## Tutorials: Chemistry

THE CHEMISTRY DEPARTMENT AT OXFORD is large and has an impressive research profile, with over 80 faculty leading diverse research groups in a wide variety of areas including catalysis, sustainable energy chemistry, advanced functional materials, and chemistry at the interface with biology and medicine. It has a history of successful commercialization of its research in spinout companies and has recently received an award for encouraging gender diversity in science. Research and teaching happen in the lively Science Area, close to Wycliffe Hall and to the University Parks. Faculty, research staff, and students can socialize in one of the nearby University cafes.

### **PREREQUISITES**

All students wanting to study chemistry at Oxford should be competent in the basics of calculus and linear algebra. Some knowledge of physics would be beneficial but is not required. For specialist study, such as quantum mechanics, further mathematical competence would be strongly recommended. Students should have studied chemistry at their home universities for at least two years.

#### **TEACHING**

Teaching will happen in a mix of University lectures, which play a key part in chemistry teaching, tutorials (one to one meetings with a specialist tutor), and, if possible, group tutorials with other Oxford undergraduates. Students will prepare work for individual and group tutorials, typically in the form of problem sheets. Students will not write essays (papers) for chemistry tutorials but present their work in mathematical or graphical form, sometimes with very short prose sections. Group work and discussion are warmly encouraged. Full lecture notes and other supporting materials are available on the University's virtual learning platform to which students will have full access once they are in Oxford.

For practical reasons it is not possible to arrange lab or other practical work or to undertake internships or practicums. Please ensure either that the subjects you choose work for credit at your home institution without having a practical component or that you can complete a lab asynchronously.

#### **CHOOSING TUTORIALS**

At Oxford all matriculated students study the three main elements of chemistry (inorganic, organic, and physical) in each term of each year, in order to get a holistic and cumulative understanding of the subject. Visiting students can either follow this Oxford pattern (in which case "Advanced studies in chemistry: inorganic, organic, and physical" will appear on their transcript) or we can tailor a tutorial to specific needs (in which case a more specific description will appear on their transcript). The former option is particularly suitable for students who will spend two semesters in Oxford, but can also be followed by one-term students. In all cases, chemistry students will follow the University lectures, which range across the discipline. Tutorial titles on transcripts will all be in some part of chemistry, although if necessary, the tutorials could cover mathematics for chemists.

To choose your STEM tutorial(s) you'll need to find your way around the University of Oxford website. Go to the Undergraduate Courses webpage to find a list of subjects. Click on whichever area you intend to study and for each there will be a tab along the top titled "Structure." Scroll down on that page to "Course Structure," where the tutorials offered are listed.

Please ignore information about how to apply, interviews, the acceptance rate, examinations, etc., as this is all intended only for matriculated students registered for degrees at Oxford. Don't be put off by the fact that it is called a 'BA' in chemistry. Almost all first degrees at Oxford are BA degrees, whether the discipline is in humanities, social science, or science.

More information may be available on the Oxford chemistry department's website. Keep in mind any posted course schedule is subject to change. Note: Hilary term is the spring term; Michaelmas term is the fall term.

Once you have looked at the website, please contact your Oxford advisor to discuss your tutorial requests in more detail. STEM classes are arranged on an individual basis.

# Tutorials: Chemistry

#### SUBMITTING YOUR COURSE SELECTIONS

Prior to submitting your SCIO Course Selections within your application, please alert your Oxford advisor via phone or email and include the following information for each STEM tutorial you are requesting:

- The exact title of the tutorial
- Which courses you have done which you feel will enable you to do this tutorial
- Whether you will be taking this course to fulfil a specific requirement at your home institution. If so, you should attach your institution's syllabus. If not, you should provide a list of any specific topics you wish to cover.

Note: All students take two tutorials—a primary (6 credits) and a secondary (3 credits)—and provide an alternative for each. Thus, if you want to take two STEM tutorials, you should list four unique titles and provide details for each according to the questions above.

After receiving your tutorial selections, your Oxford advisor will instruct you to submit the tutorial titles within your application's Course Selection questionnaire. Armed with the additional information you provide from the questions above, the Oxford staff can begin searching for the most appropriate tutor for each of your tutorial courses. They will contact you should any queries arise.