



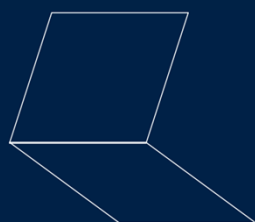
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# FRIDAYS@2

## 12<sup>TH</sup> October 2018



Oxford  
Mathematics



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# Part B Intercollegiate Classes

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# The Need for Intercollegiate Classes



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- The Oxford Mathematics, Statistics and Computer Science Departments offer an almost unrivalled set of options in the third and fourth years of their degrees.
  - There is no longer sufficient expertise in any college to cover the breadth of teaching offered at Parts B and C and so the Departments and Colleges work collectively to co-ordinate a system of intercollegiate classes, each taught by someone sufficiently expert in the relevant specialism.

# Departmental pedagogy



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- Not only are there practical reasons for now teaching in classes, these arrangements also reflect the Departments' general attitudes towards teaching.
  - In the first two years, the tutorial provides an individual and flexible meaning of teaching students who – as they begin their degrees – have little to no experience with proof, rigour, abstract thinking, independent study, presenting mathematics.
  - However as the degree progresses, students should feel more confident in their abilities to present maths, recognize any fudginess in their proofs, and ask questions addressing such problems. The class system is also a chance for students to grow further independently and take more responsibility for their learning.

# The personnel



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- Each 16 lecture course has:
  - A **COURSE LECTURER**
  - The lecturer writes and delivers the lectures, sets the problem sheets and examination paper, and is responsible for the running of the course.
  - The students registering for the course are each assigned to an intercollegiate class.
  - An intercollegiate class typically has 6-12 students.
  - The class is led by a **CLASS TUTOR**
  - The marking for the class is done by a **TEACHING ASSISTANT (TA)** who also helps co-ordinate and deliver the class.

# Organization of Classes 1



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- The Class Tutor is responsible for the overall running of the class and also acts as a mentor to the TA who might be thought of as an apprentice.
  - Initially TAs are in a tutor training programme which, when passed, will mean that they can go on to be class tutors.
  - The TA and Tutor must be present throughout each class.
  - Problem sheets and model solutions are provided for Tutors and TAs by the Lecturer, who coordinates all the classes for the course.
  - The TA marks the students' work in advance of the class.
  - It is also the TA's duty to take the register and to enter the marks and attendance on the Minerva database promptly after each class.

# Organization of Classes 2



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- The Class Tutor writes a very brief end of term report for each student (advised by the TA).
- The TA should demonstrate at least one problem for each class, as an expectation of the training programme and generally assist with the class. The Class Tutor gives the TA feedback on their teaching after each class and writes an end of term report for the TA.
- Pre-class planning is essential to ensure good use of time. So there should be a 10-15 minute pre-class meeting for the TA and Class Tutor to plan the class.

# What to expect – what we tell tutors 1



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- There are many ways of teaching classes, but a class should not be just a problems class.
  - Some tutors start by putting the material in context and reviewing the topics, drawing this from students. Others give a review at the start of each question or group of questions.
  - This can also be a way of encouraging students to participate. Lack of participation can sometimes be a problem, particularly at the beginning of term when students may not know each other or the Tutor.



# What to expect – what we tell tutors 2



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- The TA can often help with this, for example by asking questions, and pointing out any general gaps in understanding. The aim should be to create an atmosphere in which Tutor and TA are seen as approachable and students feel able to participate and to ask when they don't understand.
- It is often not possible to cover every problem in full detail, so the TA can help the Tutor to decide how to cover the central ideas efficiently and to ensure that the needs of this particular group of students are met.

# Departmental coordination for the colleges



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- Note that class teaching is done on behalf of the colleges, with prompt reporting of attendance and quality of work being returned to the college maths tutors.
  - In the event of non-attendance or non-submission of work, an email will be automatically sent – usually to the college’s senior maths tutor – to notify them.
  - The colleges pay an amount per student, per set of classes, for the teaching being done.
  - If you are no longer attending a set of classes – because you have dropped that option – make this known to the class tutor before the class list is locked (Week 4) – or else your college will be charged.

# Class logistics 1



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- Each 16 lecture course comes with sets of intercollegiate classes.
  - Each set of classes includes 6 hours of teaching.
  - These might be divided as 6 classes, each 1 hour long, or 4 classes, each 1.5 hours long.
  - The first class will be in either Weeks 3 or 4 and the final class may run into Week 1 of the following term

# Class logistics 2



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- Typically one set of work will be set per class.
  - Details re work deadlines are given alongside other details of the class.
  - The hand-in area in the Mathematical Institute is in the Mezzanine, on the left as you approach Lecture Room 2.
  - Not only may late work not be marked, but it may also remain sitting in the hand-in area at the time of the next class!

# Year round considerations



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- Mathematics students take 8 units to complete Part B, most of which consist of courses with 16 lectures and 6 hours of classes.
  - These lecture courses and classes run in Michaelmas and Hilary terms, with Trinity term largely for revision.
  - So it is important to get a reasonable balance of options across the two terms, or to minimize the effects of an extra-busy term.
  - For example 4+4 or 5+3 options across two terms can be made to work. In the 5+3 case, perhaps choosing sets of classes that complete in Hilary might mean less stress in Michaelmas. But 3+5 would probably leave too much work, too close to the exam.

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- George Dickinson
  - Fourth Year Undergraduate
    - Mathematics
  - Worcester College

# Making the Most of Classes 1



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- Now in your first intercollegiate class, what can you do to make the most of the class?
- Preparation will be helpful:
  - Have you revisited the sheet since you submitted it?
  - Do you have a clear sense of what questions you would like answering during the class?
  - This is more important now, as you may not be seeing your class tutor and TA for another two weeks. (Compare this with the access you had to your college tutors in Prelims.)
- Marginal comments on your script will help your TA marking.
  - Were there points of logic in a solution you were unclear about? Highlight this to the TA to help direct their marking.

# Making the Most of Classes 2



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- Manage your timetable
  - Classes don't begin till Week 3 at the earliest, others not till Weeks 4. Don't just spend these weeks at leisure: start some sheets early, or revisit some of the prerequisite material so that you are not rusty.
  - Try to avoid unnecessary bottlenecks in your timetable when registering for courses.
  - If deadline bottlenecks are unavoidable, start sheets as early as practicable to avoid rushing sheets.
  - Rearranging classes can't happen the way rearranging tutorials can



# Making the Most of Classes 3



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- Be willing to speak up in class
  - This is harder in the presence of students you don't yet know, but if you have a question/something is unclear, then others may well be feeling the same.
  - You will feel much more comfortable/involved in a class if you've spoken in it. Don't worry about asking potentially daft questions.
- Get to know some of the people in your class.
  - Having someone to discuss problems with can be very helpful, especially if you are the only one at your college taking the option.
- Recognize that other students may be looking to get different things out of the class, *but you still have a reasonable expectation of getting your questions answered.*

# Changing Classes or Options



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- Changing between classes (for the same option) can sometimes happen but is not automatic (not least because of capacity issues). This will need the permission of the lecturer and tutors involved.
- If you drop an option, be sure to notify the tutors and academic administration. If this happens before the class lists are finalized (Week 4) your college will not be charged.
- You will need to submit your exam entry form in HT (Friday Week 2), saying which exams you are taking. This can be changed afterwards, but only for a fee.

# Consultation sessions



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- Consultation sessions take place in Trinity Term, by way of revision support.
  - These typically run for 4 weeks of Trinity and the number of sessions organized is in proportion to the number of students taking the option.
  - It is the aim of the department to also provide model solutions to three sets of past papers (or sample papers) to further support revision.

# Useful Contacts



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- If you have a query regarding class arrangements, you might reasonably email any of the following as appropriate:
  - The course lecturer
  - The class tutor
  - The TA
  - Your college tutors
  - The Faculty Teaching Adviser – [neale@maths.ox.ac.uk](mailto:neale@maths.ox.ac.uk)
  - The Director of Undergraduate Studies – [earl@maths.ox.ac.uk](mailto:earl@maths.ox.ac.uk)
  - [academic.administrator@maths.ox.ac.uk](mailto:academic.administrator@maths.ox.ac.uk)

# Arrangements in Statistics



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# Arrangements in Computer Science



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