Health Sciences First Year

Bring science to life

“One of the best aspects of HSFY was the ‘general overview’ that this year gave me. HSFY gives you a strong grounding in the biological sciences – and I really needed that before continuing on to Medicine!”

Carla Hodgkinson
Medical Student

Health Sciences First Year (HSFY) is the foundation year for the five professional programmes: dentistry, medical laboratory science, medicine, pharmacy, and physiotherapy. HSFY is taught by departments across the University that excel in their areas of expertise, making it also an excellent way to begin a degree in biomedical science or any of the broad range of biological sciences at Otago. HSFY is great preparation for students seeking admission to the restricted-entry degree programmes in oral health, dental technology, or radiation therapy.
Health Sciences First Year (HSFY) must be your first year of university study. If you are considering tertiary study before enrolling in the University of Otago’s Health Sciences First Year, you are strongly advised to contact the Health Sciences Admissions Office beforehand. Failure to do so could jeopardise your enrolment into HSFY.

What is Health Sciences First Year?

Health Sciences First Year is only available at Otago, and is to be completed in its entirety in the first year of your university study. HSFY consists of seven compulsory papers plus the option to take an approved eighth paper in Semester Two. It is a busy year that includes lectures, tutorials, laboratories, assignments, tests, and readings every week.

What will I study?

The compulsory papers cover a wide range of fields in science and biological science, and are taught by staff from departments across the University. The papers in Health Sciences First Year collectively give a strong foundation in the biological sciences and teach you about how the normal healthy body functions at various levels: from the physical, chemical, biochemical, molecular, and cellular levels, through to functional organ systems and factors affecting health and disease in human populations.

Compulsory papers

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOC 192</td>
<td>Foundations of Biochemistry</td>
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<tr>
<td>CELS 191</td>
<td>Cell and Molecular Biology</td>
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<tr>
<td>CHEM 191</td>
<td>The Chemical Basis of Biology and Human Health</td>
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<tr>
<td>HUBS 191</td>
<td>Human Body Systems I</td>
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<td>HUBS 192</td>
<td>Human Body Systems II</td>
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<tr>
<td>PHSI 191</td>
<td>Biological Physics</td>
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<td>PUBH 192</td>
<td>Foundations of Epidemiology</td>
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All HSFY students will be required to pass a compulsory English diagnostic test in the first semester. Students who fail the test will be required to take ENGL 126 English for University Purposes.

Optional eighth paper

Students may also study an optional paper during Semester Two, selected from the approved list on otago.ac.nz/healthsciences.

Background required

There are no subject requirements for entry into HSFY but we strongly recommend you take chemistry, physics, and biology at Year 13.

Career opportunities

The Health Sciences First Year is the gateway to a career in healthcare or medical and biomedical research. These careers provide opportunities to work in private practice, community clinics, hospitals, academia, research institutions, industry, and the emergency services.

By the end of the Health Sciences First Year, you should have developed:

- A sense of the interconnectedness between different fields of knowledge in the health sciences
- A sound understanding of broader principles and concepts underpinning all of the biomedical and life sciences
- A strengthened understanding, commitment, excitement, and enthusiasm for science and the scientific method
- An awareness of why this knowledge is relevant to the study of ill-health

What next?

During HSFY you may apply for admission into any of the five professional programmes so you can become a doctor, dentist, pharmacist, physiotherapist, or medical laboratory scientist. Applications for entry for these programmes close on 15 September annually.

If you are seeking a career in dental technology, oral health, or radiation therapy, you can use HSFY as a pathway for admission. Applications for the Bachelor of Oral Health, Bachelor of Dental Technology, and Bachelor of Radiation Therapy restricted entry programmes close on 15 September annually.

For questions about Health Sciences First Year

otago.ac.nz/healthsciences

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**PROFILE**

Carla Hodgkinson

Carla Hodgkinson’s decision to enter the Health Sciences was easy – she simply decided to follow her instincts and do what she enjoyed! She took chemistry, physics, and biology in Year 13, and then the To Kahika foundation-year programme which really prepared her for Health Sciences First Year. “To Kahika was a great year, and I was given a lot of preparation and support which made the transition into HSFY easier.”

Although HSFY is a challenging year, Carla felt it was valuable preparation. She particularly found the Cell and Molecular Biology (CELS 191) lectures interesting. “The lecturers were great; she says, “and they really brought the subject alive for me.”

The HSFY labs, particularly the HUBS labs, helped Carla enormously. “The labs are where you get to learn on a practical level,” she explains, “plus you get a lot of additional information in the lab manuals that really cement your understanding.”

Carla is now a medical student, and credits HSFY with teaching her valuable study skills, including time-management. “With a busy workload of lectures, tutorials, laboratories, assignments and readings every week, HSFY really teaches you how to manage your time,” Carla emphasises.

“One of the best aspects of HSFY was the general overview that this year gave me. HSFY gives you a strong grounding in the biological sciences – and I really needed that before continuing on to Medicine!”

For the future, Carla would like to work as a general practitioner. The career appeals to her because “it balances your work and personal life, and it allows you to develop a relationship with the public and their families.”