Many courses in science have assumed knowledge, which are subjects we expect you to have studied before you begin your course. If you do not have the assumed knowledge you won’t be excluded from the course but you might find it difficult to manage the work, as your lecturer will assume you have this knowledge.

Our bridging courses run during February, just before the beginning of semester one.

We recommend you take a bridging course if you are about to start studying a course and you do not have the assumed knowledge you need for it. It is also an excellent refresher if you are returning to study.

REGISTRATION
Visit the bridging course website for more information about the courses and to register: sydney.edu.au/science/fstudent/undergrad/entry/bridging

Before you register you should check which bridging course is right for you. There is a $25 administration fee for changing your mind.

Registrations will open on Wednesday 6 January 2016.

We offer the following bridging courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Dates</th>
<th>Days</th>
<th>Time</th>
<th>Cost (inc. gst)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>15-19 February</td>
<td>Weekdays</td>
<td>9am-4.30pm</td>
<td>$360</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3-11 February</td>
<td>Weekdays</td>
<td>9am-4pm</td>
<td>$340</td>
</tr>
<tr>
<td>Mathematics Day (2-Unit &amp; Ext 1)</td>
<td>8-23 February</td>
<td>Weekdays</td>
<td>10am-12pm</td>
<td>$430</td>
</tr>
<tr>
<td>Mathematics Evening (2-Unit &amp; Ext 1)</td>
<td>8-25 February</td>
<td>Mon-Thu</td>
<td>6pm-8pm</td>
<td>$435</td>
</tr>
<tr>
<td>Physics</td>
<td>15-23 February</td>
<td>Weekdays</td>
<td>9:30am-4:30pm</td>
<td>$390.50</td>
</tr>
</tbody>
</table>

For more information and subject contacts please visit: sydney.edu.au/science/fstudent/undergrad/entry/bridging
**BIOLOGY**

The Biology Bridging Course is strongly recommended if you are starting university and have not completed HSC Biology or the equivalent. It is also a great opportunity to refresh your knowledge after a break from study, or if you found biology difficult at school. In the Bridging Course, you’ll work in teams to learn modern laboratory techniques, new ways of communicating scientific data, and design your own experiments to explore the environment on campus. Through these activities, we’ll cover topics such as cell biology, cellular biochemistry, genetics (classical/Mendelian and molecular), evolution, and the diversity of organisms and their systems.

**Course Delivery:** Each day, you will participate in a mixture of lectures, investigative laboratories, and interactive workshops. Morning tea will be provided every day, and at lunch you’re free to explore the campus and surrounds. At the end of the course, we have a relaxed game show-style event where you and your group can test your understanding and win great prizes.

Note that for laboratory sessions, will need to wear appropriate footwear that covers the toe, heel, and top of the foot.

**CHEMISTRY**

**Preliminary Chemistry (Standard)**

This course is designed for students who are entering a tertiary institution and intend to take a first year chemistry unit without having completed HSC Chemistry. Those who have completed HSC Chemistry are also welcome to come along and refresh their memory. This course is not suitable for students who are attending Cumberland College courses in the Faculty of Health Sciences except for those who are enrolling in the Bachelor of Applied Science (Exercise and Sport Science)/Master of Nutrition and Dietetics.

**Course Delivery:** You will attend two sessions a day, 9am-12pm and 1pm-4pm, which will consist of a one hour lecture followed by a two hour small-group tutorial with about ten students per tutor. In all, the course covers 13 topics. The complete notes can be viewed on our web site: sydney.edu.au/science/chemistry/study/bridgingcourse.html.

**Preliminary Chemistry (External)**

The same course is also available as an external course which can be undertaken at any time during the year. Enrolling in the external course is done through the School of Chemistry. For more information, email: chemistry.bctutor@sydney.edu.au

**MATHEMATICS**

Many tertiary courses require a certain level of mathematics. Almost all courses in the Faculty of Science require at least HSC Mathematics (2-Unit). If you intend majoring in mathematics, computer science or physics; or an engineering course you require a good understanding of HSC Mathematics Extension 1.

Mathematics offer two bridging courses:

**The Extension 1 course is for you if you have done Mathematics (2-Unit) in the HSC and wish to enrol in a course which has an assumed knowledge of Extension 1 Mathematics (3-Unit).**

**The 2-Unit course is for you if you have not done Mathematics (2-Unit) and want to study a subject for which 2-Unit Mathematics is assumed knowledge.** The main content of this course will be an introduction to the differential calculus together with revision of the necessary algebra and coordinate geometry. Knowledge of Year 10 Mathematics will be assumed.

**Course Delivery:** Courses are offered during the day and in the evening. The classes are small so that you receive the maximum amount of individual attention, and consist of 12 two-hour classes. You are expected to spend at least two hours per day on private study and homework during the bridging course, however there are no examinations. sydney.edu.au/science/maths/u/BC

**PHYSICS**

The Physics Bridging Course is strongly recommended if you are starting university and are about to take physics for the first time, need to refresh your knowledge after a break from study, or have tried physics and found it difficult.

The purpose of the course is to provide a good general introduction to the subject so that students can better appreciate the lecture and laboratory material from the beginning of the year as well as an introduction of skills and content.

Topics include:
- measurement and units
- motion along a straight line
- vectors and motion in two and three dimensions
- force and motion
- work and energy
- conservation of energy
- systems of particles
- collisions
- oscillations

**Course Delivery:** The course comprises lectures, tutorials and experimentation to consolidate the information presented. A typical day consists of a 1.5 hour lecture followed by a 2.5 hour tutorial with selected experiments in both the morning and the afternoon. There is a one hour lunch break during the middle of the day.

Lectures are interactive with participation in large classroom activities. The tutorials are group based where you examine what you have learnt by practising problems and exploring demonstrations more closely.