oxford Learning Institute was not happy with the proposal to restrict the awards to staff that had not yet been tenured. The Department has relented and has agreed to open the awards to staff at all academic levels, and its scheme has now been accepted. The awarding panel will be the Head of Department, the Director of Studies, and the Chairs of JCCU and JCCG. CRMG/AOT will circulate an invitation to apply.

**Action: CRMG/AOT**
AOT reported that on the back of the new Teaching Excellence Awards CRMG has suggested that a prize be set up for best teaching assistant. It was agreed that this prize will be assessed by a student poll to be included in the practical questionnaire.

Action: AJW/ICS

**ii. Educational Policy and Standards Committee Review**

AOT reported that informal comments from the panel on the Department and on the views made by the students were extremely positive. Comments made by students on the University questionnaire that they do not gain much from teamwork had been discussed between the panel and students over lunch. Students responded that being given the opportunity to work in teams is not the same as being trained to work in teams. DMAC felt that training was implicit in the TDP experience and that in addition supervisors did provide training in the form of guidance.

CRMG reported that he had received notes that SGR (Department representative of the review panel) had made during the closed sessions. CRMG will circulate comments to DMAC once the Department had received the formal report from EPSC.

**iii. EPSC Project on Embedding Graduate Studies**

AOT reported that one intention of the project was to seek a minimum provision by colleges and departments. There may be an opportunity for input, and the Grad Panel will be the first point of contact.

**iv. LJFJ Absence**

AOT reported that he, JMS and APD had held interviews for LJFJ’s cover on Friday 5 May. The preferred candidate would be contacted directly following this DMAC meeting (Monday 8 May).

AOT further reported that Pippa Gordon would be leaving the Department at the end of June 2006, and that the post had been advertised. HEA as a member of the Grad Panel will be a member of the interview panel. AOT requested that staff bear with the academic administrative staff in the interim period.

13. **Reports from Divisional Committees**

   i. **Academic Committee (JMS)**

      There was no business to report.

14. **Any Other Business**

      There was no further business.

**Date of the next meeting – 2 pm Monday 5th June 2006, Wolfson Meeting Room.** The meeting closed at 5.03 pm.