Oxford University Department of Materials
Academic Committee

DMAC 57 Minutes of the Academic Committee held at 2.00 pm on Monday 1 March 2010 in the Wolfson Meeting Room.

Present: AOT (Chair), JTC, JaMS, PDN, CRMG.

1. Apologies
   SCB, RIT

2. Minutes of DMAC 56 (DMAC 57/1)
   The minutes of DMAC 56 were accepted as a true record.

3. Shortened Minutes
   There were no confidential items to be removed from the minutes of DMAC 56 prior to publishing them on the Department of Materials website.

4. Matters Arising that were not specific agenda items

  *From DMAC 56
  *Minute 4i Practical Class Marking The JCCU were also concerned over the different styles of marking. The Committee felt there was a pedagogic argument to allow staff to mark practicals as they saw appropriate. However, students’ expectations regarding different marking styles needed to be managed better. This could be covered in the briefings given by the PCO and SDs, was already included in the new ‘Teaching, Study Skills & Learning Development’ workshop, and AOT agreed to add a paragraph to the Handbook.

  Action: AOT

  *Minute 10 National Student Survey Recognising the importance of not over interpreting the results from a survey which sampled only 12 students, albeit 50% of the cohort, the Committee noted with satisfaction that scores on several questions had improved significantly. However they had worsened regarding the clarity/provision of marking criteria and the promptness of feedback. Clearly one reason for the low score on the latter could be traced to the current issue of slow turn-around in the marking of practicals. The Committee agreed with the Chairman’s suggestion that this year we solicit further information on the underlying reasons for the low scores on these two questions by an e-mail survey of all current students.

  Action: AOT

  *Minute 14 Prelims course - Introduction to Error Analysis After some discussion, the Committee agreed that a small number of introductory lectures could be removed from the first year course to allow the provision of a 2h course on Error Analysis. JaMS agreed to consult with PRW and offered to teach such a course.

  Action: JaMS, AOT
In progress from previous meetings:

*From DMAC 55

*Minute 7 Consequences of failure of more than half of the written papers in FHS examinations* A proposal will be put to Faculty that to graduate with an honours degree in a Materials programme a candidate must pass at least half of the written papers. **Action: AOT**

*From DMAC 54

*Minute 11 Synopsis for New Yr 3 Option Prediction of Materials Properties (DMAC 54/5)*

FG presented a revised synopsis for the proposed new Option on Prediction of Materials Properties. The key amendments are (i) the removal of material on vibrational spectra as this topic is not covered from an experimental point of view elsewhere in the degree, and (ii) the removal of the lecture on Current Challenges which was felt to be too advanced.

It was noted that students will not have had any prior teaching on phonons (Lecture 6) and inelastic scattering (Lecture 7), and very little background on optical spectra (lectures 10 & 11). FG reassured DMAC that course was not intended to be about solid state physics theory, but aimed at relating modelling to experiments and about what can and cannot be done to inform experiments using the modelling techniques described.

Some concern remained about the volume of material in the course given the amount of necessary new introductory material, but DMAC approved the revised synopsis in general and asked FG to prepare a more detailed plan, for consideration in Trinity Term, bearing in mind the advice provided by DMAC and the Electrical and Magnetic Properties Review Group. CRMG, as Teaching Mentor, will offer to look at a draft set of notes / handouts for one of the lectures to provide guidance. **Action: FG/CRMG**

[Secretary’s Note following DMAC 54: JaMS has offered to share with FG his experience in working up the Yr 2 Quantum & Statistical Mechanics course.]

*Minute 17 Chairman’s Report* It has been suggested by one member of staff that CAD should be included in the Engineering Drawing provided for 1st year Materials UGs. DMAC were supportive of this suggestion. Paul Bailey (Eng. Sci.) could make a five-hour CAD course available, but as an addition to the current five-hour manual drawing course rather than as a replacement for it. AOT will follow this up further. **Action: AOT**

*From DMAC 53

*Minute 6 Annual Report on PGR Matters – Admissions, Provision, Progression and Completion (DMAC 53/2)*

Completion: Oxford’s completion statistics are not good within the national picture. Materials’ statistics are not good in the MPLS context. There is no obvious grouping of students within the Department that is taking longer to complete. The HoD and AOT will, on behalf of DMAC, survey supervisors on why particular students might have taken longer than 4 years. **Action: AOT/CRMG**

*From DMAC 49

*Minute 8 Examiners’ Reports – Prelims* It was noted that on MS2 there were very few attempts to the questions on Electronic Properties, and that those were poor. It was believed that, historically, this has not been a popular area for students in examinations. As an important role of the Prelims examination is to provide evidence of understanding of the subject matter, there was some concern that preparedness for the electronic properties elements of Year 2 core papers was not being demonstrated. DMAC considered that it was not necessarily that students did not
understand the subject matter, as mechanisms such as tutorials were in place throughout the
course to enable tutors to monitor basic understanding, rather that this area was less inter-related
to other subject areas so, given the format of the papers, the students chose to avoid answering
those questions. Having discussed a couple of possible solutions, such as splitting the papers into
sections, or alternating a question on Kinetic Theory with a Physics-based question each year.
DMAC concluded that further data should be established to determine the exact trend in uptake of
questions before proposing any further action. Statistics from the previous four years are to be
collated for this, and to identify whether or not there are similar trends in other areas.

[Secretary's Note following DMAC49: JCCU have also expressed concern about the content and
speed of 1st and 2nd year Electrical Properties courses. A working group will be set up to examine
Prelims and core FHS provision in this area.]

The statistics were tabled at DMAC 50. They demonstrated (i) that the low attempt frequency on
Elec Properties had occurred in most MS2 papers over the last five years and (ii) that there were
certain topics on the other Prelims papers for which attempt frequency was also low. DMAC
agreed to consider this in more detail at a future meeting.

Action: AOT/ICS

[Secretary's Note following DMAC 53: A significant revision to the 1st year Electrical & Magnetic
Properties course has been introduced for 2009/10. Attempt frequency for all Prelims topics will be
considered again after TT10 examinations.]

*From DMAC 47

*Minute 8 Regulation Change - Penalties for late submission of coursework and new
deadline for submission of Part II theses

This prompted a question about the Business Plans, as some students had been penalised by
Proctors for missing the deadline: these students had sent work via the internal post before they
left to go on the Industrial Tour. It was agreed that an explicit statement would be added to the
handbook confirming that it was the student’s own responsibility to meet deadlines and when
submitting work to Examination Schools this should be done in person so the work can be date-
stamped. DMAC asked if the submission deadline for the Business Plans could be moved to de-
conflict from the Industrial Tour. PJM is to investigate dependent timeframes with the course
lecturer. AOT reminded DMAC that a change in deadline would require a regulation change
through Faculty.

In progress: AOT/LJFJ

*Minute 9 Teaching Lab Access for Research Workers* DMAC considered the level of control
that should be implemented to assist the Practical Class Technician and others in managing
requests from researchers for access to the Teaching Lab. DMAC agreed that access should
always be arranged in advance, that users must provide their own consumables, and that
supervisors should endorse such requests, having judged whether or not the researcher is
competent in using the necessary equipment. Pre-arranged and planned access should negate
the need for out-of-hours access, and access during afternoon undergraduate practicals should be
actively discouraged. All usage must be subject to having satisfied the PCT that adequate training
has been received. A well-equipped metallographic outfit, including resources, is available at
Begbroke and when access to the teaching lab is not possible / convenient suitably trained
researchers should be referred there in the first instance. A proforma is to be drafted explicitly
stating these rules. Any exceptional requests and/or difficulties are to be referred to CRMG.

Action: AOT

[Secretary's Note following DMAC 49: Faculty were informed at the meeting in MT08. A proforma
is to be drafted.]
*From DMAC 32

*Minute 11iv Report from the Faculty - Guidance to Supervisors* AOT and CRMG will adapt the guidance from the EPSC. Andrew Watt, as part of his CDF duties, will assist in taking this forward, has been briefed by AOT and will produce a final version for DMAC in wk7. TT08.

In progress: AARW

[Secretary’s Note following DMAC 47: Update from AARW – he would still like to do this but workloads have prevented him from meeting the above deadline.]

*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 attended a half-day workshop on plagiarism in June 2006. AOT noted that EPSC has now produced some guidance on plagiarism.

AOT reported that the University is now trialling plagiarism detection software called “Turnitin” in two departments (Law and Computing).

DMAC 45: AOT reported that MPLS had agreed to take forward his request that they ask for a progress report on this trial.

DMAC 48: AOT reported that the students had conducted their own survey to investigate whether or not the students would like to submit practical reports electronically. The results showed an equal split between those who would prefer to submit reports in a word-processed format and those who would prefer to continue with hand-written reports. DMAC was concerned that an electronic format could increase the risk of “cut and paste” plagiarism. DMAC also considered that there was benefit to be gained in completing hand-written exercises prior to examinations.

Whilst it was agreed that Turnitin would prove invaluable for large pieces of work, DMAC held the view that the markers could detect any similarity in reports within the year group, although admittedly not against previous years. It was agreed that any decision regarding electronic submission of reports should only be considered once further detail is known about “Turnitin”. AOT advised that no update had been received from Division. CRMG will follow-up with the Proctors for details of progress with “Turnitin”.

[Secretary’s Note following DMAC 54: It has been reported that EdC will shortly announce its approval of the use of Turnitin for some formative assessment.]

5. UG Admissions Report DMAC 57/2

The report was noted and DMAC recommended that following the successful trial this year we should continue to provide hospitality in the Department for candidates attending interview.

6. Degree Class Statistics DMAC 57/3

The figures were noted.

7. Report from E(M)EM Standing Committee

There were no items to report.

8. Reports from Divisional Committees

(i) Academic Committee (AOT)

Advance notice had been given that a review of teaching over the whole University was in the early stages of consideration. This catalysed a discussion of the Department’s teaching requirements
and led to the question in respect of tutorial/class provision, ‘do we over-teach?’ The Committee wondered if students would prefer fewer assignments, using the time released to answer those assignments in more depth. It was decided to explore this question in the first instance at Tutors’ Committee, recognising that data on the actual amount of tutorial teaching delivered by each college and the extent to which Tutorial Fellows were teaching more than their college stints would be an important input to the discussion. 

Action: JaMS, AOT

(ii) Graduate Studies Advisory Panel

The Division was considering top-slicing some of the 2010 DTG to create a pool of studentships for which Departments could bid if they had a good prospect of attracting industrial input to create a DTA-CASE studentship. The reason for this was that the EPSRC had set a target for Oxford to convert 10% of the 2010 DTG to DTA-CASE studentships. DMAC felt that with our strong industrial links this could be a positive opportunity for the Department. The HoD would encourage staff to seek such industrial support.

The number of DTG studentships that Departments would receive from the 2010 DTG had yet to be finalised by the Division.

Under the new Points-based Immigration scheme there was a requirement on Universities to monitor student attendance and from February 2010 to report those students who miss more than ten scheduled meetings. Further guidance on how this is to be implemented is awaited.

9. Chairman’s Report

The Chair reported that the Division had decided to continue an MPLSD version of the Teaching Award scheme that had until this year been funded centrally by the University. Materials will be able to make up to two £1,000 awards.

10. Any Other Business

JS expressed concern that the requirement for PGR applicants who were interested in projects offered by more than one Department may be deterred from applying to Materials by the need to submit an additional application form and to pay a second application fee. AOT reported that this matter was under consideration by the University’s Graduate Admissions Committee who were likely to recommend that an applicant can apply to up to three programmes of study on one application form, incurring in future only one fee.

Date of the next meeting – 2.00 pm Monday 10th May 2010, Wolfson Meeting Room.