Natural Sciences

Full details of the course are available from
www.cam.ac.uk/natscitripos
and from
www.undergraduate.study.cam.ac.uk/courses/natural-sciences

The subject at Selwyn

The Cambridge Natural Sciences course is unique in the way it approaches the study of science at University level. As a Natural Scientist, you do not start out already pigeon-holed as a physicist, biologist or earth scientist, but are given the opportunity to experience different areas of science at University level before you finally settle on one particular area of specialization.

At Selwyn we believe very strongly in this approach, and think that it is very much in your interests to be as adventurous as possible in exploring the different possibilities that the course allows.

The Teaching Fellows

At Selwyn, we have a wide range of teaching Fellows who cover all of the major subject areas.

Our Natural Science Fellows include Daniel Beauregard (Chemistry), Deepak Venkaterhwaran (Mathematics and Physics), Nicholas Butterfield (Earth Sciences), Bill Clegg (Materials Science), Paul Elliot (Zoology), Fabian Grabenhorst (Neurobiology & Psychology), James Keeler (Chemistry), Amer Rana (Cell Biology), Stewart Sage (Physiology), Marta Halina (History and Philosophy of Science, Experimental Psychology), and Gavin Jarvis (Pharmacology).

All of the Fellows listed above are active in teaching Selwyn Undergraduates. We are therefore able to provide most of the supervision for the first- and second-year either in house, or with the aid of carefully selected external supervisors. As a result, the standard of supervision we offer is very high. Supervisions in the latter years of the courses are generally arranged through the departments, as this is where the relevant specialists will be found.

As well as teaching and organising teaching for Selwyn, all of these Fellows research in their own departments. Like the Natural Sciences course, their research interests cover a very wide spectrum.

Qualities we are looking for

We are looking for a genuine commitment to and interest in Science; we are looking for people who are fascinated by the physical and natural worlds, and who want to find out and understand more about them.

We expect you to have a good track record in science, and not to be afraid of hard work. Above all, we are looking for people who have the potential to think scientifically and critically about the world around them.

Pre-interview assessment

As at other Colleges, applicants will be asked to take the pre-interview written assessment for Natural Sciences, which will take place in schools and other assessment centres on

31 October 2018. You must be registered in advance (separately to your UCAS application) to take the assessment. The registration deadline is 15 October 2018. Your assessment centre must register you for the pre-interview assessment (you cannot register yourself).

Interviews

Typically you can expect to have one or two scientific interviews, together with a shorter general interview. The longer interviews will concentrate almost exclusively on scientific matters; we will be trying to assess how you think and the level at which you can work. Typically, you will be presented with problems or scenarios to discuss. These problems are open ended, and to answer them is not simply a matter of factual recall, but rather you will need to put together things you know and information you are given. We are interested not simply in your ability to recall facts, but also your ability to use the knowledge that you have in new and possibly unfamiliar situations.

The interviews will cover a range of scientific topics appropriate to the subjects you are studying at school or college.

The general interview is designed to learn about your interests and activities outside Natural Sciences, your motivation in choosing to study Natural Sciences at Cambridge, and the maturity of your approach towards academic work.

On your SAQ you are asked to describe yourself as “physical” or “biological” to help us in setting up the interviews. If you describe yourself as “biological” the interview topics will mostly be from areas of biological sciences, while if you describe yourself as “physical” the topics are likely to include physics, chemistry and allied physical sciences. If you find it difficult to decide which category to put yourself in, please contact the Admissions Officer before submitting your application. These “physical” and “biological” labels in no way restrict your choice of subject if you are admitted to the course.

Subject requirements

Ideally, your A-levels should include three taken from Biology, Chemistry, Mathematics, Further Mathematics and Physics. If you are considering studying the physical Natural Science subjects (Physics in all years, and Chemistry or Materials Science beyond the first year), Mathematics is essential. Mathematics is also strongly recommended for those intending to study biological subjects.

Similarly, if you are interested in the physical Natural Sciences you should seriously consider taking Further Mathematics to AS or A-level, possibly in addition to your other three subjects.

If you are taking other post-16 qualifications we are looking for broadly similar coverage of science and mathematics to that mentioned for A levels.

Finding out more and Open Days

Many Natural Science departments will be participating in the Cambridge Open Days on Thursday 5 July and Friday 6 July. See the insert in our prospectus about this and other open days at Selwyn. Full details are also available on our website.

March 2018