

# Corpus Christi College Oxford

July 2018

## Information for Biochemistry Freshers

The object of this note is to provide you with some information about the Biochemistry course at Oxford before you arrive and to give you some idea of what will happen in the first few days.

### *First Year Course :*

All first year Biochemistry undergraduates are required to follow five separate courses. Each of these is a self-contained unit. The courses are:

- Biological Chemistry
- Biophysical Chemistry
- Molecular Cell Biology
- Organic Chemistry
- Elementary Maths and Statistics

More detailed information on these can be found on the Departmental teaching web site (in Weblearn) at <https://weblearn.ox.ac.uk/portal/hierarchy/medsci/bioch/ug>. This site also contains lots of general introductory material. Much of this is open access so you can browse it now, but you need an Oxford account (which you will get on arrival) to access some of the material.

At the end of the 1st year, there is an exam on each course (called 'Prelims'). These are simply pass or fail, the result in Prelims does not contribute towards your final degree.

### *Lectures :*

You will usually have ten lectures per week. Lectures take place in the mornings in the science area, each lecture lasting about an hour. The lectures are co-ordinated to some degree with classes. The lecture courses cover all of the core material needed for 'Prelims' and, in many ways, define the syllabus. It is thus very highly recommended to go to all lectures.

### *Tutorials :*

Tutorials are arranged through the College, normally last an hour and are taught in groups of one to four. You will have one or two tutorials per week. Usually, your tutor will give you a reading list, some guidance as to which topics you should cover and a set of questions/essays to do about a week before the tutorial. The questions will usually be handed in for the tutor to look at the day before the tutorial. The tutorial itself is to deal with any problems that you have encountered, either in reading about the subject or in attempting the questions, and to discuss the subject in more depth. Tutorials should be a two-way process. The great advantage of the tutorial system is that students can test and develop their own ideas during the tutorial, compared to classes and lectures that simply provide a one-way flow of information.

### *Classes :*

Some of the courses also involve classes arranged centrally through the Departments and usually taught in the science area by graduate students. Again, you will be given questions to do before each class and the class will be simply to go through the answers to those questions.

### *Practicals :*

Practicals are also organised centrally through the Departments. Practical work involves experimental laboratory work, followed by writing up your experiments and results and discussion ('signing off') with one of the demonstrators. Practical work is graded as satisfactory or unsatisfactory. The Department can provide safety spectacles, and there is an opportunity to order lab coats and safety spectacles through the Department when you first arrive.

### *Books :*

There are many sources of books in Oxford, including:

College Library - contains mostly undergraduate texts that you can borrow. Students can request the College Library to buy specific books.

Radcliffe Science Library - reference only, contains almost every book/journal you will ever need and thousands more. It also has a lending section that contains a limited range of undergraduate texts.

Whilst you will probably want to buy some general texts for your own use, it is a good idea to wait until you get to Oxford. Firstly, you can get an idea of which books suit you best before buying any. Secondly, there are a lot of cheap, second-hand books available from 4th year students. The College does have a book purchase scheme to help students meet the cost of buying textbooks approved by your tutors (so keep all receipts).

### *Fun and informative reading :*

The Department has produced a list of books on biochemistry, varying from light reading to those aimed more at preparation for studying at University. This can be found at [http://www.bioch.ox.ac.uk/undergraduate/about\\_und\\_course/finding-out-more-about-biochemistry](http://www.bioch.ox.ac.uk/undergraduate/about_und_course/finding-out-more-about-biochemistry).

**Any** general reading is worth while, no matter what the level or content.

### *Work before arriving in October :*

**DON'T PANIC**, at Corpus we do not require Freshers to do any formal work before they arrive in October. The only thing we would strongly suggest is that you make sure that your mathematics skills are up to a certain level (this especially applies to those who have not done A2-level maths or the equivalent). From previous experience, we have found that there is a far greater spread of ability in maths than in any other area amongst Freshers and a sizeable minority of students have considerable difficulty with the subject. Both Maths and Biophysics assume a basic skill level at the start of the course. We have put together a booklet (the link to obtain this has already been sent to you) designed to be worked through prior to starting the Maths course (and your school teachers may be able to help with any difficulties). The content of the booklet is also covered in:

**"Foundation Maths", A. Croft and R. Davison, pub. Pearson (2006).**

**"Mathematics for Biological Scientists", M. Aitken, B. Broadbent and S. Hladky, pub. Garland (2010).**

Some students also find the organic chemistry a bit daunting, and working through the following book in advance is helpful:

**"Foundations of Organic Chemistry", M. Hornby and J. Peach, pub. Oxford University Press (1993).**

A reasonably gentle introduction to some of the topics covered in biophysical chemistry is given in:

**"Why Chemical Reactions Happen", J. Keeler and P. Wothers, pub. Oxford University Press (2003).**

We would strongly advise looking at one of the maths books and Hornby and Peach before you arrive.

If you really cannot cope with the feeling that you are not doing something more to prepare for the course, then there are various general biochemistry texts that you could start browsing, our preference being for **Biochemistry by Voet and Voet**, published by Wiley, as well as learning how to find your way around Weblearn.

*...and finally :*

When you first arrive at Corpus, you will have a meeting with us to discuss the term's work and make any arrangements necessary. Mostly we will contact you via e-mail and you will be given a College e-mail address during 0<sup>th</sup> week. The second source of information is the 1<sup>st</sup> year notice board in the Biochemistry Department. You will be required to go the Department and "sign on" on Thursday or Friday of 0<sup>th</sup> week and there will be an introductory lecture in the Department on Friday afternoon. The rest of 0<sup>th</sup> week will involve events organised by the College and the undergraduates to help you settle in.

Please feel free to contact us if you are worried about anything or would like any further information. Enjoy your summer and we look forward to seeing you in October.

Dr Struan Murray  
(Lecturer, CCC)  
Department of Biochemistry  
University of Oxford  
South Parks Road  
Oxford OX1 3QU

*E-mail: struancmurray@googlemail.com*  
*Telephone: 07581 666847*

Dr JL Kiappes (Known as JL)  
(Lecturer, CCC)  
Oxford Glycobiology Institute  
Department of Biochemistry  
University of Oxford  
South Parks Road  
Oxford OX1 3QX

*E-mail: john.kiappes@bioch.ox.ac.uk*  
*Telephone: 07412 633308*

Dr Mark Wormald  
(Senior Tutor & Fellow, CCC)  
Oxford Glycobiology Institute  
Department of Biochemistry  
University of Oxford  
South Parks Road  
Oxford OX1 3QU

*E-mail: mark.wormald@bioch.ox.ac.uk*  
*Telephone: 01865 275738 – office*  
*01865 275793 – lab*