

Supervising Part II and III Courses

We are extremely grateful for the time and enthusiasm that you will be investing in supervising the undergraduate chemists through the courses that they will be taking during the academic year. Supervising our undergraduates is both challenging and incredibly rewarding at an intellectual and personal level, and the process of teaching helps supervisors gain a greater command of the concepts relevant to your particular areas of research.

The structure of the Natural Sciences degree means that the students you teach will present a range of abilities and interests as many may take courses that do not play to their academic strengths.

While supervision arrangements at Part IA and IB (typically in pairs) were made by the college Directors of Studies (DoS), in Part II and III the courses become so specialised that the allocation of students to supervisors (in groups of 2-4) is typically done by the lecturers. If you have any concerns about a student's progress or missed supervisions you should communicate with the relevant DoS – please do not wait until the end of the term by which time it will be too late to take any action.

If one of the students you supervise has a declared Specific Learning Difficulty, the college will have received a Student Support Document (SSDs) outlining adjustments that allow them to have a more rewarding and productive learning experience during the academic year. In such cases, the DoS or the student will let you know about any adjustments (for example, to offer extra time for tasks or make some accommodation for written work).

The nature of the small group teaching we offer creates a personalised teaching experience that is unique to Cambridge (and Oxford) and provides an opportunity to develop rewarding intellectual relationships between supervisors and students. However, in an effort to 'equalise' the teaching across colleges we offer the following guidance:

(i) the expectation is to deliver ***one hour of supervision for every three hours of lectures*** – lecturers will advise if any courses require more than the typical number of supervisions. Any additional teaching (for revision or to support a student who is struggling) will need to be agreed by the college DoS or Senior Tutor. Colleges may refuse to pay for more than the expected average number of hours of teaching in any course, and to arrange more than the suggested number of hours gives some students an unfair advantage over others. There is also an expectation that if you do not know the material well, then you will need to spend a little time before the first supervision of the week to familiarise yourself with the coursework and the questions that you will be working through.

(ii) it is up to you to agree with the students by when you want to see their supervision work in order to assess their strengths and weaknesses, as doing so will help you decide how to deliver the necessary material in the allocated supervision slot. If work is not provided in advance (as agreed) or seems to be of a low standard (making the necessary accommodations as suggested in any SSD), this may be a sign that a student is falling behind and may need some action from the DoS or Tutor.

(iii) as you and the student will have limited time during the working week, ensure that the material for the supervision is covered in an hour. Begin by spending a few minutes asking the students how they found the coursework over the past week and offer your thoughts on the standard of the submitted work (which should be guided by the questions that the lecturers provide in the course notes, all of which are available on Moodle, including additional material for supervisors). Please be patient and (when required) a little flexible in order to fit the work into the typical busy undergraduate timetable.

(iv) supervisions provide an opportunity to address areas that are not clear to the students and to develop confidence in problem solving. The supervision should not be used to work through the notes in detail because students have chosen not to attend the lectures or to watch the recordings. Furthermore, do not try and work through all the supervision questions in detail if the students find the material easy – focus on the problems they found difficult or through which you can consolidate key concepts from the course. The supervision reports at the end of each term are a useful record of how well the students are doing and the advice you offer for improvements.

(v) do not dominate the supervision by talking for an hour, and avoid any one of the students talking over their partners. Give all students in a group the opportunity to contribute, and pay particular attention to encourage shy or less confident students to talk and present the way that they would work through a problem.

(vi) as you get to know the student you supervise and they become more comfortable interacting with you, ask them if they are getting ‘value’ from the supervisions and if there is anything you can do to make the sessions more productive and rewarding for them and for you.

(vii) the use of AI poses challenges to the academic development of our students and the small group supervising we offer. Encourage your students to use the available technology wisely and remind them that relying on copying answers from the web does not help them prepare for examinations, and the level of problems we set may give incorrect answers using AI (see [Undergraduate Student Guidance on Using Generative AI in Chemistry in Cambridge](#)).

The notes, questions and model answers can all be found on Moodle (<https://www.vle.cam.ac.uk/>) but you will need to contact the Undergraduate Teaching Office (teaching.office@ch.cam.ac.uk) stating the courses you have agreed to supervise so that you are granted the necessary access.

As of this year, the model answers for the previous ten years of Tripos examinations are available to the students, making additional revision sessions to go through past papers unnecessary as the students should be able to work through the answers themselves – which is an important skill to develop in preparing for the examinations.

If you agree to supervise a course, the expectation is that you know the material well enough to be able to deliver the teaching with minimal effort. Should you want to see how other experienced supervisors deliver a session, contact the college DoS or the Undergraduate Teaching Office and they can arrange for you to sit-in on another supervision which may be a good way to share best practice.

Additional links and advice about delivering supervision can be found at <https://teaching.ch.cam.ac.uk/resources-supervisors>.

Thank you again for contributing to the teaching we offer our students and wish you the very best for the academic year.