Pre-University summer catch-up courses Academic Skills, Mathematics, Statistics, Chemistry, Further Chemistry, Physics



Headstart.



Starting out at university?

Good preparation is a major factor in successful study

Essential for all students are generic study skills, including the ability to take clear lecture notes, write effective essays or lab reports, and make good use of library and ICT facilities.

Mathematics and/or statistics are vital subjects for students intending to major in engineering, all sciences including health science, psychology, forestry and commerce.

Physics and/or chemistry are key subjects for students majoring in the physical sciences, biochemistry and engineering.



Headstart courses at UC



University of Canterbury staff are keen to see our students succeed in tertiary study. The best way to achieve this is to be prepared.

If you qualify for university entrance but lack a strong

background in a particular subject, or if you have been away from study for some time, then think about our Headstart programme.

The Headstart programme offers you the chance to undertake study prior to the academic year that will boost your confidence and give you the knowledge and skills you need to succeed in your first year. The courses are timed to run just prior to the start of the academic year, so you can work or play all summer, then begin your Headstart course just before commencing at the University of Canterbury.

The Headstart programme runs alongside our other summer courses and the campus is alive with students involved in study, social, cultural and recreational activities. We have an attractive campus that is the perfect place for you to develop or grow your career.

Christchurch is a city which welcomes a wide range of students and it is close to some of New Zealand's most beautiful countryside.

I look forward to welcoming you to UC.

Liz Keneti, Director, Student Success

Whāia te iti kahurangi Ki te tūohu koe, me he maunga teitei Pursue excellence – should you stumble, let it be to a lofty mountain Headstart courses are two-week summer catch-up courses designed for newcomers to tertiary study who expect to qualify for entry to university but:

- lack a good grounding in a specific subject, or
- wish to gain confidence in the skills needed for study at tertiary level.

Courses run Monday to Friday, on campus, during mid January to early February, before the start of the first university semester in mid February. If you wish, you can book accommodation at one of our halls of residence.

All Headstart courses are taught by well-qualified and supportive tutors. Practical work in the University's well-appointed laboratories features in the relevant courses. The depth and pace at which each course is taught depends on the abilities and backgrounds of the students.

These are intensive courses and extra work will be required outside class hours.

Early enrolment is advised. If you are waiting for NCEA results to come out, you can enrol in Headstart to ensure a place, then withdraw and get a refund (less a \$20 administration charge) if you find you don't need it.

If you have more time, the Certificate in University Preparation (CUP) offers a more thorough grounding in these subjects. See www.canterbury.ac.nz/future-students/qualifications-and-courses/preparatory-programmes/certificate-in-university-preparation/

Subjects offered

This summer, courses will be offered in Academic Skills, Mathematics, Statistics, Basic Chemistry, Further Chemistry, Physics and Supplementary Physics. Details about course content are shown later in this brochure.

Note: Headstart courses do not constitute an entry qualification, and do not contribute credit points towards a degree.

Dates

Headstart courses run during the 2016/17 summer period, before the start of the first semester in February 2017.

Courses are held Monday - Friday:

Mathematics

January 16 - January 27 9 am – 12 noon or January 30 – February 10 9 am – 12 noon

Basic Chemistry

January 16 – January 27 1 pm – 4 pm or January 30 – February 10 9 am – 12 noon

Further Chemistry

January 30 – February 10 9 am – 12 noon

Physics

January 30 – February 10 1 pm – 4 pm

Supplementary Physics

February 7 – February 10 9 am – 12 noon

Statistics

January 30 – February 10 9 am – 12 noon

Academic Skills

January 30 - February 10 1 pm - 4 pm

Costs

\$300 per course (domestic and international). These prices include GST and the cost of course materials. Fees are payable on enrolment.

Frequently Asked Questions

What is covered in Headstart courses?

Headstart courses cover essential pre-university material - generally equivalent to the key concepts in subjects at NCEA level 2, or Cambridge AS level. The exception is Further Chemistry which covers the key concepts at NCEA level 3. Academic Skills covers skills that are important for all degree courses and essential for education, law, commerce, the humanities (e.g. psychology, sociology) and the arts.

Do I need Headstart?

If you have a strong, recent background in a subject at NCEA level 3 or equivalent, you don't need Headstart, and will not benefit from it.

If you have good, recent results at NCEA level 2, contact us to discuss whether or not you need Headstart.

If you have NCEA level 1 in the relevant subject, or some credits at level 2, Headstart is right for you.

If you have no background in your chosen subject, you may find Headstart challenging. You may need to do some preliminary study before attending the course. Contact us to find out more.

I don't have my NCEA results yet, so I don't know whether to enrol in Headstart or not.

If you are waiting for NCEA results to come out, you can enrol in Headstart to ensure a place, then withdraw and get a refund (less \$20 administration fee) if you find you don't need it.

Popular courses have limited entry, while any course with low enrolments might be cancelled, so we strongly advise early enrolment.

Can I get financial assistance for Headstart courses?

Headstart courses are not approved for student loans or allowances.

How many Headstart courses can I take during the same fortnight?

All courses are very intensive. Each course will require you to complete extra work in your own time. For this reason, we strongly recommend you do not attempt more than one course per fortnight. No student may enrol in more than one course per fortnight without the prior approval of the course coordinator: phyllis.mowe@canterbury.ac.nz.

Where do Headstart Courses lead?

Headstart course	Prepares you for	Which can then lead to		
Basic chemistry	CHEM114 or Headstart FURTHER CHEMISTRY	CHEM111 and/or CHEM112		
Further chemistry	CHEM114 or (if you do well in the assessments in the Further Chemistry course) CHEM111 and/or CHEM112	Further study in chemistry or biochemistry if required		
Mathematics	MATH101	EMTH118, EMTH119 and other 100-level maths courses		
Physics	PHYS111	PHYS101 and other 100-level physics and astronomy courses		
Statistics	STAT101	Further courses in statistics if required		
Academic skills	Useful for all subject areas			

I don't have University Entrance. Will Headstart get me into university?

No. The Headstart programme is not a university entrance qualification.

Are Headstart courses a suitable preparation for study at other universities?

Headstart courses are designed to mesh with UC 100-level courses, so while they are highly likely to be helpful to students aiming for e.g. health sciences or veterinary science at other universities, we cannot guarantee that they will be entirely suitable preparation.

Enrolling

To enrol in any of these courses, please use one of the following options:

- Enrol online. Simply go to: www.canterbury. ac.nz/future-students/qualifications-andcourses/preparatory-programmes/headstart/, select your subject(s), and follow the online enrolment instructions.
- 2. Complete the attached enrolment form and then either:
 - post it with your payment to: Student Transitions and Engagement University of Canterbury Private Bag 4800 Christchurch 8140
 - deliver it to:
 Student Transitions and Engagement
 Alice Candy House
 Arts road (off Clyde Rd)
 Ilam, Christchurch
 Office hours are 9.00 am 5.00 pm

Enrolments will be confirmed on payment of fees. We will then contact you with the relevant course information.

Enrolment Dates

Enrolments are limited for all courses. We suggest that you enrol before the end of 2016. Once a course is full, you'll be placed on a waiting list. We will inform you if a place becomes available.

The final dates for enrolment are:

Courses commencing 16 January 2017:

Thursday, 12 January 2017

Courses commencing 30 January 2017:

Thursday, 26 January 2017

Supplementary Physics:

Thursday, 2 February 2017

Accommodation

UC Accommodation Student Village (UCA) can often provide accommodation for Headstart students, whether or not you intend to continue living in university accommodation (the halls of residence) during the 2017 academic year. It's a great way to meet students with the same interests, including other Headstart students, and get an early taste of hall life. The cost of accommodation includes breakfast, lunch and dinner.

Subject to availability, bookings can be made from 1 August by contacting enquiries@ucastudentvillage.co.nz and please reference Headstart in the subject line. For more information on UCA visit www.ucastudentvillage.co.nz

Courses

All courses are very intensive. Students must expect to put in some hours of extra study each day outside class time. For this reason, no student may enrol in more than one course per fortnight without the prior approval of the course coordinator: phyllis.mowe@ canterbury.ac.nz.

Please also note that in 2 weeks it is impossible to cover all the material covered in a full school year. Only key concepts will be covered, and tutors may choose to include or exclude material depending on students' background.

Academic Skills

HEADSTART: ACADEMIC SKILLS is for anyone who qualifies for university entry but wants to make sure they are ready for the transition to tertiary study; especially those aiming for the arts, humanities, law or commerce. It will be particularly useful to those who feel they lack a good background in essential communication and study skills, or have been away from study for some time.

Unless you have good, recent results in English or an English-rich subject at NCEA level 3, you should consider taking Headstart: Academic Skills.

Contact our Liaison Team liaison@canterbury.ac.nz or (03) 364 2993 if you wish to discuss your needs.
You will learn how to:

- take effective lecture notes.
- write an academic essay.
- write clear and concise lab reports.
- use modern I.C.T. (information and communication technology).
- make the best use of university libraries.
- revise and prepare for university level tests and examinations.

Mathematics

This course provides essential background for students wishing to advance in Mathematics or who need Mathematics to support other subject areas, for example, Engineering, Physics, Commerce, Computer Science or Chemistry. Mathematics is also becoming increasingly important for students majoring in Biology.

You will gain confidence in the basic techniques of Mathematics and develop your skills in analysing and solving problems.

You will learn:

- · algebraic manipulation and equations
- · functions and their geometry
- · trigonometry
- calculus (differentiation and integration).

Statistics

This course is for you if you intend to study Statistics at University. Statistics is a compulsory subject for all students studying towards a degree in commerce. It is also important for students studying Health Sciences, Sociology, Psychology, Forestry or Biological Sciences.

You will learn:

- · numerical and algebraic skills
- sampling and what it means
- graphing and summarising data
- · the basic concepts of probability
- discrete and continuous random variables.

Physics

If you are enrolling in Headstart Physics, we strongly recommend that you also enrol in Headstart Mathematics, preferably during the previous fortnight.

The physics course provides valuable preparation for students wishing to advance in Physics, Engineering or other science-based courses that require a basic knowledge of physics. Note that this course focuses on key skills and therefore covers only selected parts of the secondary physics curriculum, mainly mechanics.

You will learn:

- laboratory techniques and practical skills
- classical mechanics: motion, momentum, forces, energy, circular motion.

Supplementary Physics

This is a one-week extension course for students who need a background in wave motion and electromagnetism to supplement the mechanics covered in the Headstart Physics course. (note: Monday 6th February is a public holiday so the course starts on 7th.)

Basic Chemistry

This course provides essential background, up to approximately NCEA level 2, for students wishing to advance in Chemistry, Biochemistry or Forestry. It is also useful for students intending to study Biological Science or Geology. Students who complete this course should be able to cope with the degree course CHEM114; but it is not sufficient preparation for CHEM111 (see Further Chemistry below).

You will learn about:

- the nature of matter; chemical bonding
- important types of chemical reactions
- simple volumetric analysis (practical laboratory work)
- energetics of chemical and physical processes
- some important inorganic and organic materials.

Further Chemistry

This course is for students wishing to advance in Engineering or Chemistry who have a good background in physics and calculus but have not done Year 13 chemistry. Course content is as above, but at a higher level. However, organic chemistry is not included.

A good background in Year 12 chemistry is a requirement for entry to this course. You may also enter if you have completed the BASIC CHEMISTRY Headstart course in the previous fortnight.

Entry via FURTHER CHEMISTRY to the degree courses CHEM111 and CHEM112 is subject to consistently good results in assessments that will take place during the course.

More information

If you have any questions regarding your enrolment contact Joanna Leahy, phone (03) 369 3350.

For general Headstart enquiries, contact phyllis.mowe@canterbury.ac.nz

To be sent a copy of the University of Canterbury Undergraduate prospectus 2017 please phone 0800 VARSITY (0800 827 748).

Cancellation policy

The University of Canterbury reserves the right to cancel a course due to insufficient enrolments or other unforeseen circumstances. If a course is cancelled you will be advised as soon as possible and your fee returned in full.

Refunds

If you withdraw prior to the course commencing and seek a refund, a \$20 administration fee will be charged. After the course start date, a refund as above is available if your refund application is received (email to phyllis.mowe@canterbury.ac.nz) within 72 hours of the start of the first class. After that, refunds will not be made.

Applications for refunds must be made in writing or by email.

WAITANGI DAY OBSERVANCE

Waitangi Day is observed on Monday 6th February so there will be no classes that day.

UC Headstart 2017 Enrolment Form

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diveri / Til se Harrie		Surname					
Preferred name	National Student Number (if known)						
Postal address							
		F	ostcode				
Phone (home)			mail				
	(**************************************						
Please tick preferre	ed course(s)						
Course Name	Course Code	Dates	Time	Fees			
O Basic Chemistry	SHCH45	January 16 – January 27	1 pm - 4 pm	\$300			
O Basic Chemistry	SHCH46	January 30 – February 10	9 am – 12 noon	\$300			
O Further Chemistry	SHCH79	January 30 – February 10	9 am – 12 noon	\$300			
○ Mathematics	SHMA49	January 16 – January 27	9 am – 12 noon	\$300			
○ Mathematics	SHMA50	January 30 – February 10	9 am – 12 noon	\$300			
○ Physics	SHPH22	January 30 – February 10	1 pm - 4 pm	\$300			
O Supplementary Physics	SHPH61	February 7 – February 10	9 am – 12 noon	\$150			
○ Statistics	SHST60	January 30 – February 10	9 am – 12 noon	\$300			
○ Academic Skills	HACC07	January 30 – February 10	1 pm - 4 pm	\$300			
Payment details (c	GST Reg Number 1	1/131/859)					
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Privacy Act

The University will retain your information for statistical purposes only, for the reporting of statistics to the Ministry of Education.

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Headstart Student Transitions and Engagement University of Canterbury Private Bag 4800 Christchurch 8140 New Zealand