

Oxford University Department of Materials Academic Committee

DMAC 39 Minutes of the Academic Committee held at 2.00 pm on Monday 29th January 2007 in the Wolfson Meeting Room.

Present: CRMG, KAQOR, DJHC, MRC, AJW, JMS, AOT (Chair).

In attendance: ICS (Secretary), KJD, Sarah Haigh (Outgoing JCCG Chair) (Items 1-3), Dave Armstrong (Incoming JCCG Chair) (Items 1-3), Alex Zawadzki (JCCU Chair) (Items 1-3).

1. Apologies & Welcome

AOT welcomed Dave Armstrong, as incoming Chair of JCCG, to the meeting, and thanked Sarah Haigh, as outgoing Chair of JCCG, for her hard work during her period of office. DMAC expressed its thanks to KJD for her contribution to the Department during LJFJ's period of maternity leave.

2. Report from the Chair of JCCG (SH)

(i) JCCG coffee

SH reported that JCCG coffee was working well: issues arise and get dealt with more quickly.

(ii) Laboratory coats

JCCG raised the matter of issue and laundering of laboratory coats. It was their understanding that members of staff could be issued with three laboratory coats and that the Department had arranged for these coats to be laundered in rotation; whereas research students could be issued with one laboratory coat at stores, charged to their research cost centres, and that laundry was the students' own responsibility. JCCG felt that this was unfair and that laundering of laboratory coats in domestic washing machines was a potential health risk. ICS reported that he had looked into this matter. He explained that staff members (predominantly technical staff) were indeed using the external laboratory coat issue and laundry system paid for by the Department. The system is on a hire basis in which the cost of hire includes laundering. Hire is on a 3-yearly basis and if a member of staff or a student is removed from the system within 3 years or a laboratory coat is not returned then the Department is liable for the residual value of the coat. ICS further reported that the Department is supportive of JCCG's concern and, although it appears that it has not been widely publicised, that this system is available to students (and research staff). APD will review the system as a whole in due course.

3. Report from the Chair of JCCU (AZ)

(i) 1st year Introduction to Computing practical

1st year students feel that the Introduction to Computing practical is in need of improvement or extension, particularly in the use of Excel related to later practicals. The practical is taken by PJW who splits the cohort into two groups and takes each for one afternoon. AOT noted that there is more time available on the timetable for the practical, and that it may be possible to ask OUCS to put on an Excel course specifically for 1st year Materials students. AOT further noted that some students also say that they are being taught material that they already know, and hence there appears to be a broad range of knowledge amongst incoming undergraduates. DMAC suggests inviting PJW to a JCCU meeting to discuss the practical.

Action: AOT/LJFJ/AZ

(ii) 3rd year options class feedback

3rd year students feel that they are receiving insufficient feedback through marking of work for options classes. DMAC noted that students often hand work in with too little time for marking before the class. The issue of size of class was discussed: DMAC felt that this should be left to the discretion of the lecturer as some options are suited to small groups and some to larger groups with longer classes.

DMAC concluded that a minimum provision of feedback should be that where work is set and required to be submitted in advance of the class then it is expected that the lecturer provides feedback on the scripts prior to the class (this may be by handing out marked scripts at the commencement of the class). The lecturer can impose a deadline for submission to allow sufficient time for feedback to be provided. AOT will prepare a formal form of words.

Action: AOT

4. Minutes of DMAC 38 (DMAC 39/1)

The minutes of DMAC 38 were accepted.

5. Shortened Minutes

There were no 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 attended a half-day workshop on plagiarism in June 2006. AOT noted that EPSC has now produced some guidance on plagiarism.

In progress: AOT

***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 completed (ICS/AJW) (see Minute 16)

[Following discussion at DMAC 35 the questionnaire will also include a poll for a new prize to be awarded to the best Teaching Assistant.]

***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, and has been briefed by AOT and will produce a final version for DMAC in wk7 TT08.

Action: AARW

***From DMAC 37**

Minute 4ii 2nd Year Polymers JCCU reported that past exam questions do not reflect the lecture notes for 2nd year Polymer courses, in particular Mechanical Properties of Polymers, and that current 3rd year students intended to avoid questions on this material. AJW reported that the question on viscoelasticity on Paper 3 in 2006 had been popular and marks were not out of step with marks on questions on other courses, and thus did not reflect the concerns of the current 3rd year students. JMS noted that the course may have moved on and that past exam questions may not necessarily reflect the current course content. Subsequent discussion with HEA indicates that this is not the case. A working party (AARW (chair), HEA and BG) has been set up to review all polymers teaching in the undergraduate programme. The working party will report to DMAC by TT07.

Action: AARW

Minute 9 Maths Review (DMAC 37/4) CMB noted that the Earth Scientists would like to see the recommendations before they are put in place. AOT said that this was standard procedure and he would be seeking approval from the Earth Sciences Faculty/ Academic Committee before seeking the approval of the Materials Faculty. The Earth Scientists have responded and discussions are ongoing.

In progress: AOT**Minute 10iv External Examiners' Reports (DMAC 37/8)**

(a) Total Scaling.

AOT suggested that to facilitate continuity and consistency of examination procedures, Academic Administration should provide the incoming Chair of Examiners each year with a briefing during Michaelmas Term. He will explore this with the Chairman of Examiners and then Faculty. The incoming and outgoing Chairmen of Examiners have responded positively to this suggestion. A paper will be presented to Faculty in due course.

In progress: AOT

(b)-(e) Part II Matters

Several issues raised by Prof Derby regarding the MS thesis and its assessment have been addressed. Action completed (AOT).

***From DMAC 38**

Minute 7i-iv Exam Conventions (DMAC 38/4)(DMAC 39/2) Items 7i-iv have been taken account of in the 2007 exam conventions.

Minute 7v Part II Examiners' responses to the External Part II Examiner's Report

MS Part II page limit It was agreed that a detailed discussion on the issue of a page limit for theses should be held over to a future DMAC meeting.

[Note added. ICS will look at the practices for Chemistry Part II and make a proposal.]

Action: ICS

MS Part II Oral Presentation SGR agreed with DMAC that the Oral Presentation should remain unexamined.

MS Part II Project Management It was agreed that the External Examiner's concerns that management of MS Part II projects was properly described for assessment should be met by ICS, as Part II Coordinator, providing guidance to students on making proper use of the fourth Project Management form which requires a free-text report.

Action: ICS/SGR

MS Part II Supervisor's Reports CRMG noted that, in contrast to Prof Derby's report, a previous external examiner had strongly guided the Examiners to remove consideration of the supervisor's reports from the Part II assessment. SGR has specifically requested that supervisors are asked how much help they gave the student. AOT noted that PRW has also asked for guidance on how much time the supervisor should spend advising the student on the thesis. DMAC agreed that the supervisor's form should allow the supervisor to link the amount of help given to the student to the efficiency of a student, e.g. the student has received a greater amount of help because he has been efficient and well organised.

[Note added. Oxford supervisors of externally placed students will be requested to incorporate comments from the external supervisor.]

Action: SGR/ICS/LJFJ

Minute 9 MSI Polymers & Composites Course Content (DMAC 38/6) AOT noted that the lecturer and CRMG had met and had agreed that there was too much material in the Polymers & Composites course. CRMG agreed that material on the mechanics of fibre reinforcement is given elsewhere and should be removed from the course, but felt that material on non-polymer composites should not be removed because it is not given elsewhere. AOT will ask a working group, comprising HEA and AJW or RIT, to discuss the course material and provide feedback to DMAC at its meeting in week 7 of HT i.e. well before the course is given in TT.

Noting that the Department's complete polymers teaching provision was now under review, this action was superseded following discussion at DMAC 39 where it was agreed that subject to approval by RIT, the Material on the mechanics of fibre reinforcement would be removed. BG should be informed once RIT's views are known.

Action: ICS

Minute 14iii Chairman's Report – Other The MPLS division have requested that departments introduce exit points at year 3 for all four year programmes. We currently have a year 3 exit point of unclassified BA honours for MS, but nothing in place for MEM. AOT noted that this is strictly a matter for the E(M)EM Standing Committee, but would like DMAC to provide the Standing Committee with a steer. DMAC considered that an unclassified BA honours would be an appropriate year 3 exit point for MEM, and AOT/KAQOR/ICS will put this suggestion to the Standing Committee when the issue appears on its agenda.

Action: AOT/KAQOR/ICS

7. Clarification of Specimen Preparation Requirements of Practical Classes

AOT reminded DMAC that recent discussions related to the new 3rd year Materials Characterisation Options Module had resulted in some confusion regarding for which 1st and 2nd year practicals students were required to polish metallographic specimens, and for which pre-polished specimens were provided. DMAC consider the ability to polish specimens to be a core skill of the materials scientist, and confirmed that students should carry out all of their own polishing in 1st and 2nd year practicals. DMAC agreed however that it would be useful for a set of pre-polished specimens to be kept locked away. AJW and ICS will provide a guidance note for Senior Demonstrators.

Action: AJW/ICS

8. *Responses to Examiners' Reports (DMAC 39/3)

This item was for information only.

9. OSCEQ Results (DMAC 39/4)

i. Materials low response rate

DMAC discussed possible reasons why there was a low response rate by Materials students to the annual questionnaire. AOT reported that discussions at JCCU suggested that the timing of

the questionnaire might be poor for Part II students and that those students generally satisfied with the course may not feel a need to respond. DMAC noted furthermore that there were 8 returns recorded from EMS students which apparently represented 40% of the EMS cohort. Given that the EMS cohort was fewer than 8 students it was suggested that perhaps OLI (the coordinators of the questionnaire) had confused EMS and MS students.

[Secretary's Note: OLI have confirmed that such an error was made and will correct the OSCEQ results accordingly.]

ii. MPS Divisional results

A paper was tabled, recording the responses of two JCCU members to selected OSCEQ questions (Qs. 5, 13, 15, 22, 24 & 27).

Q5: Almost half of respondents across the MPS Division disagreed or strongly disagreed that their course helped them to develop their ability to work as part of a group. As DMAC would have hoped, the JCCU respondents feel that they get good practice at teamwork.

Q13: Across the MPS Division, about one third of respondents felt that they were assessed on what they memorised rather than what they understood. The JCCU respondents did not agree with this viewpoint.

Q15: Over half of respondents across the MPS Division disagreed or strongly disagreed that they were given enough time to understand the things they had learnt. The JCCU respondents also feel that they do not have sufficient time during term to assimilate material, but recognise that they need to work in the vacations.

Q22: 43% of respondents across the MPS Division disagreed or strongly disagreed that their course had improved their skills in written communication. The JCCU respondents concurred with this view.

DMAC was of the view that the Materials courses give students plenty of opportunities to practice written communication, but recognised that writing skills are rarely directly taught or assessed. One exception is the seminar on essay writing given to the MEM students.

One member of DMAC felt strongly that the Department should formally teach writing skills to undergraduates. DMAC noted that as part of a Queen's/Mansfield/Corpus Christi tri-lateral tutorial arrangement students are now asked to write a termly essay which is assessed by the College Tutors. One reason for introducing this was the recognition that some students struggle with the structuring of answers to non-numerical exam questions.

DMAC agreed that Tutors/Senior Demonstrators should place more emphasis on writing skills in all work. DMAC suggested that writing skills is raised at the Tutors' Committee, incorporating feedback from the Queen's/Mansfield/Corpus Christi essay writing trial, to discuss if the issue can be dealt with within the tutorial system or whether the Department needs to make a formal provision. The Tutors' Committee should report back to DMAC in TT07.

Action: LJFJ/Tutor's Committee

DMAC further agreed that in the rare case of extreme language problems, students should be referred to professionals at the Language Centre.

Q24: Two thirds of respondents across the MPS Division agreed or strongly agreed that the volume of work necessary to complete their course meant that it could not all be thoroughly comprehended. DMAC were unsurprised that the JCCU respondents concurred with this view. It is known that students omit some subjects from their revision (whether it is because there is insufficient time or because they find that particular material difficult). DMAC agreed that the course should be designed such that all students are stretched.

Q27: This question was not discussed directly.

10. Supplementary Subject Options

AOT reminded DMAC that the following Supplementary Subjects are currently offered: (i) Quantum Chemistry, (ii) History and Philosophy of Science, and (iii) Aromatic and Heterocyclic Pharmaceutical Chemistry. AOT noted that the availability of Aromatic and Heterocyclic Pharmaceutical Chemistry caused timetabling problems, and that in practice Materials Science students do not take this course as a Supplementary Subject. DMAC agreed that this course should no longer be offered to Materials Science students.

11. Report from the Tutors' Committee (JTC/KJD)

There was no business to report.

12. Report from the EMS Standing Committee (SGR/ICS)

There was no business to report.

13. Reports from Divisional Committees**i. Academic Committee (JMS)**

The following matters were discussed at DivAC:

- Examiners reports.
- Whether meetings between External Examiners and students after examination papers are sat is of any value.
- Engineering decision flow chart. JMS questioned whether Materials should consider such a decision flow chart for examinations. The flow chart was recognised to be of value, but it was noted that in recent discussions there had been no appetite amongst Faculty for the adoption of a preponderance rule for arriving at classifications.
- Draft 5-year plan on teaching and learning.

The MPLS Division will endorse the practice of using admissions tests if departments wish to use them.

The University wishes to increase the number of overseas students. The MPLS Academic Committee feels that this should only be the case if it is not to the detriment of home applicants.

The University has a drive towards 4-year DPhil programmes. DivAC were concerned about the cost to self-funded students (fees in particular), but some members saw some benefit of a 4-year programme along the lines of the Life Sciences Doctoral Training Centre (1 year of structured training plus 3 years of research).

14. Chairman's Report

The reported on the following matters:

- The Bologna Accord process continues. In AOT's opinion a steer is now needed from bodies such as IoM³, IoP and the Engineering Council.
- The Department website is now under review. ICS and LJFJ will take the lead on the structure and content of academic/teaching pages.
- Quality Enhancement is now a component of QAA. Departments should now show that they provide generic skills training for undergraduates (there is now good provision of such training for postgraduate students, and Roberts funds have recently been released for Contract Research Staff).

- EPSC now require Chairmen of Examiners to be nominated by TT in the year prior to their service. For simplicity, the Department will therefore select the Chairmen two years in advance at the same time that the Examiners are nominated.
- A 3-year part-time Divisional Academic Advisor is to be appointed to coordinate training of staff new to teaching.
- Electronic theses. Part II students are now asked to supply a CD-ROM containing their theses. Materials is to be a trial department for the electronic archiving of postgraduate research theses under the University's Oxford Research Archive project.
- The postgraduate/postdoc trial of the new Materials Modelling Options Module took place in weeks 1&2 of this term (HT07). Feedback on the full course is awaited, but feedback from the halfway stage (taught element) is very good.
- It has still not been possible to publish the Prelims regulation changes as a result of EPSC and Division-wide discussion of failure of coursework. The deadline for submitting regulation changes for publication in the grey book (Examination Regulations) is in March 2007. AOT will make the uncontentious minor regulation changes for this deadline.
- The University is pressing for capping of student numbers. The Department's plans for a modest expansion have however been endorsed by the Head of Division.
- The undergraduate brochure will be updated during 2007.
- The Undergraduate Panel has one of three positions vacant, the key requirement of which is attending JCCU. AOT noted that he attends JCCU ex officio, AJW attends as Practical Class Organiser and ICS attends as Part II Organiser. AOT proposed that the Director of Studies, Practical Class Organiser, Part II Organiser and Chair of Faculty should all attend ex officio, and that there should be one further member elected from the academic staff. DMAC approved this proposal.

AOT has requested nominations for the vacant position on the Graduate Panel.

[Secretary's Note: Dr Simon Benjamin was elected to the vacant position on the Graduate Panel at Faculty in HT07.]

15. Marking of Characterisation and Modelling Options Modules

AOT reported that MRC, as organiser/Senior Demonstrator of the new Characterisation Options Module, had raised the question of who should be responsible for assessment of this and the new Modelling Options Modules. AOT introduced the item by noting that the Options Module contributes the same number of marks (50) towards the final degree mark as the Team Design Project (TDP). AOT reminded DMAC that to date TDPs were blind double-marked by two TDP supervisors (a team is not assessed by their own supervisor) and by one Examiner to provide oversight. This 2006/07 Examiners have proposed that examiners carry out all of the TDP marking. Some concern was expressed that TDP supervisors should not be removed completely from the assessment process as only supervisors can judge the contribution of individual students to the TDP. AOT reported that the issue of judging individual students had not been discussed by the examiners.

AOT expressed the opinion that given their similar contribution to the degree mark, assessment of the Options Modules should include oversight by at least one Examiner, but that the SDs had raised the question of whether they should be assessed by the Examiners only, in line with the Examiners' proposal for TDPs. DMAC discussed whether it was important to have expert assessors, i.e. the Module Organisers, for the Modules.

DMAC will recommend to Faculty that the Options Modules should be blind double-marked by a Module Organiser as an Assessor and one Examiner for the whole module for consistency.

Action: AOT/JMS

16. Any Other Business

(i) Practical Questionnaire

AJW and ICS tabled a draft Practical Questionnaire. For each practical students would be requested to rate (i) the practical as a whole on a scale of 0 to 5, (ii) the assistance given by the Teaching Assistant on a scale of 0 to 5, a (iii) the amount of information given in the guide notes from “not enough” (-3) to “too much” (+3). Space would also be available for students to make any additional comments that they may wish to. The question on whether the Senior Demonstrator’s role in the practical should be rated was discussed. It was agreed that a rubric should be included in the Additional Comments section to make it clear that comments on the SD’s role are welcomed.

It was proposed that students would be given a questionnaire to complete at the end of each term for all practicals in that term. DMAC concluded that it was preferable to provide a questionnaire at the end of each practical rather than termly. To encourage a high response rate, the SD would hand a fresh questionnaire to each student during marking sessions such that students could complete the questionnaire and post it immediately in the box provided. SDs should be provided with fresh questionnaires by the Practical Laboratory Technician at the beginning of marking sessions. ICS and AJW will redraft the questionnaire and put it into practice.

Action: ICS/AJW

Practical questionnaires will be reviewed regularly at JCCU.

Date of the next meeting – 2.00 pm Monday 26th February 2007, Wolfson Meeting Room. The meeting closed at 4.56 pm.