

**Director of Undergraduate Studies**  
**Dr Audrey Curnock**

24-29 St Giles, Oxford OX1 3LB  
Enquiries: +44 (0) 1865 273525  
Direct line: +44 (0) 1865 273555  
Fax: +44 (0) 1865 273583  
curnock@maths.ox.ac.uk  
<http://www.maths.ox.ac.uk>

11 January 2010

**To: Senior Mathematics Tutors (also by email to all college mathematics tutors)**

### **Hilary Term 2010 – Teaching Information**

#### **Pedagogical Issues**

##### **1. Overall Lectures MT 2009 Course Questionnaire Returns**

Mods lecture courses overall have been well-received. Part A received much lower return rates than in previous years (only 230). Part B overall seems to have gone reasonably well although two courses were less successful than previous years. Part C shows positive feedback overall.

**Online notes** : With the advent of online lecture notes for the majority of courses now it is clear from the questionnaire comments that students do not see the need to attend lectures. We might want to consider whether this is good. Some faculty have tried discussing different examples in their lectures from the online notes and even giving a hint to a difficult problem sheet. **Tutors might wish to discuss with their students why lectures are helpful.**

##### **Mods Lectures**

Overall 846 responses were received. As is the usual case, Dr Acheson's lectures on Dynamics were the most popular; students love his style, his demonstrations and generally look forward to his lectures. (131 responses). We can all learn from him. Analysis received 205 responses and was also a very popular course (and the lecturer is commended). The following lecture courses were generally well-received : Reasoning and Proofs (40 responses), Linear Algebra I, (99 responses). Geometry (84 responses), Probability (125 responses), Calculus of One and Two Variable (162 responses).

Typical comments include "larger writing please", "possibly longer problem sheets (with optional problems)" in Probability I, and that there is overlap between Reasoning and Proofs and Introduction to Pure Mathematics (which we plan to combine next year when the lecturer changes).

##### **Part A**

This year Algebra has been taught in two parts and generally rings has 1 lecture per week and LA 2 lectures. The rings part received 36 responses and some students found it difficult to retain the ideas from the previous week's lecture. Linear Algebra received 73 responses and was very positively received. Analysis received 65 responses and was a very successful course. Differential Equations received 56 questionnaire responses. The review of structures/courses will need to take these comments into account.

**Practical Arrangements**

1. **MODS AND PART A COLLECTIONS** on Michaelmas Term lecture material have been revised and new versions are now on the web in the restricted Information for Teaching Staff Restricted Materials.

You will need your Mathematical Institute IT username and password to access these and some other material at <https://www.maths.ox.ac.uk/teaching-staff/restricted/teaching-material/>. Some solutions will also be posted – to the pure. If you have difficulty with this please contact the IT staff via [help@maths.ox.ac.uk](mailto:help@maths.ox.ac.uk).

2. **Revised Moderations Classification for TT 2010**

Please note that the Teaching Committee has approved the following change to the conventions for the awarding of classes for Honour Moderations in Mathematics effective from Trinity Term 2010.

Classes will be awarded according to the following conventions :

**First Class:**  $Av1 \geq 70$  and  $Av2 \geq 70$

**Second Class:** Not satisfying the conditions for a first class and both  $Av1 \geq 50$  and  $Av2 \geq 50$

**Third Class:** Not satisfying the conditions for a second class and both  $Av1 \geq 40$  and  $Av2 \geq 40$

**Pass:** Not satisfying the conditions for a third class and  $Av2 \geq 30$

**Fail:**  $Av2 < 30$

**In addition to this, no student shall be awarded a Pass or Honours unless they score at least 30 on each of the four papers.**

3. **MAPLE**

Dr Wilkins (Maple Projects Coordinator) will be giving a lecture for all students taking Maple. It will be held at the University Museum from 2-3pm on Monday of Week 1.

***Maple Projects***

- The *Mathematics with Maple* course will continue this term. All first-year undergraduates taking Mathematics or Mathematics & Statistics must complete two Maple projects. These count towards Moderations. The deadlines for these projects are Friday 12 noon, Weeks 5 and 8. Project handbooks are available from reception at the Mathematical Institute or online at <http://www.maths.ox.ac.uk/courses/material/4546>
- **Late Submissions**

Candidates who miss the above deadlines may ask their college to apply to the Chairman of Mathematics for permission for late submission. Where there is a valid reason, the Chairman would normally approve the late submission without penalty. Where it is deemed that there is no valid reason the Chairman of Mathematics will advise the Moderators to apply a penalty of at least 5% of the maple project mark.

***Demonstration Sessions***

This term, the Maple slots in Week 1 and 2 will be the same as those for the odd weeks of Michaelmas Term, to allow those who did not have a session in Week 1 last term to catch up. So if your students were allocated on the odd weeks, please ask them to attend in Week 1 as usual in the same room as last term.

From Week 3 onwards, there are no fixed hours for each college, so your students may drop in whenever it suits them within the following times:

Weeks 3,4,6,8 Mon-Fri 3pm-4pm

Weeks 5 and 8 Mon, Tues 2pm-4pm, Weds, Thurs 2pm-5pm, Fri 10am-12noon

The MAPLE license needs to be renewed at the end of each year. Students can do this by logging onto the OUCS website at <https://register.oucs.ox.ac.uk> and choosing "software" from the options on the left-hand side of the screen and then selecting maple from the list of software that appears.

Tutors asked for guidelines for students transferring to Mathematics (or Mathematics and Statistics). The Mathematics Teaching Committee agreed the following:

#### **Maple for Students Transferring to Mathematics**

- Case 1 - If a student transfers from a mathematical joint school (Mathematics & Computing, Mathematics & Philosophy) to single honours maths (or Mathematics & Statistics) before the end of week 7 of MT, they would be allowed to submit their Maple projects by noon on Monday week 1 of TT. (Ideally one project would be submitted before the end of HT but that would be for a tutor to guide).
- Case 2 - If they were to transfer before the end of MT week 8, they would need to submit their maple projects by noon on Monday of week 2 of TT.
- Case 3 - If s/he missed this s/he'd would be "incomplete" at the examination board in July 2010 but would be allowed to sit this element and be reviewed by the Moderators at the Prelims Board in September 2010. *Please note we have asked the Proctors for formally approve this correction.*

#### **4. Mathematics and Philosophy**

A revised Handbook for this course is accessible via the website

<https://www.maths.ox.ac.uk/current-students/undergraduates/handbooks-synopses/mathphil>. A hard copy is being sent to each first year student.

Please note that Mods Probability is an option for Part A Mathematics and Philosophy students for the current academic year.

A Supplement to the Synopses and Handbook has been circulated to the Mods and Part A students with the following corrections:

The following rubric for use in the Trinity Term 2010 AO1(P) examination.

**Candidates may submit answers to as many questions as they wish, the best 4 answers will count towards the total mark for this paper.**

The wording of the Rubric for AC2(P) has also been edited but no substantive change to its content.

#### **5. Numerical Analysis at Part A**

Numerical Analysis is offered for Mathematics Part A, Mathematics & Statistics Part A, Mathematics & Computer Science Parts A and B, and Computer Science Parts A and B

students. The course, lectured by members of the Numerical Analysis group, has been held successfully for many years in the Computing Laboratory. Last year about 120 Undergraduates took the course, with about two thirds of them being Mathematics students.

Numerical Analysis has 16 lectures, no practicals, and 7 one-hour classes are offered in Hilary term. Classes in HT 2010 will still be held at the Computing Laboratory but are from now on organised by the Mathematical Institute. These will be administered in Minerva. It is hoped that longer term arrangements can be made in due course.

## 6. Hilary Term Lecture List

The up-to-date lecture list, along with details of changes which have been made since the printed version was produced, can be found on the website;  
<https://www.maths.ox.ac.uk/notices/lecture-lists>.

Please note that any late room changes will be posted on the web however there have been none to date.

Please note that the new format for the timetable has now been extended to Parts B and C.

## 7. Intercollegiate Classes

In some areas there is a shortage of tutors and we may have to run classes with more than 12 students. Where this seems likely Sandy Patel will email you to alert you. She will ask colleges if they wish to withdraw their students. If the students DO attend, the college will be billed at the usual rate.

The report on classes for 2008/09 will shortly be posted at  
<https://www.maths.ox.ac.uk/teaching-staff/restricted>

## 8. Exam Entry

Mods and Part A students are entered automatically at registration.  
For Parts B and C, students should enter for their exams via the college office by noon on Friday 29 January 2010.

Part B students should declare on their exam entry form their intention to take either the three-year (BA) or four-year (MMath/MMathPhil/MMathCom/MMathStats) course. From that point onwards the registration will be stored officially in the University Student Records system (OSS), and if the college wishes to check/change the registration after that date they will have to do it via that system.

## 9. History of Mathematics

Please note that mini-projects must be handed in to the Examination Schools by noon on Friday of week 9 this term. Further details will be communicated to candidates via the Notices.

## 10. Undergraduate Ambassadors Scheme

Please note that the deadline for journals and reports for the Undergraduate Ambassadors Scheme is noon on Friday of 0<sup>th</sup> week Trinity Term.

## 11. Extended Essays and Dissertations

The deadline for extended essays and dissertations is 12 noon Friday week 9 of Hilary Term. Students need to submit four hard copies and one electronic copy. Supervisors continue to be involved in assessing projects. Details of the electronic submission will be included on the Notices to candidates. We hope to launch an electronic archive of past projects shortly.

#### **12. Lecture List for 2010/2011**

Bids for Mods and Part A Lectures will be coordinated shortly. Parts B and C will follow.

#### **13. Solutions to Problem Sheets on the Tutor's Forum**

We are pleased to note that Dr Jim Oliver has very kindly agreed to allow us to post his worked solutions to all Mods Applied problem sheets.

The timing here will be important. We are asking the current lectures to run an eye over these and they will be posted the week before each problem sheet is due. (Realistically it's unlikely to be much in advance as he will update his solutions from last year where problem sheets change).

#### **14. Careers Event**

The Careers Service will be holding a Careers Event for undergraduate Mathematicians at the Mathematical Institute on Monday 8<sup>th</sup> February from 4-6pm. Details will be sent to tutors and students by email. We are trying to encourage our students to attend this type of session following a review of the First Destination Statistics. The Careers Service tell us that if students have some work experience on their CV this will greatly enhance their employment prospects on graduation and so they may wish to consider internships if they are not taking a summer project.

#### **15. Examiners Reports**

All examination reports including External examiners reports are now posted on-line and can be found at: <https://www.maths.ox.ac.uk/notices/exam-reports>

#### **16. Working Party on Structures in Mods and Part A**

The working party on structures in Mods and Part A group continue to meet and all minutes and consultation papers can be found at:  
<https://www.maths.ox.ac.uk/notices/committees/teaching/reports/restricted>

#### **17. Teaching Register**

The teaching register for graduate students and Post docs is available at:  
<https://www.maths.ox.ac.uk/notices/committees/teaching/reports/restricted/teaching-register>

#### **18. Weblearn**

We are conducting a small pilot of using Weblearn; this could be useful particularly for allocating classes and course questionnaires.

With best wishes  
**Dr A G Curnock**