

## Oxford University Department of Materials Academic Committee

**DMAC 34 Minutes of the Academic Committee** held at 2.00 pm on Monday 27<sup>th</sup> February 2006 in the Wolfson Meeting Room.

**Present:** KAQO'R, AJW, HEA, JMS, CRMG, AOT (Chair).

**In attendance:** ICS (Secretary), Martin Carr (Schools Liaison Officer).

### 1. Apologies

GT.

### 2. Minutes of DMAC 33

The minutes of DMAC 33 were accepted.

### 3. Shortened Minutes

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

### 4. 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.

**Action: AOT**

#### *\*From DMAC 27*

*Minute 7 Matters Arising:*

7(c) Programme Specifications on the Web – PS have been updated and are being reviewed before publication online. In progress: AOT

#### *\*From DMAC 30*

*Minute 8i - Practical Review* – The end of term questionnaire is currently under construction.

**Action: LJFJ**

#### *\*From DMAC 31*

*Minute 8c Prelims Examination Reports-Maths Lectures* The students had reported previously that the Maths lectures were progressing at too fast a pace. This has been backed up by the lecture questionnaires. Historically the Maths course is fast-paced with a high number of topics covered relatively quickly. The Committee agreed that a Working Group should look at this issue. It was proposed that the Academic Committee's Undergraduate Panel (GT, JMS and PRW) should be asked to review the course in the Hilary term. The Chair also proposed to meet with the maths Convenor in The Department of Earth Sciences (Prof. Woodhouse).

**Action: see matters arising – DMAC 33**

#### *\*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.

**Minute 3ii Quantum & Statistical Mechanics (DMAC34/2)** An informal working group has been set up comprising PRW, SH, MRC and JaMS (Chair).

**Minute 7 Prelims Regulation Amendments** The amendments will be put forward to division – in progress: LJFJ.

**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 4<sup>th</sup> Year course.

**Action: LJFJ**

## 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 has 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 an announcement will be made at Faculty in TT06.

## 6. Workshop on Tutoring

AOT reported that he had not yet moved forward on a workshop on Oxford-style small group tutoring. Following the experience of M. Todorovic running a workshop on maths classes, he suggested that the small group tutorial should be led by a member of the Department that has tutored for several years. AOT suggested that early in MT06 would be ideal and that the leader of the workshop should be paid £500. CRMG suggested that the workshop should be run in the 1<sup>st</sup> or 2<sup>nd</sup> week of November, and that S. Speller would be suitable to lead the workshop and might like to do it. AOT will approach her before she goes on maternity leave.

**Action: AOT**

AOT also suggested that a senior member of staff should be involved in the afternoon session. KAQOR suggested that more than one senior member of staff should be involved as each tutor has a different approach. JMS asked what provision there was from OLI, and AOT replied that there was no provision for Postgraduates. DMAC was very positive about the value of offering this workshop on tutoring.

## 7. Widening Participation

### i. Schools Liaison Officer Annual Report (MJC) (DMAC 34/3)

Martin Carr (MJC) outlined the annual summary report on schools liaison activities and reported that the 2005/06 schools liaison programme was an extension of the 2004/05 programme with the exception of the residential course for teachers. A new activity is the organisation of a symposium to be held on 20<sup>th</sup> March 2006 on the development of school curricula that might contain Materials Science (Materials content at GCSE is increasing, the new syllabus goes live in September 2006, and MJC suggested that this pattern is likely to be followed into A-level. It is hoped that if this first symposium is successful then it will become an annual event. CRMG stated that the Department would like to set up a further meeting for schools liaison officers around the country to share best practice, but warned that we need to be aware of possible overlap with the IOM<sup>3</sup> in this regard.

Gatsby Science Enhancement Programme (SEP) – The Department has supported SEP with development material. MJC would like to see other members of this Department, and other Departments, involved in the future.

Open Days – Due to decreased interest there are there will be three open days this year instead of the usual four. It is becoming increasingly difficult to find industrial speakers and MC is still looking for industrial speakers for open days on 15<sup>th</sup> and 22<sup>nd</sup> March. AOT suggested that MC keep in touch with RIT in his role as Director of OCAMAC. JMS suggested that Dr Paul Butler (Departmental Visitor) be approached. CRMG offered to act as an industrial speaker (on the subject of atom probe) on the morning of 22<sup>nd</sup> March. MC further reported that it is becoming increasingly difficult to organise Department tours for open days. Several tour stops are being used routinely, but not all of them are available at any one time.

MC reported that he is working with his local secondary school to make a radio programme on ‘What is Materials Science?’ If the programme is successful then it could be placed onto the School’s and/or the University’s website. He suggests that the programme could perhaps be regarded as a pilot for others particularly if they were to be related to the schools curriculum.

Nuffield Science Bursaries – The Oxford Trust have stated that they would like to initiate the organisation of projects earlier this year. MC has already requested projects from members of staff but to date has not received any replies. He reminded DMAC that the bursaries were for school pupils to spend 4-6 weeks in the Department during the summer following their lower sixth form year; and that the Department has a high success rate of receiving applications for the UG courses from the Nuffield Bursary Students. JMS raised a concern over the level of supervision required. AOT reminded the committee that other similar schemes (e.g. the UG Nuffield Bursaries) run over the summer. CRMG suggested that it would be good to put the Nuffield Bursary students to work on the Department’s projects for schools that are being rolled out/developed. He stated that he would be willing to act as a nominal supervisor for such students with the day to day supervision being done by the Teaching Laboratory Technician. MC and CRMG will discuss this further.

## **ii. Widening Participation**

Incorporated in Minute 7i.

### **8. UG Admissions Report (AOT) (DMAC 34/4)**

AOT reported that there could be as many as 35 undergraduates starting in MT06 which indicates continuing incremental growth. Overall, the success rate of number of offers to number of applicants is 59%, although there is a slight distortion on this figure because OCAO incorporate Phys2 in the number of offers but not in the number of applicants. DMAC agreed that the schools liaison activities of the previous year had been successful. It was disappointing that the ratio of state school to independent school applications was still low, but it was difficult to see what more we could do. As the impact of our schools liaison work accumulates it is hoped that the ratio will improve.

### **9. New 3<sup>rd</sup> Year Options Scheme: details of “Introduction to Modelling in Materials Science” option (DMAC 34/5)**

AOT reminded the committee that the introduction of this option course was born out of the recent review of 3<sup>rd</sup> Year options. In addition to the choice of two from three blocks of option courses, there will be an option for MS students to take a two-week long module in either Characterisation or Modelling. The new modules will be assessed by coursework rather than through written examinations. The modules will be offered to postgraduate students also. The modules will run for the first time for undergraduates in HT08. The Modelling module will offered to postgraduates in 06/07 to provide an opportunity for wrinkles to be ironed out.

Following lengthy discussion the following comments/recommendations were made:

The reporting length of 2000-3000 words should be a total for both reports rather than for each report, subject to a review of what will be required as assessment of the Characterisation module.

The organisers should consider some element of oral assessment in line with Team Design Projects, and subject to a review of what will be required as assessment of the Characterisation module.

DMAC regarded the trial with postgraduates to be essential, as it was felt that there might be some degree of overload. The organisers/teaching staff should be prepared to revise the programme as necessary following the trial.

There was also concern that if students found the Modelling module too demanding it would be too late to switch to the Characterisation module.

DMAC request that the organisers confirm that the module can be run using existing hardware, and the maximum number of students that can be accommodated on the module.

Undergraduates should be given priority over postgraduates.

AOT will raise these points with the organisers (DGP and Ralf Drautz) and offer them DMAC's thanks.

#### **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 and to refer to the course handbook for details. DMAC agreed to this proposal.

**Action: AOT/LJFJ**

GT had suggested by written note that we restructure the four General Papers into five General Papers and also reduce the number of Part I examiners from six to five. This suggestion was not favoured by the committee.

#### **11. Report from E(M)EM Standing Committee (KAQOR) (DMAC 34/7)**

The Economics Department tabled at the Standing Committee, with no prior consultation, a reform of Introduction to Economics. The course currently comprises 16 lectures on microeconomics (MT) and 16 lectures on macroeconomics (HT). Economics, Management and PPE students also receive 10 maths lectures. They intend to integrate the maths lectures into a 32 hour lecture series with microeconomics and macroeconomics. Some of the economics content will therefore appear as examples in the maths content. KAQOR raised concern that Materials students (2<sup>nd</sup> yr) will be turned off by the low level of maths within the course, but will not get the economics examples any other way. Despite protests from Materials and Engineering representatives at the meeting Economics will proceed with the reform. Tutors should manage expectation by informing MEM students in advance that they will find that some of the course content will not stretch them.

#### **12. Chairman's Report**

**i. Postgraduate Poster Session** The poster session went well and is well set for repeating in subsequent years.

**ii. EPSC Working Group on Projects** AOT is sitting on the MPS division's group. This is a genuine information gathering exercise. It is apparent that the Department of Materials is on the extreme having 43% of the degree based on project work, which meets the QAA guidance on using a wider range of assessment methods.

**iii. Educational Policy and Standards Committee Review** The EPSC Review is still timetabled for Thursday 27<sup>th</sup> and Friday 28<sup>th</sup> April 2006, although it is hoped that only one day will be necessary. The schedule has still not been received by the Department.

**iv. Graduate Recruitment** Recruitment is going well. The number of home applicants is low so far and there is unlikely to be a major competition for DTA places (although the number of DTAs is not yet known).

**v. Admissions Offers** At DMAC 32 LJFJ reported from the Tutors Committee that a standard minimum offer of AAA had been agreed, but RIT had informed AOT that the tutors had 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 will seek clarification.

**Action: AOT**

### **13. Reports from Divisional Committees**

#### **i. Academic Committee (JMS)**

Project work was discussed.

#### **ii. \*Graduate Studies Advisory Panel (AOT) (DMAC 34/8)**

There had been a presentation from OLI on the annual postgraduate survey. Materials, although not the best, certainly came out above average and is doing well compared with other departments in the university.

#### **iii.\*Undergraduate Studies Advisory Panel (AOT)**

AOT drew the DMAC's attention to the Further Maths Network under development.

### **14. Any Other Business**

Confidential first item removed from the minutes to be published on the Department of Materials website.

AOT reminded DMAC that each year the Department has an opportunity to give a presentation to Physics 1<sup>st</sup> year undergraduates regarding the possibility of transferring to Materials. AOT asked if DMAC wished to continue with this practice. It was agreed that the Department would respond that we would not wish to give such a presentation, but if a Physics student was interested in transferring then they should contact AOT in the first instance. The default position should be that they enter the 1<sup>st</sup> year in Materials, but it should be at the tutor's discretion.

**Date of the next meeting – 2 pm Monday 8<sup>th</sup> May 2006, Wolfson Meeting Room.** The meeting closed at 4.25 pm.