Intercollegiate Classes: Guide for Teaching Staff

Contents

Overview

Course structure

- The Mathematical Institute offers circa 70 16 hours lecture courses to Part B & C/OMMS students
- Each course is supported by a set of 4*90-minute intercollegiate classes
- There may be multiple sets of classes for the same course, ideally with no more than 12 students per group

The only Part B and C/OMMS courses without intercollegiate classes are those which are project-based or being run as reading groups.

Roles

The Intercollegiate Classes are supported as summarised below – please consult the relevant guidance document for specific detail.

Role	Responsibility
Subject Panel Convenor	Recruitment of teaching provision
Lecturer	Delivers 16hr lecture series Tutors 1 set of classes
Tutor	Runs classes
Teaching assistant (TA) (Part B only)	Supports the tutor Records attendance Marks Part B problem sheets
Marker (Part C only)	DPhil students filling the tutor role are expected to do their own marking. Faculty members filling the tutor role may employ a marker and should work with the Subject Panel Convenor to fill the role.

Course organisation

Each course is affiliated with one of the following Subject Panels

- Algebra
- Analysis
- Geometry, Number Theory & Topology
- Logic
- Mathematical Methods & Applications
- Mathematical Physics
- Numerical Analysis & Data Science
- Stochastics, Discrete Mathematics & Information

The Subject Panel Convenors will oversee the recruitment of teaching support to intercollegiate

classes, with the support of the Research Group Administrators and Academic Administration. The following schedule shall be implemented:

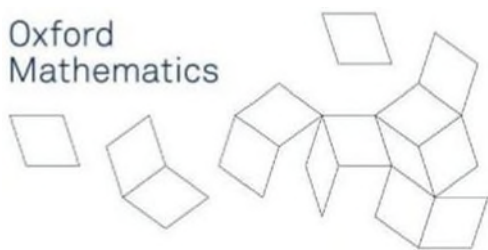| Trinity Term	
Weeks 4-11	Tutors and TAs and any markers required to be recruited
Long Vacation	Provisional tutor/TA/marker allocation published
	HR to send out Right to Work check information and letters of engagement
	Those engaged to ensure that Right to Work checks are completed
	Provisional Intercollegiate Class timetables for Michaelmas & Hilary published
Michaelmas Term	
Week 1	Academic Administration to confirm actual of sets required for Michaelmas
	Final MT Intercollegiate Classes timetable to be published
Week 3	Intercollegiate class teaching to commence
Week 4	Merging of any particularly small sets to be considered
Christmas Vacation	Academic Administration to confirm actual of sets required for Hilary
	Final HT Intercollegiate Classes timetable to be published
Hilary Term	
Week 3	Intercollegiate class teaching to commence
Week 4	Merging of any particularly small sets to be considered
Trinity Term	
Week 0	Revision lecture and consultation session schedule to be published

Contacts

Academic Administration and the wider Professional Services team are keen to assist with the smooth running of classes wherever possible and look forward to supporting those teaching as required. Key contacts are listed below. Academic Admin is always keen to put faces to names so do pop in!

What	Where	Who
General queries Moodle support Panopto (recordings)	academic.administration@maths.ox.ac.uk Room S0.15 Andrew Wiles Building	**Clare Donnelly** Undergraduate Studies Administrator (Part B inc. Intercollegiate Classes) **Anwen Amos** Undergraduate Studies Administrator (Part C/OMMS) **Hannah Ross** Undergraduate Studies Administrator (Prelims & Part A) **Denis Ghior** Undergraduate Studies Administrator (Processes)
Room booking	Room booking calendar Room-booking@maths.ox.ac.uk	DIY Academic Administration
Payment/stint claims	academic.administrator@maths.ox.ac.uk Room S0.18 Andrew Wiles Building	**Rosalind Mitchell** Undergraduate Studies Officer
Right to Work checks & letters of engagement	Casual-workers@maths.ox.ac.uk	**Brenda Willoughby** Senior HR Officer
Student welfare	College welfare teams Central University welfare charlotte-turner-smith@maths.ox.acuk student.hotline@maths.ox.ac.uk (anonymous course-related enquiries)	College welfare contact Student Welfare and Support Services **Charlotte Turner-Smith** Head of Academic Administration – MI Academic Administration
Lecturer not providing model solutions	eamonn.gaffney@maths.ox.ac.uk dmitry.belyaev@maths.ox.ac.uk dan.ciubotaru@maths.ox.ac.uk	**Prof. Eamonn Gaffney** (MT & TT) and **Prof. Dmitry Belyaev** (HT) Academic Lead – Parts B&C **Prof. Dan Ciubotaru** Associate Head of Department (Education)

Training

The Institute strongly recommends that all tutors take part in the departmental training session for tutors, which typically occurs in Week 1 of Michaelmas and Hilary Term. A registration link will be circulated beforehand.

All new TAs are expected to attend a TA training seminar. These are typically held in Week 1 of Michaelmas Term. If you are from another department, please contact Academic Administration to register. A link to the registration form will also be circulated prior to the session.

The slides of all sessions and related guidance will be available here.

To assist students in their professional development, the MI runs a training programme referred to as Stage 1, completion of which qualifies students to act as tutors. Individuals must attend a TA training session and demonstrate suitable proficiency whilst acting as a TA for two sets of classes in order to pass. The classes can be for the same course but must have different tutors. Those who successfully complete Stage 1 will receive a signed letter of confirmation.

FAQs

What if I am ill/cannot attend a class?

Tutors: inform Academic Administration, the relevant lecturer and TA (if relevant) as soon as possible. Please rearrange the class as soon as you are able to do so.

TAs: please inform your tutor as soon as possible.

What should I do if I am concerned about a student's work and/or welfare?

If there are serious concerns at any time, for example, if a student (without a reasonable excuse) presents unsatisfactory work or fails to hand in work, or if you are concerned about the welfare of a student, the class tutor must inform the student's college. This can be done by e-mailing tutors-*<insert college name>*@maths.ox.ac.uk.

You may also wish to get in touch with the welfare contacts listed above.

Tutors

We hope that you will encourage your students to engage with classes by leading them in a dynamic and interactive style.

We ask that you be aware of unconscious bias, more reserved students and your teaching assistant's skills and progress.

We very much hope that you will find tutoring these classes a useful and rewarding experience and encourage you to contact Academic Administration or the relevant lecturer should you require assistance at any point.

We strongly recommended that you take part in the departmental training session for tutors, a registration link for which will be circulated prior to Week 1 in both Michaelmas and Hilary Terms.

Part B tutors

- Meet with your TA for 10-15 minutes before each class to discuss how students have handled the problem sheets and plan the class accordingly
- Decide which topics and problems (or parts of problems) should be prioritised and the order in which you might want to discuss them.
- Tutors may ask their TA to inform them of their students' performance in advance.

Decide how the TA contributes to the class:

- TAs should demonstrate at least one problem in each class, they should have some choice about which problem this will be and sufficient notice to prepare their presentation
- The TA can also help by encouraging students to participate in the class and pointing out particular problem areas
- At some stage during the class, students should have an opportunity to ask the class tutor and TA about remarks on their work, and about general queries.

The TA should record both marks and attendance on Moodle promptly after each class by so that college tutors can track the progress of their students. It is the responsibility of the tutor to make sure this happens.
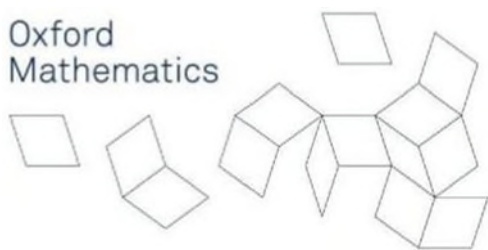
Part C/OMMS tutors

Faculty

Members of Faculty are welcome to do their own marking should they wish; however, they are entitled to employ a Marker and should work with the Subject Panel Convenor to find a suitable person.

DPhil students

DPhil students engaged as Part C class tutors will be expected to do their own marking.

All tutors

Tutors should record attendance and marks on Moodle. If the tutor has a marker, they should ensure that the marker records marks on Moodle. The marker should highlight any areas that students particularly struggled with to the tutor.

Responsibilities

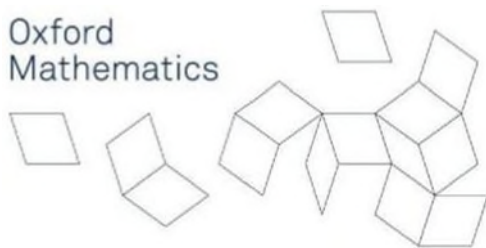|	Part B	Part C /OMMS
Room booking (Long Vacation)	✓	✓
Send teaching schedule to Subject Panel Convenor (Long Vacation)	✓	✓
Plan and deliver teaching	✓	✓
Submit an end of term report on each student	✓	✓
Contact a student's college should you have any urgent work or pastoral related concerns	✓	✓
Ensure TA records attendance and marks on Moodle	✓	
Monitor standard of TA's marking	✓	
Mentor TA	✓	
Submit a TA training report	✓	
DPhil students only: mark 2 problem sheets and record marks on Moodle		✓
Faculty only: work with the Subject Panel Convenor to recruit a marker		✓
Faculty only: ensure that your marker records marks on Moodle		✓
Record attendance on Moodle		✓

Classes

Classes usually take place in the Andrew Wiles Building, in classrooms C1-C6. Occasionally, smaller lecture theatres such as L6 may be used, if available. Room bookings can be made at https://www.maths.ox.ac.uk/members/room-booking/room-booking-calendar, or by emailing room-bookings@maths.ox.ac.uk.

The class should be more than a problems class: it should also give context and purpose to the problem sheet. Student feedback is consistently received to this effect. Furthermore, with pre-class planning (as below) it should not be necessary to cover every problem or part of a problem.

Pre-term Meeting

The lecturer is expected to meet with the teaching team (tutors and TAs) to discuss the approach to teaching the material and the timings of the classes to ensure they are complementary to the lecture course.

We encourage the lecturer and class teaching teams to liaise throughout term, swapping feedback about aspects of the course in order to address any particular issues students may be having with understanding lectures or tackling problem sheets.

Planning

Take time to plan what you will write:

What needs to be written on the paper/tablet screen/ board

- What needs to stay visible on the paper
- What can just be said out loud

Make sure you write legibly and scan any paper notes afterwards to share with the class on Teams.

Class discussion and student involvement

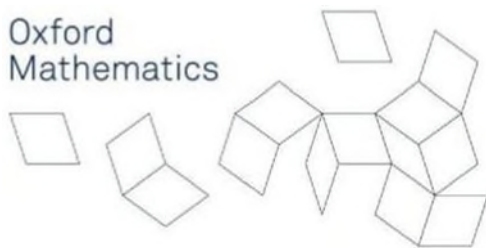Students should be actively engaged in discussion – do not simply copy out problem sheet model solutions.

The tutor should thoroughly understand the problem sheet's questions and solutions and attempt problems themselves in order to get a sense of where the difficulties lie, whilst also consulting the lecturer's solution.

- Consider how to introduce and give context to the solution, and what approach to take

- Use the problem as a way to review and deepen understanding of topics from lectures, so that students would be better able to tackle a similar question in future

- Use the same notation and approach as the lecturer

- Where all students have completed part of a question correctly, you might choose not to go through that part, but should still say something about it to give context to the rest of the question

- In the case of routine calculations, you might give a brief summary rather than going through details (e.g., finding the eigenvalues of a matrix should be routine for third-year students)

- Ask questions about possible next steps/ a piece of theory required/a standard example they might know

- Watch the students, as this will help you to judge your pace, and encourage them to ask questions

- Be careful to react positively when students ask questions, and be patient when they don't immediately understand

- Students may be encouraged to demonstrate solutions, when appropriate, but they should have some choice about this.

Try to be sensitive to the needs of the individual students: everyone should feel comfortable in the class, and everyone should learn something useful.

Mentoring (Part B only)

It is University policy that graduate research students undertake some preparation for academic practice alongside their research training, and for this reason the department expects graduate

students to do a limited amount of work as a TA. As a class tutor you are asked to act as mentor to your TA, who could be thought of as an apprentice:

- Your TA should attend every class

- You should agree with your TA which question(s) they will demonstrate in each class and you should assist by making helpful constructive comments during or after the presentations

- If your TA is undergoing training, you will be required to submit a report on your TA commenting on

- their marking and presentation of solutions

- providing constructive feedback

- indicating whether further training is necessary
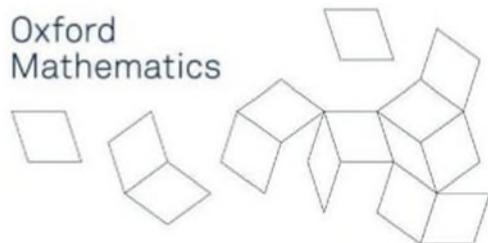

Feedback

Tutors are responsible for writing reports, with input from the TA. These must be completed and entered into Moodle by the end of week 7 (please note these will be emailed to Colleges on Monday Week 8).

If the final class occurs after Monday Week 8, the marks and attendance for that class should be added later.

At the end of term, Academic Administration will ask students to give feedback on classes. When the feedback has been collated, the report will be shared with the tutor (and TA).

Additionally, after the final class, Tutors are asked to submit feedback to their students' giving comments on the student's overall performance in classes. This is submitted via the 'Class Tutor's Comments' function on Moodle. Instructions on submitting comments is available here: https://www.maths.ox.ac.uk/members/it/faqs/moodle-courses-system/tutors-tas-markers/submitting-class-tutors-comments

Teaching Assistants

We hope that you will encourage your students to engage with classes by facilitating a collaborative and nurturing environment.
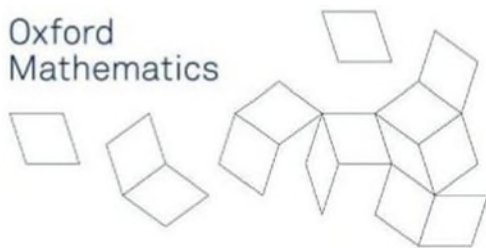
We ask that you be aware of unconscious bias, more reserved students and your own developmental requirements.

We very much hope that you will find supporting these classes a useful and rewarding experience and encourage you to contact Academic Administration or the relevant lecturer or tutor should you require assistance at any point. It is hoped that the role will provide you with useful experience and an opportunity to develop your teaching, communication and organisational skills. These will benefit all career paths, particularly academia.

All new TAs are expected to attend a TA training seminar. This is typically held in Week 1 of Michaelmas Term. If you are from another department please contact Academic Administration to register. A link to the registration form will also be circulated prior to the session. The slides of the session and related guidance will be available here.

Responsibilities

	TA	Tutor
Room booking (Long Vacation)		✓
Send teaching schedule to Subject Panel Convenor (Long Vacation)		✓
Plan and deliver teaching		✓
Attend every class	✓	✓
Attend training	✓	✓
TA and tutor to meet before each class to plan	✓	✓
Contact a student's college if any urgent work or pastoral related concerns	✓	✓
Lead discussion and demonstrate solution of one question per class	✓	
Record attendance on Moodle	✓	
Mark problem sheets	✓	
Record marks on Moodle	✓	
Submit an end of term report on each student		✓

Markers

Members of Faculty are welcome to do their own marking should they wish; however, they can employ a Marker instead and should work with the Subject Panel Convenor to find a suitable person.
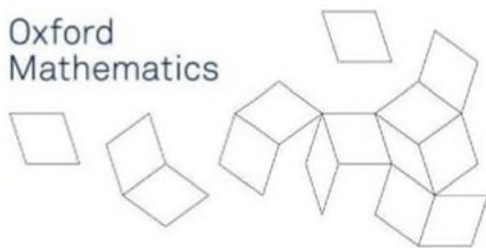
DPhil students engaged as Part C class tutors are expected to do their own marking.

We hope that marking provided will encourage student development via constructive feedback, recognising effort and encouraging further thought/suggesting alternative processes when marking.

It is suggested that Markers attend a TA training seminar, typically held in Week 1 of Michaelmas Term and Week 0 of Hilary Term, as these cover the marking of problem sheets. If you are from another department, please contact Academic Administration to register. A link to the registration form will be circulated prior to the session. The slides of the session and related guidance will be available here.

Responsibilities

	Marker	Tutor
Room booking (Long Vacation)		✓
Send teaching schedule to Subject Panel Convenor (Long Vacation)		✓
Plan and deliver teaching		✓
Attend every class		✓
Attend training	✓	✓
Suggest areas class should focus on	✓	✓
Contact a student's college if any urgent work or pastoral related concerns	✓	✓
Record attendance on Moodle	✓	
Mark problem sheets	✓	
Record marks on Moodle	✓	
Submit an end of term report on each student		✓

Problem sheets and marking

Problem sheets and model solutions should be provided by the course lecturer and uploaded to Moodle.

Lecturers have been asked to structure Part B and C problem sheets with three sections: A, B, C. Please contact Prof. Belyaev if this format is not adhered to.

- Section A: one or more introductory questions, with solutions provided for students

- Section B: core questions, usually not with solutions for students, to be discussed in classes.

Part B students will have these questions marked across all problem sheets and Part C students will have these marked for problem sheets 1 and 3.

- Section C: one or more optional extension questions (which might, but need not, be harder than those in Section B), with sketches of solutions/references provided for students.

If more appropriate, individual questions might be subdivided into parts that are labelled as being category A/B/C, rather than having separate sections.

What to mark

Part B

TAs should mark Section B of all problem sheets. Tutors should address Section B questions during class, they are not expected to address Sections A or C.

Part C

Tutors (if DPhil students) should mark Section B of problem sheets 1 and 3. Tutors who are Faculty members may recruit a marker to carry out this work.

All

Only work submitted by undergraduates, OMMS, MMathPhys and MFoCS students (who are registered for the class) should be marked.
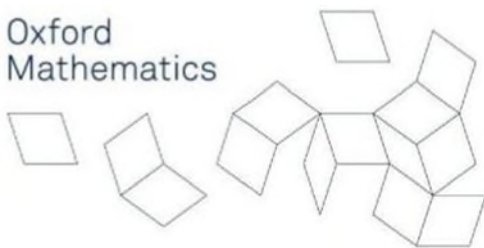
There is no requirement to mark supplementary material set specifically for Masters students – such material should only be covered in class if there is time.

Work is submitted by students and marked work returned via Moodle. Marked work should be returned before the class.

Time allocation

30 minutes should be allowed per script:
- if marking is consistently taking longer than this, please discuss this with the class tutor in the first instance
- Marking is a nonlinear process! One gets faster as one progresses through the scripts.
- Speed will increase with experience

Feedback

Students benefit most from feedback on their work, rather than grading, so write brief comments

- explain where the student has gone wrong
- how it could have been done better (counterexamples, hints)
- how the presentation/clarity could be improved
- note if an argument is particularly elegant or inventive

Try to be reasonably positive and encouraging – give praise where it is due!

Please grade each question and give an overall grade – these should be recorded. Please give either a numerical mark or a quality mark for each question. Additional pluses or minuses can be used. An overall grade might be assigned as follows:

Alpha (19-25/25): Student has answered most questions with an alpha score (possibly with one or two betas); has demonstrated a very good grasp of the topic, with possibly a few minor errors. Overall, shows flare.

Beta (12-18/25): Student has mostly scored beta for each question (with, possibly, one or two alphas or gammas). Has answered questions well and demonstrated a sound knowledge of the topics.

Gamma (6-11/25): The work is poor, with mostly gamma scores (maybe with a few betas or alphas). It is short on details or precision. The student appears to lack understanding.
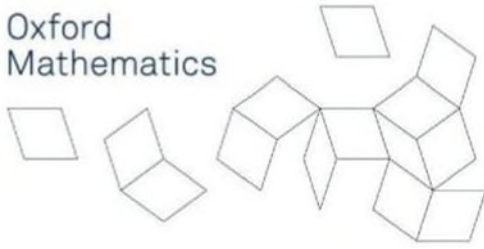
Considerations

Thoroughly review the questions before marking, and reflect on those that one might consider less than straightforward before consulting the model solutions. The model solutions are important as they give an indication of the lecturer's expectations. Some people find it helpful to mark the work of the higher-achieving students first.

The nature of marking will vary with the subject, so these notes need to be interpreted in the context of the course
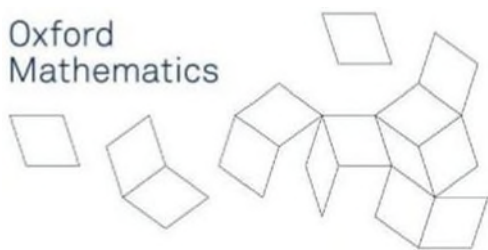
- TAs are not expected to find careless errors in the midst of long calculations, but should try to satisfy themselves that the error is indeed careless rather than substantive

- If an error cannot be addressed briefly, and if the problem will be covered in class, then it is fine to refer to the class and put "see class", but one should still try to indicate errors or misconceptions, and ensure the problem is covered in class.

One of the aims of the marking is to help students to learn presentational skills:

- if work is muddled or confused, e.g. it is a problem where axioms have to be checked but haven't been set out clearly, feedback that the axioms must be checked carefully and set out properly as opposed to spending ages trying to decide if everything has been done correctly

- not all students will necessarily use the same method and professional judgement will need to be used about whether this method is correct: if in doubt, consult the class tutor.

The department has a limited number of graphics tablets available to lend to TAs who would like to use one for marking: please email it-support@maths.ox.ac.uk.

Payment and stint arrangements

Payment rates

Please note that rates are with effect from 1 August 2025.

Your payslip will reflect holiday pay, which is paid on top of the below, and tax deductions, which are not reflected below.

Part B - Those who tutor and act as TA for themselves will be paid for the marking part of the TA role only.

Part C/OMMS - It is expected that DPhil students acting as Part C/OMMS tutors will do their own marking.
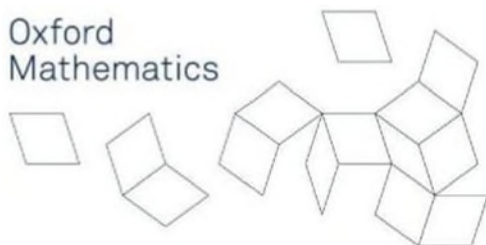
		Item	Hourly calculation	£/hour	£/class	£/set of 4 classes
Part B	**Tutor and TA**	Tutor	Grade 6.7 * 2.5 (includes 1.5hrs prep time)	53.38	80.06	320.25
		TA for self (marking)	Grade 5.7 (30mins/student)	19.67	118.02	472.08
	Tutor Only	Tutor	Grade 6.7 * 2.5 (includes 1.5hrs prep time)	53.38	80.06	320.25
	TA Only	(Prep time)	Grade 5.7 (2hrs prep/set)	-	-	39.34
		(Attendance)	Grade 5.7	19.67	29.51	118.02
		(Marking)	Grade 5.7 (30mins/student)	19.67	118.02	472.08
Part C	**Tutor and Marker**	Tutor	Grade 6.7 * 2.5 (includes 1.5hrs prep time)	53.38	80.06	320.25
		Marker	Grade 5.7 (30mins/student)	19.67	118.02	236.04
	Tutor Only	Tutor	Grade 6.7 * 2.5 (includes 1.5hrs prep time)	53.38	80.06	320.25
	Marker Only	Marker	Grade 5.7 (30mins/student)	19.67	118.02	236.04

Grade 5.7	19.67
Grade 5.10	21.35
Grade 6.7	21.35
Grade 6.10	23.19

Assumed Class Size	12
Assumed Problem Sheets - Part B	4
Assumed Problem Sheets - Part C	2

Payment methods available

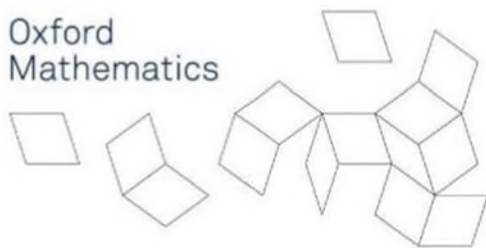|	**Casual payroll**	**Departmental stint**	**College stint**
DPhil student	✓		
Postdoctoral researcher	✓	✓	
College employee	✓		✓
Faculty member	✓	✓	✓
No University/collegiate affiliation	✓		

Payment

Students employed as tutors/TAs/markers will automatically be paid for attendance at all 4 classes and/or problem sheet marking as relevant. The marking payment remains defined by the number of students registered for a class after the Friday Week 4 course change deadline (for students).

Payment schedule 2025-26

DPhil students will be paid on a monthly basis. As before, students will only be paid for teaching/marking which has already been carried out. The table below sets out when students can expect to be paid for work undertaken.

Work undertaken by	Will be remunerated on
Sunday, 2nd November	Thursday, 27th November
Sunday, 30th November	Tuesday, 23rd December
Sunday, 14th December	Thursday, 29th January
Sunday, 1st February	Thursday, 26th February
Sunday, 1st March	Monday, 30th March
Sunday, 29th March	Wednesday, 29th April
Sunday, 26th April	Thursday, 28th May
Sunday, 31st May	Monday, 29th June
Sunday, 28th June	Thursday, 30th July

If you have any questions about your payment, please email the Undergraduate Studies Officer, Rosalind Mitchell, via academic.administrator@maths.ox.ac.uk, call her on Teams or visit her in Room S0.18.

Teaching Requirements & Equivalences

DPhil students

October 2018-19 start	To complete an overall total of 2 sets of classes prior to Confirmation of Status, with a minimum of 1 set completed before Transfer of Status.
October 2020-23 start	To complete an overall total of 3 sets of classes prior to Confirmation of Status, with a minimum of 1 set completed before Transfer of Status
October 2024 start onwards	To complete an overall total of 5 sets of classes prior to Confirmation of Status, with a minimum of 2 sets of classes completed before Transfer of Status

Role	Teaching requirement credits awarded
Part B/C/OMMS tutor only	1 set of classes
Part B tutor + TA for same class	2 sets of classes (tutoring = 1 set, TAing = 1 set)
Part C tutor + marker for same class	1.5 sets of classes (tutoring = 1 set, marking = 0.5 sets)
Part B TA only	1 set of classes
Part C marker	0.5 sets of classes

Note: as mentioned in the Training section, in order to qualify as a tutor, a DPhil student must act as TA for 2 sets of classes. The sets can be for the same course but **must** be tutored by different people.

Stage 1 cannot be passed with marking credit alone. Marking for Part C can count for at most one unit of stint in total towards the 5-unit DPhil stint.

Hooke and Titchmarsh Research Fellows

Research Fellows are contractually obliged to teach for up to 3 hours /week each term. The equivalences can be found here.

PDRAs

PDRAs may be required to undertake teaching should there be a departmental need; additional renumeration is paid, and such teaching would generally not exceed 3 hours per week for the 24 teaching weeks of the year.

Departmental Lecturers

Minimum of 6 sets of classes/year.