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

Michaelmas Term 2018 – Teaching Information

Academic Administration
Those in the Mathematical Institute involved in the administration of courses are as follows:

- **Charlotte Turner-Smith, Academic Administrator**
  academic.administrator@maths.ox.ac.uk

- **Gemma Proctor, Deputy Academic Administrator**
  gemma.proctor@maths.ox.ac.uk
  Gemma provides administrative support for Part B/C examinations, for the Projects Committee and for the Mathematics Teaching Committee. This post also has responsibility for arranging payment for intercollegiate class teaching.

- **Sandy Patel, Graduate Studies Administrator**
  graduate.studies@maths.ox.ac.uk
  Sandy is responsible for all postgraduate research matters.

- **Sarah Davidson, Mathematical Finance Administrator**
  mathematical.finance@maths.ac.uk
  Sarah is responsible for the administration of the MSc in Mathematical Finance.

- **Nia Roderick, Academic Assistant**
  nia.roderick@maths.ox.ac.uk
  Nia is responsible for administration of the Prelims and Part A examinations, for students with disabilities, MATLAB, open days and undergraduate admissions administration. Nia also prepares the termly lecture timetable.

- **Charlotte Manning, MSc Course Administrator**
  charlotte.manning@maths.ox.ac.uk
  Charlotte provides administrative support for administration of the MSc in Mathematics and the Foundations of Computer Science and the MSc in Mathematical Modelling and Scientific Computing.

- **Laura Auger, MSc Course Administrator**
  mathcompfin@maths.ox.ac.uk
  Laura provides administrative support for administration of the MSc in Mathematical and Computational Finance and is PA to the Mathematical Finance research group.

- **Jasmine Smith, Academic Assistant**
  jasmine.smith@maths.ox.ac.uk
  Jasmine is responsible for the admissions and on-course administration for the MMathPhys/MSc in Mathematics and Theoretical Physics. She is responsible for the admissions for the MSc in Mathematics and the Foundations of Computer Science. She also assists with the on-course administration. Jasmine is also responsible for room bookings.

- **Victoria Waterson, Academic Assistant**
  victoria.waterson@maths.ox.ac.uk
  Victoria is responsible for the administration of the new MSc in Mathematical Sciences. She is also responsible for the administration of the intercollegiate class scheme.

- **Helena Gardener, Graduate Studies Assistant**
  helena.gardener@maths.ox.ac.uk
  Helena provides administrative support for graduate admissions and on course administration.
**Information for first year undergraduates**

You may find it useful to direct your first year undergraduate students to the following link where they can find lots of useful information for first year students studying Mathematics and Mathematics and Philosophy.

[https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/prelims-students](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/prelims-students)

**Induction Programmes**

There will be an induction session for all first year students it will be held on Friday, Week 0 (5th October) 2pm – 3pm in L1 in the Mathematical Institute, Andrew Wiles Building, Radcliffe Observatory Quarter, Woodstock Road.

Please note the induction is compulsory for

Mathematics students
Mathematics & Statistics students
Mathematics & Philosophy students
Mathematics & Computer Science students

Further sessions are organised for students in the Joint Schools:

Mathematics & Statistics Induction
Week 0 Friday 3.15pm: Department of Statistics, 24-29 St Giles

Mathematics & Computer Science & Computer Science
Week 0 Friday 3pm: Department of Computer Science, Wolfson Building, Parks Road.

Mathematics & Philosophy Induction
Week 0 Friday 3.15pm: Radcliffe Humanities Building, Radcliffe Observatory Quarter, Woodstock Road.

Mathematics & Philosophy Induction held by the Faculty of Philosophy:
Details can be found here [http://www.bodleian.ox.ac.uk/using/training/undergraduate](http://www.bodleian.ox.ac.uk/using/training/undergraduate)

All students: Details of library inductions (in the RSL, Philosophy Library, etc) vary between colleges. For details consult [http://www.bodleian.ox.ac.uk/services/training/undergraduate](http://www.bodleian.ox.ac.uk/services/training/undergraduate)

**Undergraduate Handbooks and Course Synopses**

Mathematics Handbook: Please note that Mathematics Handbooks will be distributed to first-year students at the Induction session on Friday of Week 0. The Handbook is posted on the website at [https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/handbooks-synopses](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/handbooks-synopses)

The course materials and synopses can be found here [https://courses.maths.ox.ac.uk/](https://courses.maths.ox.ac.uk/)

Mathematics and Philosophy Handbook: The handbook will be given out at one of the induction sessions and is available at [https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/handbooks-synopses](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/handbooks-synopses)

Mathematics and Statistics course handbooks and synopses [http://www.stats.ox.ac.uk/current_students/bammath/course_handbooks](http://www.stats.ox.ac.uk/current_students/bammath/course_handbooks)
Mathematics and Computer Science course handbooks and synopses
http://www.cs.ox.ac.uk/teaching/mcs/

Mathematical and Theoretical Physics course handbooks and synopses
https://mmathphys.physics.ox.ac.uk/students

Syllabi, Lecture Synopses, Reading Lists: Prelims, Parts A, B, C for 2018/19
All syllabi, synopses and reading lists can be found at:
https://courses.maths.ox.ac.uk/
Paper copies are no longer distributed students will be notified of any changes by email.

Computational Mathematics
For students in Mathematics and Mathematics & Statistics only:
The Computational Mathematics projects are compulsory and will be counted towards Prelims.

a) Lectures There will be an explanatory lecture in MT in Week 2 and a further one on Computational Mathematics projects week 5. The lectures will be on Thursday in Week 2 and 5 at 11am in the Mathematical Institute L1.

b) Demonstration Sessions These will be in the Mathematical Institute. Sessions will be held as follows: MT 2018 Weeks 3-8:

   Monday 11-1pm & 4-6pm
   Tuesday 4-6pm
   Wednesday 4-6pm
   Thursday 4-6pm
   Friday 11-1pm

   These will take place in classrooms of size 20, students will attend one session every two weeks. A timetable showing Computational Mathematics sessions for students in your college this term has been sent by email.

c) Access to MATLAB Students may access the system through college or individual computers; for details of how to do this they should consult the computing support at their own college. Further details on how to install MATLAB are available at http://www.maths.ox.ac.uk/members/it/software-personal-machines/matlab

d) Laptops (IMPORTANT) Students should bring a laptop to the demonstration sessions and install MATLAB as above. Those without personal laptops are asked to contact Nia Roderick (roderick@maths.ox.ac.uk) as soon as possible to organise to borrow one from the Institute for the duration of a session.

e) Logging-on and submission of projects in Hilary Term This can be done using university computer accounts, so there is no need for students to have a maths account. The project submission will be handled by Mathematics. Details at https://courses.maths.ox.ac.uk/node/30/assignments

f) Using MATLAB in lecture courses Lecturers are encouraged to talk to Dr Thompson about examples they could use in problem sheets where using a package is the most efficient method, eg. searching for patterns – which a student could then prove a general result about.

g) Computational Mathematics Manual The new manual for Michaelmas Term will be handed out at the Undergraduate Induction.
**E-mail**

All first years will be asked either to use their college email accounts, or to set up a ‘forward’ from those accounts to one which they use regularly. (Full details of how to do this are given in the Undergraduate Handbook). Information about courses will often be sent directly to students by e-mail, and all students should check their e-mail regularly.

**Information for second, third and fourth year students**

Part A students can be directed to the following link for information specifically related to Mathematics and Mathematics and Philosophy students in their second year:  
[https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-students](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-students)

Mathematics or Mathematics and Philosophy students just entering Part B can be directed to the following link:  
[https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-bc-students](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-bc-students)

Mathematics students just entering Part C/OMMS can be directed to the following link:  
[https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c](https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c)

**Examination Entry Parts A, B and C**

Examination entry for second, third and fourth year students is on-line. Students will be instructed to complete their entry on-line through student self-service. Academic Records will be sending out further details closer to the deadlines (which are in Hilary Term). The exam entry dates will still be as follows:

- Part A students by noon Friday of Week 4 of Hilary Term 8th February 2019.
- Part B and C students by noon Friday of Week 2 of Hilary Term 25th January 2019.

**Student Registration – Self-Service**

Each student needs to register via Student Self Service  
([https://www.studentsystem.ox.ac.uk/OA_HTML/xxigs/xxigsAppsLocalLogin.jsp](https://www.studentsystem.ox.ac.uk/OA_HTML/xxigs/xxigsAppsLocalLogin.jsp)) at the anniversary of the term in which they first started their current programme of study. When they access Student Self Service they will be asked to confirm their personal details, check their programme of study details, and confirm their new or continuing status as a student for the forthcoming academic year.

**Intercollegiate Class scheme (Parts B and C)**

The Minerva database is used to administer the classes. This is to reduce the administrative burden for all involved, and allow college tutors to monitor, through the web, the progress of their students.

New lecturers can obtain a password by emailing [acadadmin@maths.ox.ac.uk](mailto:acadadmin@maths.ox.ac.uk). Each college has a password so that college tutors can follow the progress of students at their college. Again, passwords can be obtained by emailing [acadadmin@maths.ox.ac.uk](mailto:acadadmin@maths.ox.ac.uk).

Please note that Classes in Statistics and in Computer Science are administered using similar systems, but you will need to contact the Statistics Department ([academic.administrator@stats.ox.ac.uk](mailto:academic.administrator@stats.ox.ac.uk)) and the Department of Computer Science (Leanne Carveth – [leanne.carveth@cs.ox.ac.uk](mailto:leanne.carveth@cs.ox.ac.uk)) for details/passwords.
Each year we arrange sufficient classes to cover students who have registered before the beginning of term. Any large classes are a result of students changing preferences early in the term.

Students will be able to sign up to classes on-line. Sign up will open at 9am on Thursday of Week 0 and will close at 9am on Monday of Week 1. As in previous years any changes to classes must be made by Monday of Week 4.

We will ask class tutors to provide class times and dates by Wednesday Week 0.

We will be running a ‘Making the most of intercollegiate classes’ session for third years at 2pm Friday of week 1. This session is aimed at helping students with the transition from tutorials to classes and guiding them on how to get the best out of classes.

French & German Classes
Students in Mathematics and Mathematics & Statistics are eligible. Students in Mathematics & Philosophy are eligible if there are sufficient places. Students who haven’t yet registered for classes must email acadadmin@maths.ox.ac.uk as soon as possible.

Part A Structure – Long Options
Second year Mathematicians need to offer papers A0, A1, A2 and Paper ASO (on the Short Options). They also need to offer 5 or 6 of the Long Option papers. It is expected that most students will choose to do 5 with perhaps some selection of highest achieving taking on the extra workload.

If a student wishes to be examined in 6 long options they may be and should fill in the exam entry form accordingly in due course. When 6 long options are taken, the student’s best four papers will count with a unit’s weight and the worst two papers with half a unit’s weight. (This is so that the extra paper is not lightly decided upon but at the same time students are not disadvantaged in taking an extra option). All exam marks will appear on a student’s transcript. If in doubt, students should discuss this further with their college mathematics tutors.

Only Mathematics and Mathematics & Statistics students are currently eligible to take an extra-long option.

The long options are largely lectured in Hilary Term, the two exceptions being A8 Probability and A11 Quantum Theory. It was the view of Faculty and Teaching Committee that taking one of these two options in MT would make for an appropriate workload. It is of course possible to take neither or both. The former would make for a rather light term; the latter was also felt to be possible if some of the tutorial teaching was delayed into HT.

FHS Maths & Philosophy
If a Part A candidate wishes to apply to the Joint Committee for Mathematics & Philosophy for approval of other optional subjects as listed for Part A of Mathematics – beyond the standardly permitted Rings and Modules, Integration, Topology, Probability, Short Options – the application should be made through the candidate’s college to the Chairman, Joint Committee for Mathematics & Philosophy, c/o Academic Administrator, Mathematical Institute, to arrive by 5pm on Monday of week 2 Hilary Term.

If a Part B or C candidate wishes to apply to the Joint Committee for Mathematics and Philosophy for approval of one or more other options from the list of Mathematics Department units for Part B or Part C. This list can be found in the Supplement to the Mathematics Course Handbook giving syllabuses and synopses for courses in
Mathematics Part B or C. Applications for special approval must be made through the candidate’s college and sent to the Chairman of the Joint Committee for Mathematics and Philosophy, c/o Academic Administrator, Mathematical Institute, to arrive by **5pm Friday of week 5 of Michaelmas Term.**

**Extended Essays**
Students wishing to do an *Extended Essay* (option BE/OE in the third year) should apply to the Projects Committee by **Friday of Week 0**. Application forms and Guidance Notes are on the web at: [https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/projects](https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/projects)

*Note that, Teaching Committee’s recommended hours of supervision for an extended essay is 6 hours (to be divided up as appropriate across Michaelmas and Hilary terms).*

**Dissertations for OMMS and Part C students**
Note that OMMS students are required to undertake a dissertation worth two units as part of their degree programme. This can be either a mathematics dissertation or a statistics dissertation. Part C students may choose to offer a mathematics dissertation. Dissertations will be compulsory for Part C students from 2020-2021.

OMMS and Part C students will be sent a list of topics to choose from on Friday of Week 0 and must select 5 choices by noon on Friday of Week 3. Students will be notified of their dissertation allocation on Monday of week 5. It is expected that their first supervision before the Christmas vacation.

*Note that, Teaching Committee’s recommended hours of supervision for a dissertation essay is 4-5 hours with the first supervision taking place before the Christmas vacation. It is expected that these will be group supervisions rather than one-to-one supervisions.*

Further details about dissertations can be found here [http://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/teaching-and-learning/dissertations](http://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/teaching-and-learning/dissertations)

**OMMS/Part C Induction**
OMMS students will start their induction on Tuesday of Week 0 [see attached] note that Part C students are not expected to attend this. On Friday Week 0 all OMMS and Part C students will be expected to attend an induction session at 10am in the Mathematical Institute [see attached].

**Part C – New For 18/19**
Part C students must be assessed on a minimum of 8 units. From this year they may choose to be assessed on a further 1 or 2 units. A student’s overall classification will be based on their best 8 USMs. It is anticipated that most students will continue to choose to do 8 units with perhaps some selection of highest achieving taking on the extra workload of 1 or 2 units.

**LaTeX Lectures**
We will be running a series of LaTeX lectures open to all students, both research and undergraduate. They will be held at the following times in Michaelmas term: Thursday 11am weeks 2-4, Mathematical Institute L5.
MMathPhys

MMath students entering their third year (but not joint schools) will have the option of applying to transfer to a fourth year in Mathematical and Theoretical Physics, and completing their degree with a MMathPhys. The deadline for applications is noon on 18th January 2019. Full details can be found at http://mmathphys.physics.ox.ac.uk/

The course is challenging and it is anticipated that most students transferring to the course will achieve first class marks in Parts A/B. Students who unsuccessfully apply to transfer will be permitted to continue to Part C.

Information for all students

Lecture List – changes to the printed list
Please note that there have been some changes to the printed list. The updated list can always be viewed on the website at https://www.maths.ox.ac.uk/members/students/lecture-lists
Please make sure that your students are using the most up to date list. The lecture list will also be available on-line in a different format for all students.

New for MT18 – Fridays@2
Following the success of the Fridays@4 sessions for graduate students we will be introducing a new series of weekly Fridays@2 sessions for undergraduate and MSc students from maths, statistics and computer science. The idea of the sessions is to offer a mix of talks/interactive sessions on mathematics, skills training and some fun sessions. The schedule of events is attached but can also be found here http://www.maths.ox.ac.uk/events/list/3463

Undergraduate Bulletin
Please draw your students’ attention to the weekly email bulletin sent to all undergraduate students during term time. The bulletin aims to inform students about events taking place in the department, career opportunities and important information relating to their studies.

Information for Tutors

Electronic Archive of Past Papers
In addition to the webpage with past examination papers, an electronic archive of past papers is now available from the Mathematical Institute website, as well as on the computer network. These can be downloaded for use in problem sheets, Collections, and the like. The LaTeX source and style files are available; as the style files have changed over time a certain amount of editing may be necessary. In order to access the papers see https://www.maths.ox.ac.uk/members/teaching-staff/restricted/past-papers
[You will need a Mathematical Institute computer account username and password to access these pages, and other teaching information. If you do not have one of these please contact help@maths.ox.ac.uk].

‘Teaching the Undergraduate Mathematics Course: a Guide.’
A slightly revised version can be accessed on the web at: https://www.maths.ox.ac.uk/members/teaching-staff/restricted
You will need a Mathematical Institute computer account username and password to access this.

Do also note that there also shorter documents at this site – briefing notes for new tutors; suggestions on giving lectures, tutorials, and intercollegiate classes; comments on
common student difficulties and research re gender issues; the organization of mathematics teaching within colleges – which it is hoped will be helpful, especially for new tutors (faculty and graduates).

English Language Classes for Overseas Students
We would just like to draw to your attention the English language courses available at the University’s Language Centre for any overseas students who may need some additional help. Details of courses can be found at http://www.lang.ox.ac.uk/eas.html
The Language Centre will also be offering a week-long intensive course in academic writing for overseas students, post-docs and contract researchers in Week 9 of TT for more details on this course please contact the Language Centre directly at admin@lang.ox.ac.uk
Finally pre-sessional English Language Courses are available in July/August/September for overseas students before they arrive for more information please go to: http://www.lang.ox.ac.uk/courses/pre-ses.html

Useful web links for tutors and supervisors
Prelims and Part A lectures https://www.maths.ox.ac.uk/members/teaching-staff/information-lecturers-prelims-or-part-courses
Part B and C lectures https://www.maths.ox.ac.uk/members/teaching-staff/information-lecturers-part-b-or-part-c-courses
Undergraduate projects https://www.maths.ox.ac.uk/members/teaching-staff/information-supervisors-undergraduate-projects
Resources for tutors and lecturers https://www.maths.ox.ac.uk/members/teaching-staff/restricted

Summer projects
We are pleased to note that these are growing in number and the department is trying to organise these earlier in the year so that we can guarantee funding for these projects and therefore attract more students. This year we would like to send a list of summer project topics out to our current second and third year students towards the end of Michaelmas Term, an email will be sent out at the start of term with further information.

Project titles previously used can be found at http://www.maths.ox.ac.uk/current-students/undergraduates/projects
Student can use these as a guide and then contact supervisors to agree a topic.

If you are interested in offering a summer project for the summer vacation 2019 please email Charlotte Turner-Smith (turner-smith@maths.ox.ac.uk)

Examination notices to candidates
Please note that we will no longer be sending out paper copies of notices to candidates to senior maths tutors or senior tutors instead they will be sent via email. Notices to candidates can also be found here https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/examination-conventions

Oxford Masters in Mathematical Sciences (OMMS)
Tutors are reminded that we will be welcoming the first cohort of OMMS students in MT18. We hope that tutors will help us to integrate the OMMS students with the Part C students as much as possible. All OMMS students will have a departmental supervisor and a Part C student 'buddy' to support them. Should you have any enquiries about this degree, please email omms@maths.ox.ac.uk.

Events for students and tutors – please come along!

**Annual Institute Celebration**
On Thursday week 1 (11th October) at 5pm in the Mathematical Institute there will be an event to celebrate those students who were awarded prizes for their performance in the 2018 examinations. Also those who have been awarded a departmental or divisional teaching award will also be recognised. Professor Marcus du Sautoy will be giving a talk and it will be followed by a drinks reception. We welcome all students and tutors. We do require you to register. If you would like to attend please register at https://www.maths.ox.ac.uk/members/students/undergraduate-courses/undergraduate-welcome-event

**Mathematics and Philosophy Welcome Lecture**
On Wednesday Week 1 (10th October) at 5pm in the Mathematical Institute there will be a welcome lecture for the joint schools Mathematics and Philosophy, Physics and Philosophy and Computer Science and Philosophy. The talk will be given by Professor Peter Millican and it will be followed by a drinks reception. We welcome all joint schools students and tutors. If you would like to attend please register at https://www.maths.ox.ac.uk/members/students/undergraduate-courses/welcome-events/philosophy-ug-welcome-lecture

Dr R A Earl
(Director of Undergraduate Studies)