Suggestions for Teaching an Intercollegiate Class

The Class Tutor is assisted by a Teaching Assistant (TA). The Class Tutor is responsible for the overall running of the class and also acts as a mentor to the TA who could be thought of as an apprentice. The TA (and Class Tutor) must be present throughout each class. Problem sheets and model solutions are provided by the Lecturer, who coordinates all the classes for the course. Please see the Class Guidance Notes for other details about administration: https://www.maths.ox.ac.uk/members/teaching-staff/class-scheme.

General Procedure: The TA marks the students’ work in advance of the class\(^1\). The Class Tutor should be ready to advise on the TA’s marking and some Class Tutors find it helpful to mark one or two scripts themselves for each 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.\(^2\) The Class Tutor should check that this is done, and also write 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\(^3\), 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. Time should be allowed for students to ask individual questions to the Class Tutor and TA – generally at the end of the class.

Teaching the Class: 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. The TA should provide a mark sheet. 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.

There are many ways of teaching classes, but it should not just be 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. The TA can often help with this, for example by asking questions, and pointing out any general gaps in understanding (but without exposing particular students). 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.

The Tutor might like to set a few ground rules at the first meeting. For example explicitly encouraging students to participate and ask questions (there’s no such thing as a stupid question...), maybe also setting out expectations, and, while encouraging collaboration, strongly discouraging copying from other students or model answers. It is also a good idea to get everyone to introduce themselves at the first meeting. This should help students to get to know each other, and may also encourage participation, as a student who has spoken once may be more likely to speak again.

Preparation: It is important that both Tutor and TA are well prepared for the class. The ideal is to work through the problems yourself, only referring to the Lecturer’s solution when stuck. However, it is important that you review the model solutions so that you know what the Lecturer’s expectations are. You should use the same approach and notation as the Lecturer.

Some enlightening quotes from undergraduates and TAs:

“Some tutors are very good at creating an atmosphere where you feel happy to ask questions.” (Undergraduate)

“It can be a problem (in classes) that tutors don’t explain why they’re doing what they’re doing. It would be better if they went through the motivation first – then went into the detail.” (Undergraduate)

“Sometimes classes can feel like a bit of a waste of time: if it is all working out on the board, with no questions and no engagement.”(Undergraduate)

“The TA role can be very frustrating if you mark the work and then just have to sit in the class and watch. I like teaching.” (Graduate student TA)

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\(^1\) For advice about marking see TA Job Description: https://www.maths.ox.ac.uk/members/teaching-staff/class-scheme

\(^2\) It is important that the grades are entered promptly so that college tutors can monitor their students’ progress.

\(^3\) The TA should have some choice of problem and enough notice to give them time to prepare.